Exhibit D:
Initial Acceptance Testing Plan

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1. Purpose

The purpose of this document is to provide an initial Acceptance Testing plan that consists of a draft:

- Factory Acceptance Testing (FAT) plan to evaluate the equipment's operation against the approved Original Equipment Manufacturer (OEM) manufactured and operational data.
- Site Acceptance Testing (SAT) plan that is a repeat of the FAT after the system is installed onboard the bus.
- User Acceptance Testing (UAT) plan for the customer experience validation of the equipment.

2. Scope

FAT

The FAT is used to ensure that the equipment performs according to the OEM specifications, before the equipment is dispatched to the site. There should be no manufacturing, quality, or performance issues with the equipment based upon the approved OEM documentation, for instance:

- Manufacturers drawings
- Data Sheets
- Specifications
- Test Method Statement

SAT

The scope of the SAT is to describe the tests to be done on each logical component in order to test if all the components on the buses for the AFC system are correctly installed and operational. The tests assume that the FAT on the individual components has been completed and that the SIT has been performed. We did not include the Systems Integration Testing (SIT) plan for purposes of this MST Proposal submission. This SAT will therefore not attempt to describe the steps to be followed for the operation of the individual components. The outcome of the SAT is the acceptance of the bus's components to go into full service.
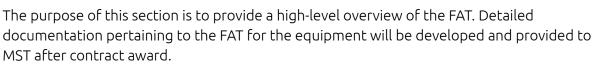
UAT

The scope of the UAT is to provide an agreed upon set of scenarios and test cases, that, once executed, will complete the UAT for the system. The approach is to test the entire implementation end-to-end by means of predefined scenarios and test cases in accordance with the required specification.

For ease of interpretation, this document will be divided into the three separate high-level testing plans.

Each plan is customized according to the needs of the testing phase of the project and signed off by the Kuba and MST.

FAT

2. FAT

The purpose of this section is to provide a high-level overview of the FAT. Detailed documentation pertaining to the FAT for the equipment will be developed and provided to MST after contract award.

Prerequisites

The prerequisites for the FAT are:

- FAT Plan
- FAT procedure

Objective

The FAT is used to ensure that the equipment performs according to the OEM specifications, before the equipment is dispatched to the site. There will be various team members involved with the testing at different stages.

Once the FAT has been completed successfully, the validators will be approved for loaded with the necessary software and delivered to MST for installation.

Scope

Participation

During the FAT, representatives from MST will be invited to witness this phase of testing.

FAT Acceptance Criteria and Sign Off

The testing plan will specify the equipment and tests to be conducted, and the procedure will specify the testing process that will be used according to the approved document. Observations will be reflected in a FAT checklist. All results that deviate from the approved documentation will be listed in the Defect List.

Approach

The detailed activity of FAT will be planned by Kuba. Kuba test personnel will perform the FAT, and the results as well as any issues will be noted. The project implementation plan prepared at the time the project is launched will include information on the anticipated length of the FAT.

Entry Criteria for FAT

- Test Readiness Review has been performed and documented
- The test specifications have been approved
- The agreed equipment has been set up and is available
- Stable FAT environment exists

Item Pass/Fail Criteria

The following high-level criteria will be used to assess whether an Item has passed testing:

- Successful completion of test cases, as defined in the specification
- No unresolved issues where an issue means that FAT is unable to continue
- Completion of all reporting tasks, including registration of all issues incidents and defects in the appropriate issues' management system

A test phase is awarded a **"PASS"** status when the equipment functions within the scope of the testing and OEM specifications.

The FAT will be considered **complete** once the acceptance tests have met their defined pass criteria.

Defect Management Process

The Defect Management Process will be described in the FAT document that will be made available after contract award.

Responsibilities

The responsibilities of the different people/roles involved in the FAT testing will be agreed upon at the time of the contract award.

Schedule

The schedule of the FAT testing will be agreed upon at the time of the contract award.

SAT

3. SAT

The purpose of this Exhibit is to provide a high-level overview of the SAT. Detailed documentation pertaining to the SAT will be developed and provided to MST after contract award.

Prerequisites

The prerequisite for the SAT is the FAT.

Test Equipment and Environment

The Onboard Equipment (OBE) and network communication will be tested.

Test Tools

- The test laptop will connect to a network switch
- Bank cards will be used during the testing
- The communication system (i.e., network switch, test back office etc.)
- Device Management Platform for running the test server

Test Procedures

Objective

The objective of the Test Procedure is to check that the OBE is installed correctly. We will also test that the equipment is correctly secured, wired and labelled.

Prerequisites

- The prerequisite of the Test Procedure is to ensure that the power to the OBE is available on the bus.
- Link to the MST's preferred bank of choice is operational
- Communication system is operational
- Access to internet

An example is shown in the table below.

Step	Description	Pass/Fail	Comments
1	The version numbers of all software and components need to be recorded, and set as the baseline. Any changes after this needs to occur in a controlled manner.		
2	Use the web browser to access		

Step	Description	Pass/Fail	Comments
	the Device Management Platform. Follow the instructions to login. The following modules within the Platform will be displayed: • Reporting		
	AC Converter: • Labels • Mounting • Wiring to the connector strip		
	Cables/wiring are neat and tied together: • Sustainability and quality • Workmanship • Installation quality • Accessibility for maintenance • Safety		
	Entrance validator: • Mounting bracket • Labels • Mounting cradle and cabling • ABT3000 validator with serial number xyz on bus xyz12		

Acceptance Date _____   **Signature** _____

AFC System Functional Tests

Objective

The objective of the functional testing is to make sure that the AFC system is operational.

Prerequisites

- Production server is operational and the applications are loaded
- Communication to the production server is operational
- On bus communication is operational

Functional tests

The functional testing is performed to verify that the AFC equipment operates and is functional will also be presented in a table format.

Bank-Issued Cards Testing

Objective

The objective is to test that the bank card's open payment system works.

Prerequisites

- Production server is operational and the applications are loaded
- Communication to the production server is operational
- On bus, communication is operational
- Communication to MST's Bank of Choice is operational

Functional tests

The functional testing is performed to verify that the card testing is functional.

Snag List (example)

Severity Criteria

Level 1	Cannot Go Live
Level 2	Can Go Live, but on SNAG List
Level 3	Cosmetic, will be fixed in 3-months time

Snag #	Severity Level	Snag Detail	Date Raised	Date to be resolved	Comment / raised by

UAT

4. UAT

Prerequisites

Customer experience testing is done via the UAT of the equipment. A prerequisite of the UAT is the FAT Plan and the FAT Procedure. We assume that the SAT will be done onboard the bus, in that case SAT is also a prerequisite.

Purpose of the UAT

Kuba and MST have to agree to a set of scenarios and test cases that can be executed for the UAT. The approach is to test the entire implementation end-to-end by means of predefined scenarios (which are provided by MST) and test cases in accordance with the requirements' specification.

Results and Measurements

Any issues found during the UAT will be recorded in a separate spreadsheet and categorized according to a priority and definition.

Process Flows

A workflow will be defined together with a high-level workflow breakdown.

Scenarios and Test Cases

MST will discuss the scenarios and test cases with Kuba who will determine if the test cases and scenarios are fit for purpose.

Kuba will create the test criteria for the UAT per scenario/test case, wherein the test case steps and expected results are recorded.

Each test case/scenario will have an objective and execution steps with expected results. The actual results are recorded as per the UAT and the test case/scenario will either Pass/Fail/Blocked. Comments are compulsory for Fail and Blocked results. The UAT is signed off by the tester.

END