

## Public Consultation

### The UAE National Policy for Information and Communications Technology (ICT) and Telecommunications

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- **What do you think of the proposed vision of the policy “The UAE is a global leading country in ICT and Telecom ”?**

The proposed vision reflects the United Arab Emirates leading position in ICT and telecommunication services.

- **What do you think of the proposed mission of the policy “Developing the ICT and Telecom sector and encouraging, facilitating and promoting universal access to ICT and telecom networks, services and applications by all members of society to stimulate sustainable economic and social growth in order to enhance the well-being and reach the smart and happy nation”?**

ICTs and telecommunications are rapidly transforming societies and economies and have the potential to enhance all citizens' well-being. However, these technologies need to be as accessible as possible to as many people as possible in order to achieve this goal. The RIPE NCC therefore supports the goal of promoting universal access to ICT and telecom networks, services and applications for all members of society.

- **What do you think of the proposed values of the policy?**

**Service and happiness of the people**

**Efficiency**

**Competitiveness**

**Cooperation**

## Leadership

### Accountability and Transparency

The RIPE NCC welcomes the recognition that cooperation, accountability and transparency are at the heart of this policy. We believe that these values, in particular, lead to policies that are technically sound while meeting the broadest range of stakeholders' needs possible and, ultimately, benefiting the greatest number of end users.

- This part of the policy takes into consideration relevant national goals, policies and strategies such as the UAE 2071 Centennial Plan, the National Innovation Strategy, the National Innovation Strategy, the Higher Policy for Science, Technology and Innovation, the UAE Strategy for the Fourth Industrial Revolution, the Guide to Happiness and well-being in the workplace, the Future Foresight Strategy, and the UAE Vision 2021, which aim to make the UAE one of the best countries in the world. This Policy also takes into account the UAE National Agenda. **What is your opinion? Are there other tools / documents that you suggest to add or take into account?**

No

- This part of the policy, which supports all of the policy pillars mentioned below, addresses the role of innovation and future foresight in the ICT and telecom sector, and has taken into account the National Strategy for Innovation and the UAE Future Strategy. The Government emphasizes the pivotal role of the ICT and Telecom sector in the smart transformation of society. The Government seeks to create a supportive environment that encourages innovation and future foresight and promotes a culture of innovation and future foresight. Significant development in the ICT sector, especially emerging new technologies, has become an incentive for innovation and future foresight.

**In your opinion, what is the role of innovation and future foresight in the ICT sector? And How can innovation and future foresight skills be utilized to meet the Government's aspirations for the ICT and Telecom sector?**

The ICT sector is currently a rich space for innovation and emerging technologies, such as 5G, the Internet of Things, potential uses of AI and big data, and technologies for smart cities. The key to unlocking the potential of many of these innovations is a healthy, sustainable underlying Internet infrastructure.

As the Government looks at how to foster the innovation and future foresight to harness new and emerging technologies, it is vital to ensure that innovation is fostered at all layers in the ecosystem. This will help ensure that the telecommunications/ICT infrastructure can continue to evolve and develop such that it will meet the demands of the full range of new and emerging technologies.

### **Pillar 1: Sustainable and integrated infrastructure supportive of the economy**

Governments around the world are aware the importance of investment in the ICT and Telecom sector as an enabler of social and economic development. The Government aims to ensure that the ICT and Telecom sector continues to play its role in stimulating the national economy through sustainable and integrated ICT infrastructure. It is essential for the UAE to have a digital, integrated, modern, high quality and speedy telecommunications infrastructure that provides connectivity to all users and entities in the UAE, since the telecommunications infrastructure serves as the backbone of the sector through connecting users and entities. **What topics do you propose to include under this pillar as enablers for achieving the objectives of the pillar?** ex: supporting the comprehensive transformation to smart and sustainable cities.

Sustainable and integrated infrastructure that can support economic growth relies on an Internet that is capable of keeping up with the growing demands being placed on it as more and more citizens come online and new and emerging technologies require more connections and greater bandwidth.

