



Digitized Shifting Enhancements in Telemedia

STATEMENT OF WORK

IMPLEMENTATION OF <Digitized Shifting Enhancements in Telemedia>

Dated : 08-Mar-2021

CSR NO. 20210308-PP-R2-0482

CCB NO. : 154/FL/03/2021

Client: Bharti Airtel Ltd.

Version : 1.0

Status : Baseline

Project Type: Fixed Price

Security: IBM & Bharti Airtel Confidential

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Document Information

Document Source References

Revision History

Ver #	Revision date	Revised By	Summary of changes	Revision marks
1.0	08-Mar-2021	Nishant Sharma	SOW for Digitized Shifting Enhancements in Telemedia	Baseline



Digitized Shifting Enhancements in Telemedia

SIGNATURE PAGE

This SOW shall be governed by the terms and conditions of the Addendum 4 to MSA dated 27-September'17 signed on 30-Mar'19 between IBM India Private Limited (IBM) and Bharti Airtel Limited (Airtel)("Agreement") save and except for Clause and the Schedules which shall not apply.

By signing below for our respective authorized representatives, we agree to the terms of this SOW unless modified in writing by mutual agreement reduced in writing by the authorized representatives of the Parties.

Agreed to:
Bharti Airtel Limited

Agreed to:
IBM India Private Limited

By: Nemesh Jain

By: Nishant Sharma

Authorized signature

Authorized signature

Name (type or print):

Name (type or print):

Date:

Date:



Digitized Shifting Enhancements in Telemedia

Contents

1. Introduction	5
1.1. Background	5
1.2. IBM's Approach	5
2. IBM Statement of Work	6
2.1. Project Scope	6
2.2. Exclusions	6
2.3. Assumptions	7
2.3.1. General	8
2.3.2. Business Process & Application Functionality	8
2.3.3. Data Management	9
2.3.4. Integration	9
2.4. Dependencies	9
2.5. Data Security and Privacy	9
2.6. Project Schedule	9
2.7. Deliverables	10
2.8. Asset Bill of Material	10
2.9. Completion Criteria	10
2.10. Charges	10
2.10.1. Application Services Effort & Charges	10
Total IBM Efforts: 79 PDs	10
Price as per Agreed Rate Card in Addendum 4 to MSA-2017 signed on 30-March-19	10
2.10.2. Hardware & Software Charges	11
2.10.3. 2.9.3 Travel & Miscellaneous Charges	11
2.10.4. Payment Milestones	11
2.11. Terms and Conditions	11
2.12. Charging and Invoicing	11
Appendix A - Project Change Control Procedure	13
Appendix B – IBM and Bharti Responsibilities	14
Appendix C - Deliverable Materials Acceptance Procedure	15
Appendix D - Escalation Procedure	17
Appendix E - Defects Categorization	18
Appendix F - Customer Business Requirements (CBR)	20
Appendix G - Solution Overview	21
Appendix H – Bharti Airtel Resource Requirement	22
Appendix I - EFFORT DISTRIBUTION MIX	23
Appendix J - Sizing Solution	24
Appendix K- Project Specific	25

1. Introduction

1.1. Background

This Statement of Work (SOW) governs the “Digitized Shifting Enhancements in Telemedia” project. The document refers to consensus scope, technical SOW, to implement this solution as defined in CBR of ‘Digitized Shifting Enhancements in Telemedia’ in Telemedia iCRM.

CCB NO.: 154/FL/03/2021

1.2. IBM’s Approach

To provide in-house developed solution for “Digitized Shifting Enhancements in Telemedia”. This solution will be deployed on the existing servers where Telemedia iCRM application is hosted.

2. IBM Statement of Work

This Statement of Work describes the work to be undertaken by IBM under the terms and conditions of this project for Airtel. The tasks to be performed by IBM and the Deliverable Materials are defined and an Estimated Schedule is provided. In addition, the responsibilities of Airtel are listed.

Changes to this Statement of Work will be processed in accordance with the procedure described in Appendix A - Project Change Control Procedure. The investigation and the implementation of changes may result in modifications to the Estimated Schedule, Charges, and other terms of this Statement of Work and/or the Agreement.

2.1. Project Scope

Current scope is to enhance the existing Oracle Applications based application known as Telemedia iCRM. Current Scope is limited to the approved CBR attached in Appendix F.

The functional and Non-functional requirements are mentioned in the attached CBR document.

- **CSR Deliverables**
BFR01 to BFR12

2.2. Exclusions

The scope for this project is as specified above. However, to avoid ambiguity, the exclusions are listed below:

- No new Hardware / Software would be installed as part of the project
- Performing Load / Stress testing / HA of the changes is out of scope as no such environment exists.
- No new processes / attributes to be monitored at NOC as part of this change
- No changes to Archiving, backup, service restoration and purging policies are in scope.

