

# THE UNITED REPUBLIC OF TANZANIA



## PRESIDENT'S OFFICE PUBLIC SERVICE MANAGEMENT AND GOOD GOVERNANCE

### e-MKOPO API DOCUMENTATION

SEPT 2024

Version 1.0.10

#### Document Description

Document Name	Owner	Document Type
e-MKOPO API Documentation	PO-PSMGG	For Public Consumption

#### Document Version Control

Version	Date	Change Description
1.0.10	Sept 2024	Tag addition on products catalogs, Loan Status Response, Loan Takeover, Loan Restructuring

# Table of Contents

1. PREREQUISITES.....	1
2. REQUEST FLOW.....	2
2.1. Product Catalog.....	2
2.1.1. Inquire Product Catalogs.....	2
2.1.2 Product Decommission.....	5
2.2 New Loan.....	6
2.2.1 Possible Loan Charges Request from Employee to FSP.....	7
2.2.2 Possible Loan Charges Response From FSP to Employee.....	9
2.2.3 Loan Offer Request From Employee to FSP.....	11
2.2.4 Loan Offer Approval Notification From FSP to ESS.....	14
2.2.5 Loan Verification and Approval.....	15
2.2.6 Disbursement Notification from FSP to ESS.....	16
2.2.7 Disbursement Failure Notification from FSP to ESS.....	17
2.2.8 Loan Cancellation.....	18
2.3 Loan Top up.....	19
2.3.1 Pay Off Balance Request to FSP.....	20
2.3.2 Settlement Balance Response From FSP.....	21
2.3.3 Possible Loan Charges Request From Employee to FSP.....	22
2.3.4 Possible Loan Charges Response From FSP.....	24
2.3.5 Loan Top Up Request From Employee to FSP.....	25
2.3.6 Loan Offer Approval Notification From FSP to ESS.....	29
2.3.7 Top Up Verification and Approval.....	30
2.3.8 Disbursement Notification From FSP to ESS.....	31
2.3.9 Disbursement Failure Notification From FSP to ESS.....	32
2.3.10 Top up Cancellation.....	32
2.3.11 Employee Cancellation Notification to FSP.....	33
2.4 Loan Restructuring.....	34

2.4.1 Employee Request Loan Balance From FSP.....	34
2.4.2 Loan Restructuring Balance Response From FSP.....	35
2.4.3 Employee Loan Amendment Request.....	36
2.4.4 Possible Loan Restructuring Charges Response From FSP to Employee.....	37
2.4.5 Loan Restructuring Request From Employee to FSP.....	38
2.4.6 Restructuring Request Approval Notification From FSP to ESS.....	41
2.4.7 Restructuring Verification and Approval.....	42
2.5 LOAN TAKEOVER.....	43
2.5.1 Loan Takeover Balance and Payment Details Request to FSP1.....	43
2.5.2 Loan Takeover Balance and Payment Details Response From FSP1.....	45
2.5.3 Loan Charges Request From Employee to FSP.....	46
2.5.4 Possible Loan Charges Response From FSP to Employee.....	48
2.5.5 Loan Offer Request from Employee to FSP2.....	49
2.5.6 Loan Takeover Approval Notification From FSP2 to ESS.....	53
2.5.7 Rejection by Employee to FSP2.....	54
2.5.8 Loan Takeover Verification and Approval.....	55
2.5.9 Disbursement Notification from FSP2 to ESS.....	56
.....	56
2.5.10 Disbursement Failure Notification From FSP2 to ESS.....	57
2.5.11 Payment Notification From ESS to FSP1.....	57
2.6 Loan Repayments and monitoring (all loans).....	59
2.6.1 Loan Repayments From Employer/Month Deduction.....	59
2.6.2 Loan Repayments From Employee.....	61
2.7 Loan defaults recovery.....	69
2.7.1 Defaulter Details From FSP to Employer.....	69
2.7.2 Defaulter details from employer to FSP.....	70
2.8 Account validation.....	72
2.8.1 Account validation response from FSP.....	72
2.9 Financial Service Provider Bank branch.....	73

2.10 Monthly Deduction record to FSP.....	75
2.11 Deduction stop notification to FSP.....	77
2.10 Loan Liquidation notification message.....	78
2.11 Loan Status Request.....	79
2.12 Loan Status Response.....	80
2.13 General Response message.....	81
3 Digital Signature Security.....	82
3.1 Overview.....	82
3.2 Digital Signature.....	82
3.3 Digital Signature File Format.....	82
3.4 Signature Algorithm.....	82
3.5 Signed Final Payload Format.....	82
4 Appendices.....	84
4.1 Loan states.....	84
4.2 Loan state transition.....	84
4.3 Response Code.....	85

## 1. PREREQUISITES

### i. **Network Connection**

Integrating institutions should have network connection from their system accessible to GovESB.

### ii. **Institution System**

Integrating institution should have a working system that is ready to integrate without a need for manual intervention.

### iii. **API Endpoints**

All requests from the institution system shall be received at different ends based on different APIs.

## 2. REQUEST FLOW

### API REQUEST FLOW

#### 2.1. Product Catalog

The product catalogs shall be offered to ESS from FSP Systems, these catalogs shall serve as starting point where Employees traverse to find their suitable packages. These catalogs will be availed to Employee at any given instance. The process shall involve FSP Systems pushing Catalog details to ESS at a stipulated timed interval, and ESSs shall send acknowledgment response upon receipt of every transaction.

