

Annex 1

ITU Regional Development Forum for Arab Region (RDF-ARB) Accelerating the digital development in Arab Region

Organized by the International Telecommunication Union with the support of the

Bahraini Ministry of Transportation and Telecommunications

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CONTRIBUTION FORM

Please note that submitted information will be presented during the RDF-ARB P2C Roundtables and

it will also be reflected on the pledging platform of the Partner 2 Connect Digital Coalition.

Once completed send to <u>ITU-RO-ArabStates@itu.int</u>

ORGANIZATION: National Telecom Regulatory Authority, Egypt

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TITLE: Internet of Things

DESCRIPTION OF ACTION:

NTRA - Policy

National Telecommunications Regulatory Authority (NTRA), has issued an elaborate framework to enable, encourage, and foster the development and growth of IoT ecosystem across Egypt. This framework is addressing the following IoT related Pillars:-

- Definition of the potential IoT different Services in Egypt
- Clarifying the IoT Value Chain in Egypt
- Maximizing the IoT role in accordance with Egypt vision 2030
- Figuring out the different IoT connectivity types in Egypt

• Analyzing the different potential Use cases for IoT in collaboration with the relevant stakeholders in Egypt

• Considering both 3GPP related technologies as well as non 3GPP ones for IoT in Egypt when it comes to listing all addressed mentioned IoT pillars in the framework

- Covering both individual use cases as well as M2M related use cases
- Defining the private networks individual usage for IoT in Egypt
- Clarifying the needed procedure to import, Manufacture and assemble M2M devices
- Listing all the possible licensing options for the different IoT players in Egypt
- Including all the necessary commitments on the licensed IoT player to be able to provide equal opportunities to all the stakeholders in Egypt
- Figuring out the necessary process for the IoT users to register and connect to the IoT services in the Egyptian market.

Within a timeframe of 2 years starting from July 2022, NTRA has already started to consult with the governmental stakeholders to initiate a collaboration agreement plans to adopt and foster the deployments of IoT services in these sectors

Hereafter is the list for the targeted sectors:

- Energy Sector
- Agriculture Sector
- Transportation Sector
- Climate change and environmental aspects
- Health Sector

Energy Sector:

With the current trend of energy rationalization, and with Egypt adopting that trend, it was necessary to introduce modern technologies to that field and use them in various facilities for the purpose of rationalizing and maintaining different forms of energy. There are many initiatives such as the use of smart meters in the process of managing and using Energy is at optimum to address the adoption plan for IoT in Egypt.

Agriculture Sector:

Recently, the field of agriculture and crops is one of the vital areas that modern technology applications in IoT must be introduced to that field, with a view to increasing the productivity of crops and increasing the agricultural area. In addition, work to rationalize basic resources such as the uses of water in modern irrigation, which ensures that large quantities of water are not wasted and the crops are preserved for the longest possible time fit for human use.

Transportation Sector:

The Internet of Things (IoT) has the potential to transform the transport industry in Egypt by profoundly altering how transportation systems gather data and information by bringing together the major technical and business trends of mobility, automation and data analytics. This will actually be so crucial in the new smart cities that are recently established in Egypt.

Climate change and Environmental Aspects:

The Industrial Revolution and the technology underpinning it has been one of the primary drivers of manmade climate change. Yet it's another industrial revolution and another set of new technologies that looks set to help humanity avoid the worst effects of anthropogenic global warming. On the one hand, the biggest positive effect will be delivered by green technologies and renewable energy sources, yet on the other, the Internet of Things (IoT) and smart connectivity will function as a vital enabler of the above solutions, enabling green micro grids to be brought online when non-renewable utility networks fail or aren't available.

Health Sector:

In light of the current situation and with the exacerbation of the Covid-19 virus crisis in Egypt, the use of Internet technology applications will have a major impact in the field of health care through early detection of diseases in addition to following up cases of existing patients such as diabetes patients in addition to performing surgeries precisely.

COUNTRIES in FOCUS: Egypt

YEARS of IMPLEMENTATION:

2023



RELEVANT ITU REGIONAL INITIATIVE:

- □ ARB3: Developing digital infrastructure for smart sustainable cities and communities.
- □ ARB5: Developing means of digital regulation.

RELATED ITU-D PRIORITIES AS DEFINED BY THE ITU WORLD TELECOMMUNICATION DEVELOPMENT CONFERENCE 2022

- □ Affordable connectivity
- $\hfill\square$ Enabling policy and regulatory environment

RELATED ITU PRIORITIES AS DEFINED BY ITU PLENIPOTENTIARY CONFERENCE 2022

□ Digital applications.

□ Enabling environment.