## APPLICATION SERVICE LICENSE N<sup>o</sup> RURA/ICT/LIC/240427241 GRANTED BY RWANDA UTILITIES REGULATORY AUTHORITY TO THE LICENSEE FOR PROVISION OF *INTELLIGENT CONNECTED FARE METER SERVICES* IN THE REPUBLIC OF RWANDA

#### PREAMBLE

#### **Rwanda Utilities Regulatory Authority;**

Pursuant to Law N°09/2013 of 01/03/2013 establishing Rwanda Utilities Regulatory Authority (RURA) and determining its mission, powers, organization and functioning, especially in articles 2,4, 6, 20 and 37;

Pursuant to Law N°24/2016 of 18/06/2016 governing Information and Communication Technologies, especially in article 40;

Pursuant to Regulation N° 013/R/EC-ICT/RURA/2021 of 25/02/2021 governing licensing in electronic communication, especially, in articles 9, 12 and 23;

Pursuant to Regulation No 15/R/CR-CSI /RURA/2021 of 27 /09/2021 governing the operation of intelligent connected fare meter in Rwanda, especially in article 5;

#### Issues this License under the following terms and conditions:

#### **1. DEFINITION**

In this application service License, the following terms are defined as follows:

- (a) **''Application Services''** means a set of software solutions or functionalities that are nonnetwork-infrastructure-based service designed to provide a variety of applications to end users using the infrastructure of network service provider licensees;
- (b) "ICFM" means Intelligent Connected Fare Meter.
- (c) **'ICT Law''** refers to Law N° 24/2016 of 18/06/2016 governing Information and Communication Technologies;
- (d) **License**: a legal document issued by the Regulatory Authority which authorizes the licensee to provide application services under the conditions prescribed therein;
- (e) Licensee: The entity specified on the License Issuance Front Page;
- (f) **''Regulatory Authority''** means Rwanda Utilities Regulatory Authority as established by the Law N°09/2013 of 01/03/2013 and determining its mission, powers, organisation and functioning.

## 2. SCOPE OF THE LICENSE

In accordance with the ICT Law, the Regulatory Authority hereby grants an application service License to the Licensee to provide Intelligent Connected Fare Meter Services in the Republic Rwanda.

## 3. AUTHORISED ACTIVITIES

- 3.1. The Licensee is authorized to operate an ICFM platform as to provide:
  - 3.1.1. A conducive environment for Cashless Payments for all its subscribers;
  - 3.1.2. To ensure that the metering application is only installed on devices meeting the standard set by competent organ.
- 3.2. Detailed technical specification of the authorized ICFM platform are detailed in *Annex 1*.

## 4. LICENSE OBLIGATIONS

- 4.1. The Licensee must provide application services in accordance with all of National and International standards.
- 4.2. The Licensee must own and operate an ICFM platform.
- 4.3. The Licensee must provide ICFM application services as detailed in Annex 2 of this Application Service License.
- 4.4. The Licensee must maintain Quality of Service in accordance with best-specified international practices and shall comply with any directive of the Regulatory Authority in this respect.
- 4.5. The Licensee must ensure that the service is available at all times to ensure business continuity with an uptime not less than 99.5%.
- 4.6. For the case of any downtime, whether scheduled or not, must not exceed thirty (30) minutes duration at any one time and this downtime should be communicated in writing to Regulatory Authority.
- 4.7. The Licensee must establish a redundancy system to ensure availability of the services and business continuity.

## 5. DURATION AND RENEWAL OF THE LICENSE

5.1. This application service License is granted for a period of five (5) years. The Licensee shall apply for a license renewal to the Regulatory Authority at least ninety (90) days prior to the expiry of Application Service License.

## 6. FEES

The Licensee is required to pay the following fees:

- a) Application fee of One hundred (100) US Dollars, payable once;
- b) License fee of One thousand (1000) US dollars payable upon the license approval;
- c) Regulatory fee of One percent (1%) of the Annual Turnover according to modalities set by the Regulatory Board decision determining the contribution levied annual turnover of the regulated services;
- d) Universal access fees as determined by the Regulatory Board Decision;
- e) Any other fees, contributions and charges that may be or from time to time become payable in accordance with the applicable laws and regulations of Rwanda.

#### 7. COMPLIANCE WITH LAWS AND REGULATIONS

The Licensee must comply with the provisions of the ICT Law, cybersecurity regulations, the Data Protection and Privacy Law, regulations governing the operation of intelligent connected fare meters in Rwanda, and all other relevant laws and regulations in Rwanda.

## 8. REQUIREMENT TO PROVIDE INFORMATION

- 8.1. For the purpose of monitoring of compliance with terms and conditions of the License, as well as monitoring market development, the Licensee must avail to the Regulatory Authority a full access to ICFM platform.
- 8.2. The Licensee must provide all data required, in a format specified by the Regulatory Authority.
- 8.3. The Regulatory Authority is entitled to request any additional information if deemed necessary.

