1 System Test Cases

We have decided to make test cases only for consistent operations like selection of countries, providers, service types and status and also retrieval of the list of countries and service types. In this way actions like: switching from a view to another or clicking on a button and checking the related action, are taken for granted.

| ID #1 | View the country list |
|---------------------|--|
| Summary | See the list of the european countries |
| Pre-Condition | The user is in the home page |
| Post-Condition | The list of the countries is displayed in a new view |
| Test Scripts | The user clicks on the button "See the list of EU countries" |
| Execution Variables | None |
| Execution Records | The list of the european countries is displayed |

| ID #2 | Minimum requirement to continue the query |
|---------------------|--|
| Summary | During a query the user must do at least one selection |
| Pre-Condition | The user is performing a query |
| Post-Condition | The query stays in the same selection page |
| Test Scripts | Start a query and get in any of the four selection pages |
| Execution Variables | The user does not select any checkbox |
| Execution Records | The program displays an error alert with an explanation |

| ID #3 | View the service types list |
|----------------------------|---|
| Summary | The program displays the list of the service types |
| Pre-Condition | The user is in the home page |
| Post-Condition | The list of the service type is displayed in a new view |
| Test Scripts | The user clicks on the button "See the list of the trust-service types" |
| Execution Variables | None |
| Execution Records | The list of the trust-service types is displayed |

| ID #4 | Select countries during a query |
|----------------------------|--|
| Summary | Select one or more countries during a query |
| Pre-Condition | The user has stated the query |
| Post-Condition | If at least one country is selected, the view changes in the "Select providers" one and shows only the acceptable providers |
| Test Scripts | Select one or more checkboxes and click the "Next" button |
| Execution Variables | The user selects the country "Ireland" form the list |
| Execution Records | All (and only) the irish providers are listed in the provider selection page (Adobe Systems Software Ireland ltd., Post.trust ltd, trust pro QSTP ltd) |

| ID #5 | Select providers during a query |
|---------------------|---|
| Summary | The user has to select one or more providers during a query |
| Pre-Condition | The "Select countries during a query" test case has already been performed |
| Post-Condition | If at least one provider has been selected, the view switches to the "Select service types" one and shows only the acceptable service types |
| Test Scripts | The user selects one or more providers by clicking on its checkbox and then on the "Next" button |
| Execution Variables | The user selects "Adobe System Software Ireland Ltd." from the list |
| Execution Records | The view shows all the possible Service Types |

| ID #6 | Select service types during a query |
|----------------------------|---|
| Summary | The user has to select one or more providers during a query |
| Pre-condition | The "Select countries during a query", "Select providers during a query" and test cases have already been performed |
| Post-Condition | If at least one service type has been selected, the view switches to the "Select status" one and shows only the acceptable service statuses |
| Test Scripts | The user selects one or more service types by clicking on its checkbox and then on the "Next" button |
| Execution Variables | The user selects "Qualified time stamp" from the list |
| Execution Records | The view shows all the possible service status |

| ID #7 | Select service status and check the query results |
|---------------------|---|
| Summary | The user has to select one or more service types during a query |
| Pre-Condition | The "Select countries during a query", "Select providers during a query" and "Select service types during a query" test cases have already been performed |
| Post-Condition | If at least one status has been selected, the view switches to the "Query Results" one, the last of the query |
| Test Scripts | The user selects one or more statuses by clicking on its checkbox and then on the "Next" button |
| Execution Variables | The user selects "granted", one of the possible statuses of a service, from the list |
| Execution Records | The view shows the query results made of the acceptable services. In this case, with this query, we have only one result: "Adobe Qualified Time Stamp CA" |

2 Unit Test Cases

Unit test cases have been run using Junit testing framework. The system passed successfully all unit tests, and the **report** can be found <u>here</u>.

It is important to note that unit tests were implemented only for business logic classes and methods that have high or quite high logic complexity. In fact, only the classes in the model package have unit tests associated. An exception is made for Trusted List Façade that uses only other classes tested methods with no other implemented logic.