The Internet of Things, smart cities and machine-to-machine (M2M) communication will only be possible with the wide-scale adoption of IPv6, the next-generation Internet address protocol. Widespread IPv6 deployment is a crucial element in the continued growth and stability of the Internet on a national level, and will be vital in ensuring that the United Arab Emirates can continue to move smoothly toward the smart city and digital transformation, while overcoming the challenges associated with IPv4 scarcity.

### **Pillar 2: Fair and agile regulatory environment**

The regulatory environment of the ICT and Telecom sector is a dynamic changing environment that requires keeping pace with the sector's rapid changes and digital transformation that is affecting all aspects of our daily lives as individuals,

consumers, businesses and Government. It is important to develop proactive, innovative and future shaping approaches and frameworks to create a suitable regulatory environment that responds to future changes in the sector. On the other hand, the Government believes that the community should have access to a wide range of smart services in a competitive telecom market. **What topics (especially new or future topics) do you propose to include under this pillar as enablers for achieving the objectives of the pillar? ex: speedy regulatory response to market requirements to ensure optimal and positive impact**

The new digital era requires urgent innovations in ICT and telecom governance and regulation. As this new digital era takes shape, developing an enabling regulatory framework will be crucial to ensuring its success and sustainability.

A critical ingredient will be agile governance frameworks that can anticipate and shape the impact of emerging technologies and react quickly to changing circumstances and challenges.

The RIPE NCC works with regulatory authorities on Internet-related issues and recognises the importance of close cooperation between the public sector, industry and the technical community, as all stakeholders work to understand market needs and challenges.

As regulators work to introduce safeguards and protect consumers, we encourage them to adopt a collaborative approach. Working with a wide range of stakeholders from industry, business, the technical community, civil society and other groups is the most proven way to successfully shape a national digital strategy that drives innovation, encourages market competition, and produces technically sound policies.

We acknowledge and applaud the initiative taken with this public consultation to foster and develop this kind of cooperation.

### **Pillar 3: Safe and reliable cyber environment**

The UAE is building an integrated leading cybersecurity system that aims to protect vital ICT assets in the UAE, address cyber risks and threats, and create a secure cyber environment that promotes digital confidence among individuals and entities in the use of ICT. For this purpose, the UAE is developing a package of initiatives and legislation that takes into account the variables and requirements of cybersecurity and best global practices. **What topics (especially new or future topics) do you propose to include under this pillar as enablers for achieving the objectives of the pillar? For example, developing innovative and proactive plans and frameworks to address future risks and challenges.**

We need agile mechanisms to ensure a secure and reliable cyber environment that continues to promote digital confidence as technologies evolve.

The RIPE NCC recognises the leading role that governments play in cybersecurity matters relating to national security. We further recognise the important roles and contributions of a wide range of other stakeholders and encourage governments to work together with all sectors of society in a collaborative approach to cybersecurity. We also encourage the responsible reporting of ICT vulnerabilities and shared best practices in mitigating the risks to ICTs.

#### **Pillar 4: Promoting smart lifestyle**

The UAE has made great strides in transforming all its traditional services and systems into smart interactive systems and services, which are constantly improved to achieve the best quality and customer happiness. The Government aims to provide the best smart, interactive and virtual government services that rely on emerging new technologies (such as Artificial Intelligence, robotics, analysis and management of big data, Internet of Things, and others) anywhere around the clock. **What topics (especially new or future topics) do you propose to include under this pillar as enablers for achieving the objectives of the pillar? For example, the use of robotics and Artificial Intelligence to improve human life in various fields, and spread the culture of innovation to serve humanity.**

In order to take advantage of the myriad benefits that new and emerging technologies may offer, the fundamental infrastructure required to support them needs to be stable, robust and ready to accommodate growth. These technologies all rely on an Internet that can support innovation and accommodate this growth, which in turn relies on widescale IPv6 adoption.

It's also important that strategies be developed to ensure that the vast quantities of data that will be produced by new and emerging technologies can be appropriately managed through open data initiatives, citizen participation and good governance structures.

