

## **Proof of Concept (POC)**

### **1. Introduction:**

The POC will be a part of the technical evaluation by the technical committee set up by IRDA. It is intended that the functionality around the scope of work defined hereunder is built as a part of the POC. POC shall form the basis for the IRDA's technical team to assess:

- The bidders understanding of the requirements
- Their technical/architectural and domain capabilities and
- To understand what the proposed system would offer to the users based on the existing data. And, to understand the low-hanging fruits that the solution would deliver in a time frame of 3 to 4 months.

The bidder may utilize the sample transaction level data available at [https://iib.gov.in/IRDA/Sample\\_Transaction\\_levelData\\_Health.html](https://iib.gov.in/IRDA/Sample_Transaction_levelData_Health.html), that can act as the database for the POC. Apart from this, no additional transaction level data shall be provided.

While devising the POC, the bidder shall consider the following:

- It is expected that the bidder develops prototypes without actually setting up the hardware/network/software completely as per the requirements of the RFP
- The POC shall represent the spirit of the requirements and not their entirety. As such, the POC shall cover sample techniques only. Where a minimum requirement is prescribed, the bidder shall adhere to the same.

### **2. Scope of the POC:**

#### **2.1. Interfaces to be developed:**

- 2.1.1. Dashboards for the underwriters/claims handlers
- 2.1.2. Dashboards for the Management of the Insurance Companies/TPA's
- 2.1.3. Dashboards for the IRDA and IIB.

#### **2.2. Functionality to be developed:**

- 2.2.1. **Anomaly Detection:** The bidder needs to demonstrate anomaly detection, classification and clustering, simulation capabilities using at least two techniques each with respect to un-supervised, supervised

learning and experience brought from previous implementations. The scope for POC shall also include the ability to use a hybrid model for anomaly detection.

2.2.2. **Classification and Scoring of Claims and Proposals** . The bidder needs to demonstrate scoring of new proposals, claims, risk based scoring using two or more statistical techniques and tools

2.2.3. **Triggers, Alerts, Workflow:** The bidder needs to demonstrate

- Two or more triggers each from the list of possible triggers enlisted under sections 3.4.6 to 3.4.9 of the Part1 of the RFP.
- Capability to prioritize alerts, allocate work to different user
- Various modes of alerting the users.
- Red-flagging of fraud cases
- Root causal analysis of frauds

2.2.4. **Prediction and Analytical Capabilities:** The bidder needs to demonstrate the statistical/analytical capability to predict and classify claims and proposals. In addition, POC scope shall include:

- Capability to predict an attempt for fraud at underwriting
- Capability to predict an attempt for fraud at claims
- Five or more trends as stated in section 3.9 of the RFP . Part1.

2.2.5. **Summary tools:** The bidder needs to create screens to demonstrate capability extract summary level information. The scope for POC shall include:

- Graphical visualization to establish/uncover linkages
- Summarized information on products, claims etc and the ability to drill down, re-group various attributes like region, age-group, etc.

2.2.6. **User Management/Security:** The bidder shall demonstrate capability around the following:

- Role based access
- Security . Two factor authentication
- Administration of users

2.2.7. **Data:** The bidder needs to use the same data as indicated in section 1 above to demonstrate capability to

- Clean, enrich/transform the data
- Data imputation and techniques with respect to the same.
- Pre-processing
- Text mining . two or more tools/techniques
- Data mining . two or more tools/techniques
- Structured and Unstructured Analysis . two or more tools/techniques.

**2.3. Reports to be developed:** The bidder shall develop screens and utility to demonstrate the capability to

2.3.1. Generate periodic reports . two or more sample reports

2.3.2. Generate ad-hoc reports

2.3.3. Run queries.

### **3. Delivery of POC program:**

**3.1. Documentation:** The POC shall be a part of the technical bid and the program shall be copied on a non-rewritable CD. The CD shall also include:

3.1.1. Documentation on how to browse through the POC system

3.1.2. Documentation on trouble shooting of any likely issue

3.1.3. Documentation of the various screens, functionality covered.

3.1.4. Documentation of the POC functionality that could not be covered due to dependency on additional data/other factors.

**3.2. Specifications:** The program shall adhere to the following specifications:

3.2.1. It shall be with a capability to launch using a simple executable file.

3.2.2. It shall run on a PC with XP or above version of windows.

3.2.3. It shall run on a PC with a RAM of 1 GB and HDD of 20 GB with a processor of intel P IV or above.

### **4. Difficulties:**

In case of difficulty in launching the application, IRDA/IIB shall email the contact person as stated in the bid documents. It shall be the duty of the bidder to respond within a time frame of 24 hours to resolve the issue. IRDA/IIB shall not be liable to send any reminder or any further request in this regard. IRDA/IIB shall at their sole discretion treat a bidder not responding to the request to clear the difficulties as non-responsive and disqualify the bidder from further bidding process.