##### 2.1.1. Inquire Product Catalogs

Flow:

- i. FSP push product offering to ESS
- ii. Employer register employee details into government employee system
- iii. Employee login to government platforms
- iv. Employee preview product offering

#### A. Product catalog push details

S/N	Item Name	Item description	Type	Optional
1	FSP code	FSP identification	Varchar(10)	NO
2	FSP name	FSP description	Varchar(100)	NO
3	Product code	Product identification	Varchar(8)	NO
4	Product name	Product description	Varchar(255)	NO
5	Minimum Tenure	Minimum repayment period	Number(3)	NO
6	Maximum Tenure	Maximum repayment period	Number(3)	NO
7	Interest rate	Interest rate amount	Number(3,2)	NO
8	Processing fee	Cost of loan processing percentage	Number(3,2)	YES
9	Insurance	Loan cover percentage	Number(3,2)	NO
10	Amount	Min & Max loan product amount	Number(38,2)	NO
11	Repayment type	Frequency of loan repayment	Varchar(10)	YES
12	Terms and condition	List of terms and condition	Check below	NO
13	Product Description	Short and useful Product details description	Varchar(255)	YES

14	For Executive	Identification if product is for executive employee or for all(true if is for executive and false if is for all)	Boolean	No
15	Deduction code	Unique deduction number that identify FSP deduction	Varchar(10)	NO
16	Insurance Type	Type of insurance cover (up front/at once or distributed/each month)	Varchar(50)	NO

#### B. Terms and condition

S/N	Item Name	Item description	Type	Optional
1	Terms Condition Number	Terms and Condition Number	Varchar(20)	NO
2	Description	Terms and Condition Description	Varchar(255)	NO
3	TC Effective Date	Terms and Condition Effective Date	Date	NO

#### Message 01

```

<Document><Data>
  <Header>
    <Sender>FSPSystem</Sender>
    <Receiver>ESS_UTUMISHI</Receiver>
    <FSPCode>FL7407</FSPCode>
    <MsgId>FSP123467020</MsgId>
    <MessageType>PRODUCT_DETAIL</MessageType>
  </Header>
  <MessageDetails>
    <DeductionCode>FL0001</DeductionCode>
    <ProductCode>LA1001</ProductCode>
    <ProductName>Mkopo wa Simu</ProductName>
    <ProductDescription>Mkopo Elimu</ProductDescription>
    <ForExecutive>>false</ForExecutive>
    <MinimumTenure>12</MinimumTenure>
    <MaximumTenure>24</MaximumTenure>
    <InterestRate>10.00</InterestRate>
    <ProcessFee>15.00</ProcessFee>
    <Insurance>0.75</Insurance>
    <MaxAmount>5000000</MaxAmount>
    <MinAmount>100000</MinAmount>
    <RepaymentType>Flat</RepaymentType>
    <Currency>TZS</Currency>
    <InsuranceType> DISTRIBUTED || UP_FRONT</InsuranceType>

```



```

    <TermsCondition>
      <TermsConditionNumber>123456</TermsConditionNumber>
      <Description>Payment Must be Made in Full</Description>
      <TCEffectiveDate>2024-02-22</TCEffectiveDate>
    </TermsCondition>
    <TermsCondition>
      <TermsConditionNumber>123457</TermsConditionNumber>
      <Description>Load must be paid within time</Description>
      <TCEffectiveDate>2024-02-22</TCEffectiveDate>
    </TermsCondition>
  </MessageDetails>
  <MessageDetails>
    <DeductionCode>FL0002</DeductionCode>
    <ProductCode>LA1002</ProductCode>
    <ProductName>Mkopo Wa Fedha</ProductName>
    <ProductDescription>Mkopo Kwa Watumishi</ProductDescription>
    <ForExecutive>>false</ForExecutive>
    <MinimumTenure>12</MinimumTenure>
    <MaximumTenure>24</MaximumTenure>
    <InterestRate>0.05</InterestRate>
    <ProcessFee>5.00</ProcessFee>
    <Insurance>7.00</Insurance>
    <MaxAmount>5000000.80</MaxAmount>
    <MinAmount>100000</MinAmount>
    <RepaymentType>Flat</RepaymentType>
    <Currency>TZS</Currency>
    <InsuranceType> DISTRIBUTED || UP_FRONT</InsuranceType>
    <TermsCondition>
      <TermsConditionNumber>123456</TermsConditionNumber>
      <Description>Payment Must be Made in Full</Description>
      <TCEffectiveDate>2024-02-22</TCEffectiveDate>
    </TermsCondition>
    <TermsCondition>
      <TermsConditionNumber>123457</TermsConditionNumber>
      <Description>Load must be paid within time</Description>
      <TCEffectiveDate>2024-02-22</TCEffectiveDate>
    </TermsCondition>
  </MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>

```

### 2.1.2 Product Decommission

S/N	Item Name	Item description	Type	Optional
1	FSP code	FSP identification	Varchar(10)	NO
2	Product code	Product identification	Varchar(8)	NO

#### Message 02

```
<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>A1001</FSPCode>
      <MsgId>FSP12346</MsgId>

    <MessageType>PRODUCT_DECOMMISSION</MessageType>
    </Header>
    <MessageDetails>
      <ProductCode>AA123456</ProductCode>
    </MessageDetails>
    <MessageDetails>
      <ProductCode>AA123457</ProductCode>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>
```

## 2.2 New Loan

This part explain how employees will, after studying loan catalogs and choosing their preferred load category, request loan from FSP, FSP responses and the approval work flow from Employee to FSP to Employer and back to FSP for final approval and disbursement.

