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| Document type: | **E-Software Test Design** | | | | | |
| Document status: | **Approved** | | | | | |
| Title: | **Cobalt KE17 UI** | | | | | |
| Document no.: | **GEO-FPS-ENG-D-00594** | Revision: |  | Previous document no.: | |  |
| Authors: | **Simone Nicastro, Luca Tollot** | | Date of release: | | **2023-05-02** | |
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| **Reviewed by:** | R. Martin | EPL/Systems | R. Martin | 2023-05-04 |
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**Revision History:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Authors** | **Date** | **Description** | **Version** |
| Simone Nicastro, Luca Tollot | 2023-05-02 | Creation of document | 1.0 |
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| Note :  1. If any of the below sections are not applicable for the project, mention as “Not applicable” with justification notes.  2. If any information pertaining to the below sections are documented externally, embed the external document in the corresponding section below.  3. If any information pertaining to the below sections are stored in standard tools such as EPM-Gate, Teamcenter etc., mention the file path/link in the corresponding section below. |

# Introduction

## Purpose

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| The purpose of this document is to provide an overview and detailed list of the different firmware/software tests that will be performed on the new electronic platform Cobalt KE17 UI that is a re-design project inside the ERAP program of Food Preservation category. |

## Scope

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| It will be described the different typology of tests that will be executed in order to validate the I/O peripherals (FCT test procedure) and to verify all the UX design interaction specs that describes the logical functionalities of the Cobalt UI board. |

## Documents Referenced

### Codes (Norms) Agency Standards

|  |  |  |
| --- | --- | --- |
| **Standard** | **Revision and Date** | **Description** |
|  |  |  |

### Electrolux Standards

|  |  |  |
| --- | --- | --- |
| **Standard** | **Revision** | **Description** |
|  |  |  |

### Third Party Standards

|  |  |  |
| --- | --- | --- |
| **Standard** | **Revision and Date** | **Description** |
|  |  |  |

### Other Documents

|  |  |  |
| --- | --- | --- |
| **Standard** | **Revision and Date** | **Description** |
|  |  |  |

# Software Test Plan

## System Overview

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| --- |
| Cobalt KE17 UI is a high-end user interface that has been applied on different FPS appliances specifically for Multidoor or SxS architectures.  It can be declined in 4 different HW variants where the main differences are the number of touch buttons (i.e functions) and the visual led-matrix displays (dual cavity or I&W functionalies)  There will be 3 different functional software to be developed and tested:   * Cobalt 15 buttons for FF/FZ and I&W functionalities management (MDR4, Lynx, Bobcat, Thundercat, Cobra, Leo) * Cobalt 4 buttons for I&W and Wifi functionalities management (Ernie APAC) * Cobalt 4 buttons for I&W functionalities management (Cobra NA and Raptor Lyon multidoor) |

## Testing Requirements

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| There will be 2 different types of tests that will be carried for the verification of the software developed for new platform Cobalt KE17 UI.   * Verification of the FCT procedure based on the FCT specification document that will be created to verify all the I/O peripherals and provide to the electronic supplier the possibility to validate the manufacturing line. * Regression tests on all the functional behaviors related to the UX interaction design specifications applicable for the different FPS models where this UI is applicable:  1. Multidoor platforms (MDR4, Ernie, Bobcat, Lyon, Raptor, Lynx, Thundercat) based on specification docs: “ERF Cobalt User Interface - Functional Software Specification - RevL (WL).docx” and “MDR4\_EluxAU\_IS v1.1.pdf” 2. Cobra FDBM and Leo SXS platforms for North America market based on specification doc: “UX180072E\_FrenchDoorsTT.pdf” |

## Test Execution Strategy

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| --- |
| Regression tests will follow the different sections described in the specification documents mentioned above. |

### Testing Types

|  |
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| * Function Testing * Performance Testing * User Interface Testing * Load Testing * Configuration Testing * Installation Testing |

### Testing Tasks

|  |
| --- |
|  |

### Testing Tools

|  |
| --- |
| MPRecorder software tool  DLogReader software  IAR Debug Tool |

### Test Environment and Items

| Resources | Configuration |
| --- | --- |
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|  |  |

### Staffing and Training Needs

|  |
| --- |
| Any specific training needed |

### Test Responsibilities

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| Regression tests will be performed on bench setup emulating as much as possible the complete electronic system environment. (Connection to a power board and eventually other UIs to guarantee and build the proper communication logics) |

### Testing Schedule

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## Test Coverage

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## Entry and Exit Criteria

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## Acceptance Criteria

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## Defects Analysis and Closure

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## Suspension and Resumption Requirements

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## Deliverables

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|  |

# Software Test Protocol

## Test Setup Requirements

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## Instructions to the Tester

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## Test Cases

| Test Case ID | Test Procedure | Equipments / Tools Required | Expected Result |
| --- | --- | --- | --- |
| **<Mention the test objective along with requirement reference>** | | | |
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# Notes

## Terms, Definitions, Abbreviations and Acronyms

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| **Terms** | **Defintions** |
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**Appendix**

**Template Revision History:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Authors** | **Date** | **Description** | **Version** |
| B.Gopalakrishnan | 2020-09-23 | Draft Release | Draft v0.1 |
| B.Gopalakrishnan | 2021-07-02 | Updated for GEO name change | Draft v0.2 |
| B.Gopalakrishnan | 2022-04-13 | Initial Baseline | v1.0 |
| P.Kumaravelu  K.Damodaran | 2022-11-10 | Single row text box added to all the sections  Note added  Document ID has been updated from GDxxxxxxxxx/A format to GEO-XXX-XXX-X-XXXXX/A  Combined Software Test Plan and Test Protocol template and renamed as Software Test Design template  File name, header, footer modified from E. to E- | V2.0 |

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|  | **Name** | **Competency / Category** | **Signature** | **Date** |
| **Reviewed by:** | Luigi Conenna | GEO Process & Cost CL |  | 2022-11-18 |
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