## 9. THE RIGHT TO INSPECT

- 9.1 The Regulatory Authority, or its authorized representative, has the right to inspect locations from which and toward which the services are being provided, as well as to inspect number, quality and content of all services provided by the Licensee in accordance with its authority.
- 9.2 The Regulatory Authority reserves the right to exercise such monitoring of the Service(s), at all material times, as may be required for national security reasons or in the public interest.

#### **10. SAFETY MEASURES**

The Licensee shall, in respect of services operated, maintained or offered under this license, take proper and adequate safety measures to safeguard life or property, including exposure to any electrical emissions or radiations emanating from equipment or installation from such operations.

## **11. LICENSE TRANSFER AND JOINT VENTURE**

- 11.1. Transfer of license, including the direct or indirect sale, assignment, conveyance, lease or other transfer of assets or activities subject to a license to a different person shall be subject to a prior written approval of the Regulatory Authority.
- 11.2. Such approval shall be granted after consideration of the matter and if the proposed transfer meets all the conditions for granting the relevant license;
- 11.3. The licensee must seek approval from the Regulatory Authority of any joint venture into which it enters with any person; or entity holding a License issued by the Regulatory Authority.
- 11.4. Failure to comply with the above requirements shall result in license suspension or revocation.

## **12. MODIFICATION OF LICENSE**

- 12.1. Modification of the terms and conditions of this License together with its Appendices may only be made upon written approval of the Regulatory Authority.
- 12.2. The Regulatory Board has the power to modify the license if there are:
  - a) the provisions of any new Regulation or law relevant to this Application Service License;
  - b) any regulatory changes which are intended to ensure opportunities and effective competition in the ICT markets in both rural and urban areas;
  - c) changes necessary to respond to market circumstances;
  - d) changes caused by technological developments.

#### **13. LICENSE TERMINATION**

- 13.1. Upon request of the Licensee, the Regulatory Authority may terminate this license if there are sounds reasons of such termination.
- 13.2. This request must be submitted to the Regulatory authority, at least six (6) months before date, the licensee intends to close the provision of services.

#### **14. LICENSE SUSPENSION OR REVOCATION**

14.1 The Regulatory Authority may suspend or revoke a license before its expiration of the license term, when it determines that revocation is needed in order to respond to:

- a) Licensee failure to comply with license terms and conditions;
- b) Licensee abandonment of license activities;
- c) Failure of the licensee to provide the Regulatory Authority with monitoring and reporting data required by the license or failure to cooperate with the Regulatory Authority inspection and audits;
- d) Licensee submittal of false or deliberately misleading data or information to the Regulatory Authority in response to the Regulatory Authority request or in response to the Regulatory Authority monitoring reporting inspection or audit requirements;
- e) Licensee failure to provide timely access to the Regulatory Authority or inspection or audit of Licensee's facilities and corporate records;
- f) Bankruptcy, financial insolvency or liquidation of licensee; and
- g) Licensee's failure to pay the required fees.

## **15. DISCLAIM OF LIABILITY**

The Regulatory Authority shall in no case be liable in respect of any claim or damage arising out of any act done by, or any omission on the part of, the Licensee.

# <u>ANNEX I:</u> TECHNICAL SPECIFICATIONS OF THE AUTHORIZED ICFM PLATFORM

#### I. Hardware Requirements

#### 1. Intelligent Connected Fare Meter

- Rugged Device with IP68 rating to withstand harsh outdoor environment.
- Large display of at least 4.5 inches to ensure that Passenger is able to view the fare details clearly even in bright sunlight condition.
- High speed internet (4G/3G) connectivity to the backend with support for LTE Band 20.
- NFC support to accept cashless payment using NFC tags/Cards.
- Sensors Accelerometer, GPS Receiver.
- High capacity rechargeable battery (at least 4000 mAh).
- Battery charger for metering Device and to charge passenger's mobile phone.

#### 2. GPS Device

- Small, lightweight with IP65 rating (Dust and weather proof).
- GPS with location accuracy < 10 meters.
- 3G/2G connectivity.
- Internal battery backup.

#### II. Software Features

#### 1. Security and Safety Features

- Dedicated Device for Metering Application and this is the only run software provided by the Licensee.
- It should not be possible to install other software such games, social media etc. to prevent malware, viruses or fake metering applications.
- PIN based secure login for each driver.
- Secure SSL communication to the backend.
- Auto logout after a predefined period (configurable).
- Real time location tracking of device even when the driver is logged off.
- Over speed warning to drivers through audio-visual indicator.
- SOS option for driver to send notification to designated numbers in case of any emergency.
- Real time display of notifications sent to the device by the backend.