- i. Employee login to government platforms
- ii. Employee select product and FSP
- iii. Employee applies for loan
- iv. FSP receive and validate employee loan details
- v. FSP decide and reply on loan offer to employee
- vi. Employee receive loan offer
- vii. Employee decides on the offer
- viii. Employee submit loan application and deduction details to Employer
- ix. Employer approves the loan application
- x. Employer initiates loan deduction
- xi. FSP and employee receive notification of initiated deduction
- xii. FSP disburse loan
- xiii. Employee receive amount credit notification

### 2.2.1 Possible Loan Charges Request from Employee to FSP

This is on demand and sync API request to get possible loan charges from FSP

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	Designation code	Designation Identification	Varchar(8)	NO
3	Designation name	Designation description	Varchar(255)	NO
4	Basic Salary	Basic salary	Number(38,2)	NO
5	Net salary	Amount after deduction	Number(38,2)	NO
6	One third amount	Minimum amount after deduction	Number(38,2)	NO
5	Deductible amount	Net salary – 1/3 amount	Number(38,2)	NO
6	Retirement date	Current date – date of birth (Month)	Number (3)	NO
7	Terms of employment	Permanent or Contractual	Varchar(30)	NO
8	Requested amount	Loan amount	Number(38,2)	YES
9	Desired deductible amount	Desired deduction amount	Number(38,2)	YES
10	Tenure	Repayment period	Number (3)	YES
11	FSP code	FSP identification	Varchar(10)	NO
12	Product code	Product identification	Varchar(8)	NO
13	Vote Code	Vote/institution identification code	Varchar(10)	NO
14	Total Employee Deduction	Total existing employee deduction amount	Number(38,2)	NO
15	Job class code	Identifier for a Group of Designations	Varchar(10)	NO

### Message 03

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>LOAN\_CHARGES\_REQUEST</MessageType>

</Header>

<MessageDetails>

<CheckNumber>111222333</CheckNumber>

<DesignationCode>TZ800186</DesignationCode>

<DesignationName>ICTO II

</DesignationName>

<BasicSalary>5000.00</BasicSalary>

<NetSalary>10000.00</NetSalary>

<OneThirdAmount>12000.00</OneThirdAmount>

<RequestedAmount>5000.00</RequestedAmount>

<DeductibleAmount>12000.00</DeductibleAmount>

<DesiredDeductibleAmount>12000.00

</DesiredDeductibleAmount>

<RetirementDate>3</RetirementDate>

<TermsOfEmployment>Permanent and Pensionable

</TermsOfEmployment>

<Tenure>45</Tenure>

<ProductCode>22346</ProductCode>

<VoteCode>32</VoteCode>

<TotalEmployeeDeduction>120000.00</TotalEmployeeDeduction>

<JobClassCode>JB0012</JobClassCode>

</MessageDetails>

</Data>

<Signature>Signature</Signature>

</Document>

### 2.2.2 Possible Loan Charges Response From FSP to Employee

S/N	Item Name	Item description	Type	Optional
1	Desired deductible amount	Desired deduction amount	Number(38,2)	YES
2	Total Insurance	Total Loan Insurance charges	Number(38,2)	NO
3	Total Processing Fees	Total Loan Processing Fees charges	Number(38,2)	YES
4	Total Interest Rate Amount	Total Loan Interest Rate amount charges	Number(38,2)	NO
5	Other Charges	Total Loan Other Charges	Number(38,2)	YES
6	Net Loan Amount	Total Net Loan Amount employee can get	Number(38,2)	NO
7	Total Amount To Pay	Total Amount employee can pay back	Number(38,2)	NO
8	Tenure	Repayment period	Number (3)	NO
9	Eligible Amount	Maximum loan employee can get	Number(38,2)	YES
10	Monthly Return Amount	Amount employee can return in each month	Number(38,2)	NO

#### Message 04

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPName</Receiver>

<FSPCode>A1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>LOAN\_CHARGES\_RESPONSE</MessageType>

</Header>

<MessageDetails>

<DesiredDeductibleAmount>5000.00</DesiredDeductibleAmount>

<TotalInsurance>5000.00</TotalInsurance>

<TotalProcessingFees>100.00</TotalProcessingFees>

<TotalInterestRateAmount>5000.00</TotalInterestRateAmount>

```
<OtherCharges>12000.00</OtherCharges>
<NetLoanAmount>12000.00</NetLoanAmount>
<TotalAmountToPay>12000.00</TotalAmountToPay>
<Tenure>36</Tenure>
<EligibleAmount>6731040.52</EligibleAmount>
<MonthlyReturnAmount>10000.52</MonthlyReturnAmount>
</MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>
```