#### **Pillar 5: Strengthening the UAE global position (International representation and competitiveness)**

The UAE has achieved many accomplishments in the international arena and has become a role model regionally and globally in the field ICT and Telecom. **What topics (especially new or future topics) do you propose to include under this pillar as enablers for achieving the objectives of the pillar? For example,**

**strengthening the UAE's leading role in various sub-regional, regional and international organizations**

N/A

**Pillar 6: Enablement through capacity building and supporting Emiratisation**

The Government believes that supporting people is the foundation of development. In this regard, the UAE has launched several initiatives and projects to develop human cadres in the field of ICT and Telecom, aiming to build and develop a workforce of both genders and to create new job opportunities, which support the Government strategies. **What topics (especially new or future topics) do you propose to include under this pillar as enablers for achieving the objectives of the pillar? For example, encouraging and developing ICT and Telecom industry in the country.**

The RIPE NCC offers a wide range of capacity building programs, from in-person training courses to online learning platforms, in order to promote a greater understanding of Internet technologies, both for technical community participants and policymakers. Efforts to raise awareness about what resources are available to these stakeholders could help to amplify the impact of these and other existing capacity building efforts.

**Pillar 7: Happiness and well-being**

The Government believes that it is its national duty to disseminate ICT networks, services and applications, including the facilitation of accessibility, affordability and quality assurance to all members and groups of society, including people of determination and senior citizens, in order to achieve community happiness and improve well-being. Therefore, all the above-mentioned pillars serve to achieve and reach the potential of this pillar, namely happiness and well-being.

**What topics (especially new or future topics) do you propose to include under this pillar as enablers for achieving the objectives of the pillar?**

N/A

- **Do you have comments or suggestions on the main pillars of the policy?**

No

- **In your opinion, are there other pillars that should be added?**

N/A

- **What is your opinion of the pillars' order?**

N/A

- This part of the policy includes future communications of the ICT and Telecom sector.

**In your opinion, what are the future trends (short and long term) of the ICT and Telecom sector?**

We see the ICT and telecom sector becoming more and more regulated as government services, data, and entire economies migrate online. There is a growing trend for governments to try to protect digital assets as critical national infrastructure and a push to exert their digital sovereignty.

At the same time, we see strong support on behalf of governments and other sectors for developing policy and regulation with an open, multistakeholder approach, including at the global Internet Governance Forum (IGF) as well as many regional IGFs and within the UN Secretary-General's High-level Panel on Digital Cooperation.

As we move forward, we fully expect to see the evolution of new approaches to policymaking and regulation that draw on both of these positions, recognising both the international, cross-border nature of the Internet, and the important role that governments must play in safeguarding their citizens and developing their Internet industry.

- **What are the future opportunities (future foresight) of the ICT and Telecom sector?**

The ICT and telecom sector offers many far-reaching opportunities, from enabling innovation, spurring economic growth and improving citizens' lives. New and

emerging technologies have the potential to impact nearly every field of human endeavour – likely in ways that are, as of yet, unimaginable.

However, this enormous potential can only be realised in conjunction with the underlying infrastructure to support it. A healthy, functioning Internet, accessible to all members of society, is a basic prerequisite to achieving the myriad benefits offered by the digital transformation.

- **What are the future challenges facing the ICT and Telecom sector? How can they be overcome?**

The widescale adoption of IPv6 is one of the most pressing challenges facing the ICT and telecom sector, and will only become more urgent as new and emerging technologies place ever greater demand on the Internet, the major underlying infrastructure upon which these technologies are built and will increasingly rely.

The exhaustion of available IPv4 address space creates financial barriers for new entrants to the market, which may impede competition and limit innovation. It also creates new incentives for theft, fraud and hijacking of existing IPv4 address space. Mitigating these risks will require the active engagement and cooperation of stakeholders in both the public and private sectors.

Many governments have begun developing national IPv6 deployment strategies to address these challenges. We encourage these initiatives, and seek to support them with capacity building programmes to provide network operators with the tools they need for their own IPv6 deployments.

The RIPE NCC firmly believes that IPv6 adoption will be necessary for governments, businesses and industry to remain competitive in this age of digital transformation and to reap the benefits of future innovations.