

#### THE UNITED REPUBLIC OF TANZANIA



#### TANZANIA COMMUNICATIONS REGULATORY AUTHORITY

EXPERIENCE AND CHALLENGES OF MANAGEMENT OF M2M/IOT NUMBERING PLAN IN TANZANIA

PRESENTED By: TCRA





### **AGENDA**

M2M / IOT Numbering Plan in Tanzania



Introduction		•	<b>2</b> s	structure / Plan
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### 1. Introduction



#### 2019

M2M/IoT numbers were introduced to the National Numbering Plan to accommodate the data transfer between machines or applications with little or/no human interaction between devices and



M2M applications used a normal mobile number range



To avoid possible exhaustion of the existing Mobile Number Ranges



Foreseen growth of M2M application /services



**Demand from consumers** 

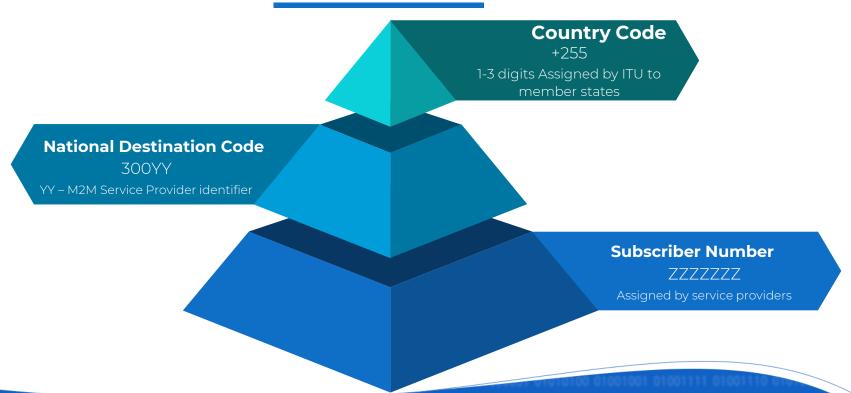


### 2. M2M/IoT Number Structure/Plan



15 digits number as per ITU-T E.164

+255300YYZZZZZZZ





## 3. M2M/IoT Numbering Assignment



#### **Criteria of Assignment**

Applicants require Application Service License. M2M may obtain M2M numbers from MNOs.

#### **M2M Numbers Assignment**

All applications, renewals and payments are through the online licensing system.

Assignment is on annual basis.

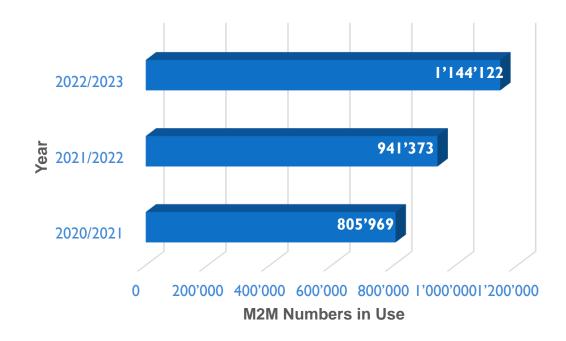
M2M numbers are provided in blocks.





### 4. Trend of Use of IoT / M2M Numbers







## 5. Regulatory Requirements





Interconnection/i nteroperability among MNOs.



#### SIM Cards Usage

- Guided by EPOCA
  (SIM Card
  Registration)
  Regulations,
  2020.
  - Devices with e-SIM shall be allowed upon



#### Number Utilization

 Submit the utilized subscriber numbers in the assigned M2M/IoT number block.



## 6. Use Cases of IoT/M2M Numbers







#### **Fleet Management**

Fleet control, fleet tracking, stock taking, fuel



#### **Point of Sales**

Communication in payment terminals such as parking meters and



#### **Security and Surveillance**

Communication with security gadgets such as gate controllers, motion



## 7. Challenges Observed



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#### Use of Global Networks

□ Local use of global network services (ITU-T E.164.1 Rec.) using global shared country codes (e.g +881,+882 &+883)

# Incompatibilit

□ Some MNOs' convergence billing systems could not accommodate the 15-digit number range.

#### **Migration**

- ☐ The prolonged process of migrating numbers from existing MSISDN to the M2M numbering range.
- □ The M2M numbering range came when the M2M services had already been deployed using

the MSISDN

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# 8. Future Existence of M2M/IoT Numbers



Food for though!!



Will Internet addresses become alternative numbers for M2M/IoT numbering Plan?