### 2.2.3 Loan Offer Request From Employee to FSP

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	First Name	Employee First Name	Varchar(30)	NO
3	Middle Name	Employee Middle Name	Varchar(30)	NO
4	Last Name	Employee Last Name	Varchar(30)	NO
5	Sex	Employee sex	Varchar(1)	NO
6	Employment Date	Employee employment date	Varchar(10)	NO
7	Marital Status	Employee marital status	Varchar(10)	NO
8	Confirmation Date	Employee confirmation date	Varchar(10)	YES
9	Bank Account Number	Employee bank account number	Varchar(20)	NO
10	Nearest Branch Name	Employee nearest bank branch	Varchar(50)	YES
11	Nearest Branch Code	Employee nearest bank code	Varchar(50)	YES
12	Vote code	Employer identification	Varchar(6)	NO
13	Vote name	Employer name	Varchar(255)	NO
14	NIN	National identification number	Varchar(22)	NO
15	Designation code	Designation Identification	Varchar(8)	NO
16	Designation name	Designation description	Varchar(255)	NO
17	Basic Salary	Basic salary	Number(38,2)	NO
18	Net salary	Amount after deduction	Number(38,2)	NO
19	One third amount	Minimum amount after deduction	Number(38,2)	NO
22	Total Employee Deduction	Total existing employee deduction amount	Number(38,2)	NO
21	Retirement date	Current date – date of birth (Month)	Number (3)	NO
22	Terms of employment	Permanent or Contractual	Varchar(30)	NO



<b>23</b>	Requested amount	Loan amount	Number(38,2)	YES
<b>24</b>	Desired deductible amount	Desired deduction amount	Number(38,2)	YES
<b>25</b>	Tenure	Repayment period	Number (3)	NO
<b>28</b>	FSP code	FSP identification	Varchar(10)	NO
<b>29</b>	Product code	Product identification	Varchar(8)	NO
<b>30</b>	Interest rate	Interest rate amount	Number(3,2)	NO
<b>31</b>	Processing fee	Cost of loan processing percentage	Number(3,2)	NO
<b>32</b>	Insurance	Loan cover percentage	Number(3,2)	NO
<b>33</b>	Physical address	Physical address	Varchar(50)	NO
<b>34</b>	Telephone number	Telephone number	Varchar(12)	YES
<b>35</b>	Email address	Email address	Varchar(50)	NO
<b>36</b>	Mobile number	Mobile number	Varchar(12)	NO
<b>37</b>	Application number	Loan application identification	Varchar(15)	NO
<b>38</b>	Loan Purpose	Reason for loan request	Varchar(250)	NO
<b>39</b>	Contract Start Date	Employee contract start date(Optional)	Varchar(10)	YES
<b>40</b>	Contract End Date	Employee contract end date(Optional)	Varchar(10)	YES
<b>41</b>	Swift Code	bank swift code	Varchar(50)	No
<b>42</b>	Funding	Employee source of salary payment	Varchar(50)	No

## Message 05

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>LOAN\_OFFER\_REQUEST</MessageType>

</Header>

<MessageDetails>

<CheckNumber>111222333</CheckNumber>

<FirstName>Juma</FirstName>

<MiddleName>Ponda</MiddleName>

<LastName>Mali</LastName>

<Sex>M</Sex>

<BankAccountNumber>011445888578</BankAccountNumber>

<EmploymentDate>2020-07-01</EmploymentDate>

<MaritalStatus>Married</MaritalStatus>

<ConfirmationDate>2021-07-01</ConfirmationDate>

<TotalEmployeeDeduction>205500</TotalEmployeeDeduction>

<NearestBranchName>A Manyoni</NearestBranchName>

<NearestBranchCode>AX002</NearestBranchCode>

<VoteCode>32</VoteCode>

<VoteName>XYZ</VoteName>

<NIN>19870527111450000124</NIN>

<DesignationCode>TZ800186</DesignationCode>

<DesignationName>ICTOII</DesignationName>

<BasicSalary>5000.00</BasicSalary>

<NetSalary>100.00</NetSalary>

<OneThirdAmount>120000.00</OneThirdAmount>

<RequestedAmount>5000.00</RequestedAmount>

<DesiredDeductibleAmount>12000.00

</DesiredDeductibleAmount>

<RetirementDate>3</RetirementDate>

<TermsOfEmployment>Permanent and Pensionable

</TermsOfEmployment>

<Tenure>45</Tenure>

```

        <ProductCode>22346</ProductCode>
        <InterestRate>20.00</InterestRate>
        <ProcessingFee>200.00</ProcessingFee>
        <Insurance>500.00</Insurance>
        <PhysicalAddress>Arusha</PhysicalAddress>
        <EmailAddress>abc.abc@instution.com</EmailAddress>
        <MobileNumber>0758484339</MobileNumber>
        <ApplicationNumber>0021000</ApplicationNumber>
        <LoanPurpose> Mkopo wakujenga nyumba </LoanPurpose>
        <ContractStartDate>2011-02-25</ContractStartDate>
        <ContractEndDate>2025-02-25 </ContractEndDate>
        <SwiftCode>AXB02</SwiftCode>
        <Funding>OS</Funding>
    </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

#### 2.2.4 Loan Offer Approval Notification From FSP to ESS

This is an API to notify ESS on submitted loan offer approval (Accepted or Rejected).

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(18)	NO
2	Reason	Reason for offer rejection	Varchar(150)	YES
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	YES
4	Other charges	Other charges	Number(38,2)	YES
5	Approval	APPROVED   REJECTED	Varchar(10)	NO
6	Loan Number	Unique FSP number that identify loan application	Varchar(20)	YES

**Message 06**