Digitized Shifting Enhancements in Telemedia

- No new service desk setup is in scope.
- Pre-production environment is not available.
- Load Stress testing is not applicable.
- Pre-production environment is not available.
- Anything not specifically mentioned shall be considered as out of project scope
- Management of requests created in the application will be the responsibility of Bharti.
- This application would be intranet based application and would be available on BHARTI LAN only.
- BHARTI Airtel is aware of risks associated with access to production data and accepts the risks associated with current access and controls over their sensitive personal data.
- BHARTI Airtel is responsible for the Data Security of the test data used for UAT.
- BHARTI Airtel will define restrictions on downloading, copying and printing data from their production systems if any.
- Load Stress testing is not applicable.
- Pre-production is not available.
- Time out parameters at integration layer shall remain the same for the new integration services created.
- Business to share the test cases.
- No Type II Materials have been introduced into the In-Scope Systems as part of the deliverables for performance of the Services.

2.3. Assumptions

This SOW and IBM's estimates to perform the services under this SOW are subject to the following key assumptions. The assumptions have been classified under the following heads:

- General
- Business Process & Application Functionality
- Data Management
- Integration

Digitized Shifting Enhancements in Telemedia

2.3.1. General

- IBM does not guarantee continuity of its resources for the duration of its engagement. However, IBM will attempt that this does not affect the project adversely.
- The mix of IBM resources and their specialty, skill level, experience, and roles may vary over time based on the project requirements.
- IBM may use the services of vendors' skilled resources to assist the team in providing the services.
- Deployment is subject to availability of Infra / Hardware / Network readiness.
- Schedule of production hardware installation will be based on priority set to the data center team by business.
- UAT would be performed on available data in Test Environment.
- Airtel has procured/will procure all approvals required in terms of Clause 8.9 of the Agreement for Type II materials to be used under this SOW

2.3.2. Business Process & Application Functionality

- Scope of the functionalities will be limited to the BFRs mentioned above. Business to ensure proper review of each requirement and ensure minimum subjectivity & interpretation. Any requirements which are subject to interpretation will be considered as per the understanding of Airtel teams.
- All changes will be taken as per change management process. Requirements /functionality /desired behavior which are not explicitly described is beyond the scope of this document/project.
- Current CSR is an Enhancement in CRM application, so current CIA rating will remain the same. Bharti Airtel to provide approved new CIA rating from Bharti Airtel security team if there is any change in the CIA rating of the application due to the enhancements.
- UAT would be performed on available data in Test Environment.
- Management of requests created in the application will be the responsibility of Bharti.
- This application would be intranet-based application and would be available on BHARTI LAN only.
- Load Stress testing is not applicable.
- Pre-production is not available.
- HA testing is out of scope.
- In case any point found not feasible during implementation can be removed from the scope provided.
- Any data purging is not in scope of this project.

Digitized Shifting Enhancements in Telemedia

2.3.3. *Data Management*

- Where Airtel requires IBM to access any data being PI/SPI, IBM assumes that Airtel has the required authorizations and approvals for the same. IBM further assumes the adequacy of security systems deployed by Airtel for the security of Data.
- Data as available in test environment shall be used for all testing phases. Any new plan/component creation request shall be handled by Bharti RA and the configuration team
- Any data purging is not in scope of this project.
- All the new API's shall be called via ESB.

2.3.4. *Integration*

NA

2.4. Dependencies

- Airtel shall provide their resources for conducting the UAT as per project plan timelines.
- Bharti Airtel team is responsible for getting SLA sign off from technical team for all data sources.
- Bharti Airtel will provide adequate Data Center space, power to install required hardware. In absence of this project implementation and rollouts will be delayed.


2.5. Data Security and Privacy

- Airtel is aware of risks associated with access to production data and accepts the risks associated with current access and controls over their sensitive personal data.
- Airtel is responsible for the Data Security of the test data used for UAT.
- Airtel will define restrictions on downloading, copying and printing data from their production systems if any.
- IBM will not access any PI/SPI data of Airtel unless specifically agreed in writing

2.6. Project Schedule

The estimated time frame for this SOW is 79 days. Please note that this is only an estimate and may need to be refined in the Project Preparation stage

Digitized Shifting Enhancements in Telemedia

Milestone/Deliverable	Mth 1	Mth 2	Mth 3	Mth 4	Mth 5	Mth 6	Mth 7
1. Project Management							
3. Design							
4. Development							
5. Testing							
6. UAT							
7. Live							

2.7. Deliverables

- Project Plan
- CBR (Already delivered and approved from business.)