## 2. General Features

- Driver must be able to enter/select Bike Plate Number prior to using the Device.
- Device must display Distance, duration and Fare on the screen in real-time.
- Device must display location on screen using digital map.
- Device must display detailed information at the end of each trip, which will include:
  - Unique Reference number for every Trip;
  - Fare amount with breakup of fare;
  - Start and End Location, distance, duration etc.
- Passengers must be able to pay with NFC cards, Digital Wallets or Cash etc.
- Device must be able to begin/end trips without internet connection.
- Cashless payment be possible without internet connection.
- Device must display trip history, account and earnings on the screen.
- Device must support multiple language, Kinyarwanda is compulsory.
- It should be possible to dynamically upgrade the Fare Table over the air.
- It should be possible to upgrade the software Over the Air.

## 3. Backend Platform

The entire platform must be hosted in a secure Data Centre located in Rwanda. No data should be stored or processed outside Rwanda.

## 4. Centralized Management & Monitoring Module Features

- Secure SSL Communication (HTTPS) between all the fare meters and backend.
- Secure Web Portal for Management and Monitoring of the System.
- Data Protection All the trip data must be stored in the Relational Database Management System (RDBMS) which is ACID (Atomicity, Consistency, Isolation and Durability) Compliant. The system must ensure that there is no loss of data in case of any hardware/software failure.
- **Trip Data** All Trip data must be stored for a minimum period of 2 years with complete details such as Date, Time, Duration, Route, Fare, Driver ID, Plate No. and Payment ID etc. It should be possible to retrieve details of any trip on demand.
- Electronic Dossier of Drivers The licensee must validate and store Driver data as a part of the registration process, such as: Name, Nation ID number, Photograph, Address and Registered Mobile Number, Emergency Contact etc. This information is stored in the central database for reporting and audit purposes.

- Data Visibility The platform provides secure web-based access to authorized users to monitor the entire systems performance and analyze the captured big data through a GUI-based interface and MIS reports. The following information must be made available through secure web interface:
  - Dashboard Total Trips, Total Distance, Online Drivers;
  - Trip History Day-wise trip data, Driver-wise trip data, Trip Route;
  - Earning, Outstanding, and Payable Summary;
  - Search Trips Trip ID, Driver Code, Date Range etc.
  - Driver Profile Activity Profile and Safety Profile.
- Notification Engine The backend must be able to send notifications to all or selected drivers. The Regulatory Authority may request licensee to send notification to all drivers in case of any emergency situation and licensee will be obliged to do that in the interest of national safety and security.
- **Digital Payments** The backend must connect to digital payment providers over secure VPN only. The licensee must have signed agreement with all the supported third-party Digital Payment providers.

## **ANNEX II: PROVISION OF LICENSED APPLICATION SERVICES**

- 1. To publish the detailed terms and conditions for the use of the Intelligent Connected Fare Meter in easily accessible and understood formats to cover:
  - a) Acceptable type of payments that can be used;
  - b) Rights and responsibilities of customers and drivers;
  - c) Applicable fees and charges if any;
  - d) Information on any help desk/ line.
- 2. To put in place measures regarding consumer protection, privacy of customer's information, quality of service, transparency of instruments and services, and prompt response to inquiries and complaints;
- 3. To provide adequate warning statements to customers and drivers on the risk of loss arising from failure or insolvency, lost or stolen payment instruments or access devices, or fraudulent transactions;
- 4. To sign an agreement with the User of Intelligent Connected Fare Meter for its effective usage.
- 5. To provide the SIM cards and pay for the required data bundled to ensure that the meters are always connected and to ensure the transmission of information to the central system.
- 6. To have an operational platform capable of serving at least 20,000 meters deployed national wide concurrently at the beginning.
- 7. To extend a terminal via secure link to the Regulatory Authority for having a complete visibility for monitoring and audit purposes.
- 8. To have a Service Center to provide 24 x 7 Call Center for Passengers and Drivers;
- 9. To ensure that the metering application is only installed on devises from any supplied approved by the Regulatory Authority.
- 10. To ensure that the application has the capacity to display the distance, duration and fare on the screen in real time.
- 11. To ensure that the platform has storage capacity of all trips related details for a period of duration of this license with complete details, such as Date, Time, Duration, Route, Driver ID, Plate Number etc. It should be possible to retrieve complete details of any trip on demand.

- 12. To facilitate the authorized agencies to have access in real-time to the platform. This platform must provide real-time statistics, visualizations and big data analytics in line with Rwanda's Smart City requirements.
- 13. To support and implement cashless means of payment acceptable in Rwanda by using the acceptable payment systems.
- 14. To facilitate and implement revenue sharing mechanism upon request from the Regulatory Authority.
- 15. To implement Safety and security features that may be required from time-to-time.
- 16. To ensure that the entire Metering Platform is hosted in Rwanda in a secure Data Centre.
- 17. To ensure that outsourcing to a third party any of their operational or managerial functions complies with the provisions of Security Regulations in force.