# Title: Corporate Investor - Commercial Registration Verification Via [X]

### **Test Plan**

Objective: Ensure the commercial registration verification process through a third-party service ([X]) is reliable, accurate, and handles valid, invalid, and negative start date scenarios effectively.

## Scope:

- 1. Functional Testing:
  - a. Verify the system sends commercial registration numbers to [X].
  - b. Validate the handling of valid and invalid data.
  - c. Ensure proper processing of start date validation logic.
- 2. Non-functional Testing:
  - a. Ensure performance and response times for communication with [X].
  - b. Test scalability for handling multiple simultaneous verification requests.

## **Entry Criteria:**

- 1. System integration with [X] is complete.
- 2. Test cases for the user story are documented.
- 3. The feature is developed and deployed in the test environment.
- 4. Completion of dev documentation.

### Exit Criteria:

- 1. All high-severity bugs are resolved.
- 2. Verification and validation processes work seamlessly across scenarios.

## Risk-Based Testing (RBT)

- 1. Third-Party Service Reliability:
  - a. Risk: Service [X] fails or responds incorrectly.
  - b. Mitigation: Test with mock responses for failures, timeouts, and unexpected outputs.
- 2. Data Validation Logic:
  - a. Risk: Incorrect handling of invalid numbers or start date thresholds.
  - b. Mitigation: Verify all edge cases for validation.

- 3. User Experience:
  - a. Risk: Poor error messaging or unclear instructions for invalid inputs.
  - Mitigation: Ensure meaningful and actionable error messages are displayed.

#### Possible Test Cases

Acceptance Criteria Test Cases

Scenario 1: Valid Data

- 1. Valid Commercial Registration Verification:
  - a. Verify that the system sends the commercial registration number to [X].
  - b. Validate the system proceeds to the validation process when [X] confirms the number is valid.
- 2. Success Notification:
  - a. Ensure a success message or progress indicator is displayed to the user.

### Scenario 2: Invalid Data

- 1. Invalid Commercial Registration Number Handling:
  - a. Verify the system displays an error message when [X] indicates the number is invalid.
  - b. Validate that the system allows users to input a new commercial registration number.
- 2. Revalidation with Corrected Data:
  - a. Ensure the system restarts the verification process with the updated commercial registration number.

Scenario 3: Validation for Start Date is Negative

- 1. Company Start Date Less Than Two Years:
  - a. Verify that the system notifies the user if the start date (output number: 15) is less than two years.
  - b. Ensure the user cannot proceed to the next step.
- 2. Company Start Date More Than Two Years:
  - Validate that the system allows the user to proceed if the start date is more than two years.

## **Edge Cases**

- 1. Test the behavior when no registration number is provided during the input phase.
- 2. Simulate a scenario where [X] does not respond within the expected time.
- 3. Verify that the system retries the request or notifies the user of the delay.

- 4. Validate that the system rejects registration numbers in an unsupported format before sending them to [X].
- 5. Ensure the system handles multiple corporate users submitting verification requests at the same time without performance degradation.
- 6. Test the behavior if [X] returns incomplete or malformed responses.

## **Test Runs**

Run 1: Functional Testing

Run 2: Load Testing

Run 3: Negative Testing

Run 4: Regression Testing