2.8. Asset Bill of Material

NA

2.9. Completion Criteria

IBM will have fulfilled its obligations under this SOW when IBM accomplishes the completion criteria of IBM activities, including delivery to Bharti Airtel of the relevant materials listed in Section "Deliverables"

2.10. Charges

2.10.1. Application Services Effort & Charges

Total IBM Efforts: 79 PDs

Price as per Agreed Rate Card in Addendum 4 to MSA-2017 signed on 30-March-19

2.10.2. Hardware & Software Charges

NA

2.10.3. 2.9.3 Travel & Miscellaneous Charges

NA

2.10.4. Payment Milestones

Milestone Name	% Billing
SoW Sign-off	10%
SIT Offer	10%
UAT Offer	35%
UAT Sign-Off	20%
Production Deployment	15%
Go-live Sign Off	10%

2.11. Terms and Conditions

This statement of Work (SoW), contains the purpose, scope of work, assumptions, dependencies and constraints (if any) for the Security Consulting Service (Services) to be provided by Airtel. This SoW is governed by the terms and conditions of the Agreement between IBM and Bharti save and except for Clauses and the Schedules which shall not apply.

2.12. Charging and Invoicing

Tax Clause

Each Party shall be solely responsible for its respective tax liabilities, including, Income Tax, GST and any other taxes, levies, duties, surcharges, fees or cess imposed, as applicable in accordance with law and accruing to the respective Party in connection with or arising out of this Agreement. Each Party shall be solely liable to collect such taxes at the relevant stage and deposit the same with the relevant Government Authority in accordance with law. If, owing to any failure or default to collect or deposit such taxes at the relevant stage, any tax demands/interest/penalties etc., are raised or levied by the relevant authorities at any subsequent stage, the party



Digitized Shifting Enhancements in Telemedia

in default shall not have any recourse to the other party and shall not be entitled to demand or recover or seek compensation in respect of such demand/interest/penalties etc. from the other party. In no event shall either party be liable to recompense the other party in relation to the other party's tax liability.

Each party shall provide the other with all reasonable assistance and information to meet their respective obligations under GST Act. IBM shall ensure that a GST compliant invoice with all particulars required to enable Airtel receive Input Tax Credit (ITC) is submitted to it within the timelines allowed by the GST Act. Any loss of ITC, interest or penalty for reasons of proven (vide the dispute resolution process of the Master Service Agreement) non-compliance on the part of supplier shall be borne by IBM."

Appendix A - Project Change Control Procedure

Please refer the below attached document for the same.



Change Management
Procedure



Digitized Shifting Enhancements in Telemedia

Appendix B – IBM and Bharti Responsibilities

Please refer the below attached document for the same.



Roles and
Responsibilities

Appendix C - Deliverable Materials Acceptance Procedure

Except for status reports, project plan, and code/executables, each Deliverable Material as defined in this Appendix B - IBM and Airtel Responsibilities will be reviewed and accepted in accordance with the following procedure:

- One (1) draft of the Deliverable Material will be submitted to the Bharti Airtel Project Manager, seeking a signoff from Airtel. It is the Airtel Project Manager's responsibility to make and distribute additional copies to any other reviewers.
- Within five (5) business days, which time period shall not impact the project progress; the Bharti Airtel Project Manager will either accept the Deliverable Material or provide the IBM Project Manager a written list of identified defects in regard to the agreed specification. If no response from the Bharti Airtel Project Manager is received within the five (5) business days as agreed above, then the Deliverable Material will be deemed accepted.
- Within five (5) business days, which time period shall not impact the project progress, IBM will resubmit the updated final version to the Bharti Airtel Project Manager for review and final acceptance.
- IBM will request in writing from Airtel reasons or shortfalls of the system, if any, if the system is put into production use without acceptance. Such response from Bharti Airtel will be provided within ten (10) working days of IBM's request. However, if no response is received from Airtel within ten (10) working days without assigning any reasons or shortcomings to IBM then the system will be deemed accepted.

User Acceptance

1. The Materials will be accepted by Airtel when the functions and features to be tested meet the completion criteria specified in the "User Acceptance Testing" phase. IBM will maintain a log of all items failing to meet the completion criteria.
2. If the deliverables meet its Acceptance Criteria, Airtel will provide IBM written notification that such Deliverable has been accepted. Alternatively, the deliverable will be deemed as accepted in case there is no notification beyond seven (7) Business Days.

Go Live/Rollout Acceptance Criteria

Go Live/Rollout is considered complete and accepted when it meets the following criteria:

- Within ten (10) business days after submission by IBM, provided there is no Severity 1 incident due to the project for the system under change for the first ten (10) working days after go-live.
- If the deliverables meet its Acceptance Criteria, Airtel will provide IBM written notification that such Deliverable has been accepted. Alternatively, the deliverable will be deemed as accepted in case there is no notification beyond ten (10) Business Days.



Digitized Shifting Enhancements in Telemedia

The remaining errors will be addressed during the Support period. All sign off deliverables will be treated as accepted when the system goes live. However, this does not include the deliverables which may be open in the UAT stage before the system goes live.