```
<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
    <MessageType>LOAN_INITIAL_APPROVAL_NOTIFICATION</MessageType>
  </Header>
  <MessageDetails>
    <ApplicationNumber>ESS1678796729374</ApplicationNumber>
    <Reason>Ok</Reason>
    <FSPReferenceNumber>TZ0010</FSPReferenceNumber>
    <LoanNumber>20070001</LoanNumber>
    <TotalAmountToPay>2500000.58</TotalAmountToPay>
    <OtherCharges>2500.05</OtherCharges>
    <Approval>APPROVED</Approval>
  </MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>
```

**2.2.5 Loan Verification and Approval**

Loan Approval Status Notification to FSP

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Reason for offer rejection	Varchar(150)	YES
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	NO
4	Approval	APPROVED    REJECTED	Varchar(10)	NO
5	Loan Number	Unique FSP number that identify loan application	Varchar(20)	YES

## Message 07

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>A1001</FSPCode>

<MsgId>FSP1234</MsgId>

<MessageType>LOAN\_FINAL\_APPROVAL\_NOTIFICATION</MessageType>

</Header>

<MessageDetails>

<ApplicationNumber>ESS101</ApplicationNumber>

<Reason>Not allowed</Reason>

<FSPReferenceNumber>TZ001</FSPReferenceNumber>

<LoanNumber>20070001</LoanNumber>

<Approval>APPROVED || REJECTED</Approval>

</MessageDetails></Data>

<Signature>XYZ</Signature>

</Document>

### 2.2.6 Disbursement Notification from FSP to ESS

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	NO
3	Loan Number	Unique FSP number that identify loan application	Varchar(20)	NO
4	Total Amount to pay	Total Amount to pay	Number(38,2)	YES
5	Disbursement date	Disbursement date	String	NO

### Message 08

```
<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
    <MessageType>LOAN_DISBURSEMENT_NOTIFICATION</MessageType>
  </Header>
  <MessageDetails>
    <ApplicationNumber>1002</ApplicationNumber>
    <Reason>I have desired not to apply</Reason>
    <FSPReferenceNumber>TZ001</FSPReferenceNumber>
    <LoanNumber>20070001</LoanNumber>
    <TotalAmountToPay>2500000</TotalAmountToPay>
    <DisbursementDate>2022-05-26T21:32:52</DisbursementDate>
  </MessageDetails>
</Data>
  <Signature>XYZ</Signature>
</Document>
```

#### 2.2.7 Disbursement Failure Notification from FSP to ESS

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Description why disbursement failure	Varchar(255)	NO

## Message 09

```
<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
    <MessageType>LOAN_DISBURSEMENT_FAILURE_NOTIFICATION</
  </MessageType>
    </Header>
    <MessageDetails>
      <ApplicationNumber>A1002</ApplicationNumber>
      <Reason>technical error</Reason>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>
```

### 2.2.8 Loan Cancellation

Employees has the ability at any particular time, before Employer Approval, to cancel their loan request and inform all involved parties i.e Employer and FSP. Below is the flow corresponding to this process: -

- i. Employee login to government platforms
- ii. Employee request cancellation (Precondition = Loan status is pending for approval)
- iii. ESS cancel loan request within the system
- iv. ESS send cancel notification to FSP
- v. FSP acknowledges the receipt of the cancellation of loan

Employee Cancellation Notification To FSP

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Reason for offer cancellation	Varchar(150)	NO
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	NO
4	Loan Number	Unique FSP number that identify loan application	Varchar(20)	Yes

## Message 10

```
<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
    <MessageType>LOAN_CANCELLATION_NOTIFICATION</MessageType>
  </Header>
  <MessageDetails>
    <ApplicationNumber>1002</ApplicationNumber>
    <Reason>reason</Reason>
    <FSPReferenceNumber>TZ2001</FSPReferenceNumber>
    <LoanNumber>20070001</LoanNumber>
  </MessageDetails>
</Data>
  <Signature>XYZ</Signature>
</Document>
```

## 2.3 Loan Top up

This part explains how employees will Top up existing loans, request loan Top up from FSP, FSP responses and the approval workflow from Employee to FSP to Employer and back to FSP for final approval and disbursement.

- i. Employee login to government platforms
- ii. Employee select existing loan to top up
- iii. Employee inquire loan balance for FSP
- iv. FSP provides loan balance
- v. Employee select product from the same FSP
- vi. Employee submit loan top up request to FSP
- vii. FSP receive and validate details
- viii. FSP accept or reject loan top up request
- ix. Employee receive and decide on the offer
- x. Employee submit loan application and deduction details to Employer
- xi. Employer approves the loan application
- xii. Employer initiates loan deduction( end current and add new deduction)
- xiii. FSP and employee receive notification of initiated deduction
- xiv. FSP disburse loan
- xv. Employee receive amount credit notification



### 2.3.1 Pay Off Balance Request to FSP

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	Loan number	Loan number	Varchar(20)	NO
3	First Name	Employee first name	Varchar(30)	NO
4	Middle Name	Employee middle name	Varchar(30)	NO
5	Last Name	Employee last name	Varchar(30)	NO
6	Vote code	Employer identification	Varchar(6)	NO
7	Vote name	Employer name	Varchar(255)	NO
8	Deduction amount	Deduction amount	Number(38,2)	NO
9	Deduction code	Deduction Identification	Varchar(8)	NO
10	Deduction name	Deduction description	Varchar(255)	NO
11	Deduction balance	Deduction balance	Number(38,2)	NO
12	Payment option	Full Payment option	Varchar(50)	NO

#### Message 11

```

<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
      <MessageType>TOP_UP_PAY_OFF_BALANCE_REQUEST</MessageType>
    </Header>
    <MessageDetails>
      <CheckNumber>111276112</CheckNumber>
      <LoanNumber>11100000</LoanNumber>
      <FirstName>Simba</FirstName>
      <MiddleName>Mapunda</MiddleName>
    </MessageDetails>
  </Data>
</Document>

```

```

    <LastName>Nguchiro</LastName>
    <VoteCode>32</VoteCode>
    <VoteName>Watumishi</VoteName>
    <DeductionAmount>300000</DeductionAmount>
    <DeductionCode>NY908</DeductionCode>
    <DeductionName>Mawenzi Deduction</DeductionName>
    <DeductionBalance>4000800000</DeductionBalance>
    <PaymentOption>Full payment</PaymentOption>
  </MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>

```

### 2.3.2 Settlement Balance Response From FSP

S/N	Item Name	Item description	Type	Optional
1	Loan number	Unique number that identify loan	Varchar(20)	NO
2	Total payoff amount	Total amount to pay	Number(38,2)	NO
3	End date	Loan end date	Varchar(8)	NO
4	Last deduction date	Last payment date	Date time	NO
5	Payment reference number	Payment reference number	Varchar(8)	NO
6	Final Payment date	Last date for payment to be accepted	Date time	NO
7	Outstanding Balance	Total Outstanding Balance	Number(38,2)	NO
8	Last Pay Date	Last Pay Date	Date time	NO
9	FSP Reference Number	Unique FSP number corresponding to request	Varchar(8)	NO

## Message 12

<Document>

<Data>

<Header>

<Sender>FSPSystem</Sender>

<Receiver>ESS\_UTUMISHI</Receiver>

<FSPCode>A1001</FSPCode>

<MsgId>FSP12346</MsgId>

<MessageType>LOAN\_TOP\_UP\_BALANCE\_RESPONSE</MessageType>

</Header>

<MessageDetails>

<LoanNumber>A1200000002</LoanNumber>

<FSPReferenceNumber>A2343453345</FSPReferenceNumber>

<PaymentReferenceNumber>A22211</PaymentReferenceNumber>

<TotalPayoffAmount>77122876112.60</TotalPayoffAmount>

<OutstandingBalance>-1150397</OutstandingBalance>

<FinalPaymentDate>2022-04-23T10:20:15</FinalPaymentDate>

<LastDeductionDate>2022-02-23T10:20:15</LastDeductionDate>

<LastPayDate>2026-01-26T21:32:52</LastPayDate>

<EndDate>2022-03-23T10:20:15</EndDate>

</MessageDetails>

</Data>

<Signature>XYZ</Signature>

</Document>

### 2.3.3 Possible Loan Charges Request From Employee to FSP

This is on demand and sync API request to get possible loan charges from FSP

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	Designation code	Designation Identification	Varchar(8)	NO
3	Designation name	Designation description	Varchar(255)	NO
4	Basic Salary	Basic salary	Number(38,2)	NO
5	Net salary	Amount after deduction	Number(38,2)	NO
6	One third amount	Minimum amount after deduction	Number(38,2)	NO
7	Deductible amount	Net salary – 1/3 amount	Number(38,2)	NO

8	Retirement date	Current date – date of birth (Month)	Number (3)	NO
9	Terms of employment	Permanent or Contractual	Varchar(30)	NO
10	Requested amount	Loan amount	Number(38,2)	YES
11	Desired deductible amount	Desired deduction amount	Number(38,2)	YES
12	Tenure	Repayment period	Number (3)	YES
13	FSP code	FSP identification	Varchar(10)	NO
14	Product code	Product identification	Varchar(8)	NO
15	Vote Code	Vote/institution identification code	Varchar(10)	NO
16	Total Employee Deduction	Total existing employee deduction amount	Number(38,2)	NO
17	Job class code	Identifier for a Group of Designations	Varchar(10)	NO

### Message 13

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>LOAN\_CHARGES\_REQUEST</MessageType>

</Header>

<MessageDetails>

<CheckNumber>111222333</CheckNumber>

<DesignationCode>TZ800186</DesignationCode>

<DesignationName>ICTO II

</DesignationName>

<BasicSalary>5000.00</BasicSalary>

<NetSalary>10000.00</NetSalary>

<OneThirdAmount>12000.00</OneThirdAmount>

<RequestedAmount>5000.00</RequestedAmount>

<DeductibleAmount>12000.00</DeductibleAmount>

<DesiredDeductibleAmount>12000.00

</DesiredDeductibleAmount>

<RetirementDate>3</RetirementDate>

<TermsOfEmployment>Permanent and Pensionable