Digitized Shifting Enhancements in Telemedia

Appendix D - Escalation Procedure

The following procedure will be followed if resolution is required to a conflict arising during the performance of this SOW.

- Level 1: If the project team cannot resolve the conflict within two (2) working days, the Bharti Airtel Project Manager and IBM Project Manager will meet to resolve the issue.
- Level 2: If the conflict is not resolved within three (3) working days after being escalated to Level 1, the Bharti Airtel Project Executive will meet with the IBM Project Executive to resolve the issue. If required the Project Executives may address this through the Governance process in the Agreement.
- During any conflict resolution, IBM agrees to provide services relating to items not in dispute, to the extent practicable pending resolution of the conflict save and except where such dispute is in relation to payment.

-

Level	IBM	Bharti
Level 1	Project Manager – Nishant Sharma	Project Manager – Nemesh Jain
Level 2	Portfolio Manager – Rakesh Razdan	Stream Lead – Simrat Pal Singh Bhalla
Level 3 (if any)	IBM IT Governance	Airtel IT Governance

Appendix E - Defects Categorization

Defects shall be categorized as per the guidelines below :

Severity Level	Classification	Criteria / Problem
1	Catastrophic Error Stops the Application	<p>Critical function provided by the application is interrupted and would cause disruption of the work of Bharti Airtel,</p> <p>Database corruption</p> <p>Infinite loop</p> <p>Core dump, memory fault, and Floating Point Exceptions</p> <p>Disables the system or module</p> <p>System crash [Even if the crash is caused by invalid inputs- it is still a Severity 1]</p> <p>Disables the terminal [Locks or hangs the Terminal]</p> <p>Return to Unix Shell prompt</p> <p>Message: "An Error has occurred. Please Contact...."</p> <p>Database/SQL Connection Error</p> <p>No workaround exist for the problem</p> <p>The basic feature/function is not operating as documented/specified e.g.</p>
2	Serious Malfunction	<p>provides incorrect output</p> <p>service provided by the application is degraded</p> <p>some functions may not be available or may be inadequate.</p>
3	Misleading Information; Error Handling	<p>Low severity problems that include problems that have been circumvented at operational levels and/or not disrupting the normal operations e.g.</p> <p>Wrong messages</p> <p>Failure to acknowledge input</p> <p>Wrong, Outdated, Obscured or Missing Help Messages</p> <p>Misleading Error Message</p> <p>Reporting Non-error as an Error</p> <p>Fail to Report Error</p>
4	User Unfriendly	<p>Cosmetic problems and others that have no impact on the functionality of the system e.g.</p> <p>Poor Aesthetics in Screen or Report Layout</p>

Digitized Shifting Enhancements in Telemedia

Severity Level	Classification	Criteria / Problem
		<p> Typos Overlapping Messages Unnecessary Repainting of Screen Failure to Clear Screen or Highlight Unfriendly or Verbose Message Message Displayed for Too Long or not Long Enough No Warning for the operations which takes a long time No Progress Report (i.e. acknowledge during long delays) Complex Menu Hierarchy Unrelated Commands under the Same Menu </p>



Digitized Shifting Enhancements in Telemedia

Appendix F - Customer Business Requirements (CBR)



CBR-Digitized Shifting
Enhancements in Telei



Appendix G - Solution Overview

Functional Overview

It has been explained in the CBR document. CBR document is attached in Appendix F.

Architecture Overview

Technology: Oracle Applications CRM, SQL, JAVA J2EE, XML, PL/SQL, concurrent program.

Database: Oracle 11g Release 11.2.0.2.0

Zone: Bharti Intranet Secured zone.

Interface Overview

iCRM Telemedia

Development / Deployment Platform

Database: Oracle 11g Release 11.2.0.2.0



Digitized Shifting Enhancements in Telemedia

Appendix H – Bharti Airtel Resource Requirement

The table contains the estimated resources that would be required from Bharti Airtel during the course of this assignment. These figures are only estimates and periodic reviews will be done to ensure that optimum resource levels are maintained.

S.No.	Resource Skill	Line of Business	Involvement
1	Bharti Airtel Business SPOC		Y
2	Bharti Airtel Stream Lead		Y
3	Bharti Airtel IT Manager		Y
4			
5			
6			
7			



Digitized Shifting Enhancements in Telemedia

Appendix I - EFFORT DISTRIBUTION MIX

Efforts mentioned in Charges section above for Fixed Price Projects are distributed in the ratio as per document attached below (as per Annexure D of Addendum 4 to MSA-Sep'17)



Effort Distribution
Mix.xls



Appendix J - Sizing Solution

NA



Appendix K- Project Specific



Digitized Shifting Enhancements in Telemedia

*** end of document ***



Digitized Shifting Enhancements in Telemedia

Document Control Page

SOW (Statement of Work)

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