```

        </TermsOfEmployment>
        <Tenure>45</Tenure>
        <ProductCode>22346</ProductCode>
        <VoteCode>32</VoteCode>
        <TotalEmployeeDeduction>120000.00</TotalEmployeeDeduction>
        <JobClassCode>JB0012</JobClassCode>
    </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

#### 2.3.4 Possible Loan Charges Response From FSP

S/N	Item Name	Item description	Type	Optional
1	Desired deductible amount	Desired deduction amount	Number(38,2)	YES
2	Total Insurance	Total Loan Insurance charges	Number(38,2)	NO
3	Total Processing Fees	Total Loan Processing Fees charges	Number(38,2)	YES
4	Total Interest Rate Amount	Total Loan Interest Rate amount charges	Number(38,2)	NO
5	Other Charges	Total Loan Other Charges	Number(38,2)	YES
6	Net Loan Amount	Total Net Loan Amount employee can get	Number(38,2)	NO
7	Total Amount To Pay	Total Amount employee can pay back	Number(38,2)	NO
8	Tenure	Repayment period	Number (3)	NO
9	Eligible Amount	Maximum loan employee can get	Number(38,2)	YES
10	Monthly Return Amount	Amount employee can return in each month	Number(38,2)	NO

### Message 14

```
<Document>
<Data>
  <Header>
    <Sender>ESS_UTUMISHI</Sender>
    <Receiver>FSPName</Receiver>
    <FSPCode>A1001</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
    <MessageType>LOAN_CHARGES_RESPONSE</MessageType>
  </Header>
  <MessageDetails>
    <DesiredDeductibleAmount>5000.00</DesiredDeductibleAmount>
    <TotalInsurance>5000.00</TotalInsurance>
    <TotalProcessingFees>100.00</TotalProcessingFees>
    <TotalInterestRateAmount>5000.00</TotalInterestRateAmount>
    <OtherCharges>12000.00</OtherCharges>
    <NetLoanAmount>12000.00</NetLoanAmount>
    <TotalAmountToPay>12000.00</TotalAmountToPay>
    <Tenure>36</Tenure>
    <EligibleAmount>6731040.52</EligibleAmount>
    <MonthlyReturnAmount>10000.52</MonthlyReturnAmount>
  </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>
```

### 2.3.5 Loan Top Up Request From Employee to FSP

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	First Name	Employee First Name	Varchar(30)	NO
3	Middle Name	Employee Middle Name	Varchar(30)	NO
4	Last Name	Employee Last Name	Varchar(30)	NO
5	Sex	Employee sex	Varchar(1)	NO
6	Employment Date	Employee employment date	Varchar(10)	NO
7	Marital Status	Employee marital status	Varchar(10)	NO
8	Confirmation Date	Employee confirmation date	Varchar(10)	YES
9	Bank Account	Employee bank account	Varchar(20)	NO

	Number	number		
<b>10</b>	Nearest Branch Name	Employee nearest bank branch	Varchar(50)	YES
<b>11</b>	Nearest Branch Code	Employee nearest bank code	Varchar(50)	YES
<b>12</b>	Vote code	Employer identification	Varchar(6)	NO
<b>13</b>	Vote name	Employer name	Varchar(255)	NO
<b>14</b>	NIN	National identification number	Varchar(22)	NO
<b>15</b>	Designation code	Designation Identification	Varchar(8)	NO
<b>16</b>	Designation name	Designation description	Varchar(255)	NO
<b>17</b>	Basic Salary	Basic salary	Number(38,2)	NO
<b>18</b>	Net salary	Amount after deduction	Number(38,2)	NO
<b>19</b>	One third amount	Minimum amount after deduction	Number(38,2)	NO
<b>20</b>	Deductible amount	Net salary – 1/3 amount	Number(38,2)	NO
<b>21</b>	Total Employee Deduction	Total existing employee deduction amount	Number(38,2)	NO
<b>22</b>	Retirement date	Current date – date of birth (Month)	Number (3)	NO
<b>23</b>	Terms of employment	Permanent or Contractual	Varchar(30)	NO
<b>24</b>	Requested amount	Loan amount	Number(38,2)	YES
<b>25</b>	Desired deductible amount	Desired deduction amount	Number(38,2)	YES
<b>26</b>	Tenure	Repayment period	Number (3)	NO
<b>27</b>	FSP code	FSP identification	Varchar(10)	NO
<b>28</b>	Product code	Product identification	Varchar(8)	NO
<b>29</b>	Interest rate	Interest rate amount	Number(3,2)	NO
<b>30</b>	Processing fee	Cost of loan processing percentage	Number(3,2)	NO

31	Insurance	Loan cover percentage amount	Number(3,2)	NO
32	Physical address	Physical address	Varchar(50)	NO
33	Telephone number	Telephone number	Varchar(12)	YES
34	Email address	Email address	Varchar(50)	NO
35	Mobile number	Mobile number	Varchar(12)	NO
36	Application number	Loan application identification	Varchar(15)	NO
37	Loan Purpose	Reason for loan request	Varchar(250)	NO
38	Contract Start Date	Employee contract start date(Optional)	Varchar(10)	YES
39	Contract End Date	Employee contract end date(Optional)	Varchar(10)	YES
40	Loan Number	FSP unique identifier for existing loan	Varchar(20)	NO
41	Settlement amount	Loan settlement amount	Number(38,2)	NO
42	Swift Code	Bank swift code	Varchar(50)	No
41	Funding	Employee source of salary payment	Varchar(50)	No

## Message 16

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>TOP\_UP\_OFFER\_REQUEST</MessageType>

</Header>

<MessageDetails>

<CheckNumber>111222333</CheckNumber>

<FirstName>Juma</FirstName>

<MiddleName>Ponda</MiddleName>



<LastName>Mali</LastName>  
<Sex>M</Sex>  
<BankAccountNumber>011445888578</BankAccountNumber>  
<EmploymentDate>2020-07-01</EmploymentDate>  
<MaritalStatus>Married</MaritalStatus>  
<ConfirmationDate>2021-07-01</ConfirmationDate>  
  <TotalEmployeeDeduction>205500</TotalEmployeeDeduction>  
<NearestBranchName>AX Manyoni</NearestBranchName>  
  <NearestBranchCode>AX Manyoni</NearestBranchCode>  
<VoteCode>32</VoteCode>  
<VoteName>XYZ</VoteName>  
<NIN>19870527111450000124</NIN>  
<DesignationCode>TZ800186</DesignationCode>  
<DesignationName>ICTOII</DesignationName>  
<BasicSalary>5000.00</BasicSalary>  
<NetSalary>100.00</NetSalary>  
<OneThirdAmount>120000.00</OneThirdAmount>  
<RequestedAmount>5000.00</RequestedAmount>  
  <DesiredDeductibleAmount>12000.00  
  </DesiredDeductibleAmount>  
<RetirementDate>3</RetirementDate>  
<TermsOfEmployment>Permanent and Pensionable  
  </TermsOfEmployment>  
<Tenure>45</Tenure>  
<ProductCode>22346</ProductCode>  
<InterestRate>20.00</InterestRate>  
<ProcessingFee>200.00</ProcessingFee>  
<Insurance>500.00</Insurance>  
<PhysicalAddress>Arusha</PhysicalAddress>  
<EmailAddress>abc.abc@instution.com</EmailAddress>  
<MobileNumber>0758484339</MobileNumber>  
<ApplicationNumber>0021000</ApplicationNumber>  
<LoanPurpose> Mkopo wakujenga nyumba </LoanPurpose>  
<ContractStartDate>2011-02-25</ContractStartDate>  
<ContractEndDate>2025-02-25 </ContractEndDate>  
<LoanNumber>AA0021000</LoanNumber>  
  <SettlementAmount>800000.58</SettlementAmount>  
<SwiftCode>AXB02</SwiftCode>

```

        <Funding>OS</Funding>
    </MessageDetails>
</Data>
    <Signature>Signature</Signature>
</Document>

```

### 2.3.6 Loan Offer Approval Notification From FSP to ESS

This is an API to notify ESS on submitted loan offer approval (Accepted or Rejected).

S/ N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Reason for offer rejection	Varchar(150)	YES
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	YES
4	Other charges	Other charges	Number(38,2)	YES
5	Approval	APPROVED    REJECTED	Varchar(10)	NO
6	Loan Number	Unique FSP number that identify loan application	Varchar(20)	YES

#### Message 17

```

<Document>
    <Data>
        <Header>
            <Sender>FSPSystem</Sender>
            <Receiver>ESS_UTUMISHI</Receiver>
            <FSPCode>1001</FSPCode>
            <MsgId>FSP1234</MsgId>
        </Header>
        <MessageType>LOAN_INITIAL_APPROVAL_NOTIFICATION</MessageType>
        <MessageDetails>
            <ApplicationNumber>ESS1678796729374</ApplicationNumber>
            <Reason>Ok</Reason>
            <FSPReferenceNumber>TZ0010</FSPReferenceNumber>
            <LoanNumber>20070001</LoanNumber>
            <TotalAmountToPay>2500000</TotalAmountToPay>
            <OtherCharges>2500</OtherCharges>
            <Approval>APPROVED</Approval>
        </MessageDetails>
    </Data>

```

<Signature>XYZ</Signature>  
</Document>

### 2.3.7 Top Up Verification and Approval

Loan Approval Status Notification to FSP

S/ N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Reason for offer rejection	Varchar(150)	YES
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(8)	NO
4	Approval	APPROVED    REJECTED	Varchar(10)	NO
5	Loan Number	Unique FSP number that identify loan application	Varchar(20)	YES

### Message 18

```

<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>A1001</FSPCode>
      <MsgId>FSP1234</MsgId>
      <MessageType>LOAN_FINAL_APPROVAL_NOTIFICATION</
      MessageType>
    </Header>
    <MessageDetails>
      <ApplicationNumber>ESS101</ApplicationNumber>
      <Reason>Not allowed</Reason>
      <FSPReferenceNumber>TZ001</FSPReferenceNumber>
      <LoanNumber>20070001</LoanNumber>
      <Approval>APPROVED || REJECTED</Approval>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>

```

### 2.3.8 Disbursement Notification From FSP to ESS

This include Loan Application or Loan Takeover disbursement notification

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(8)	NO
3	Loan Number	Unique FSP number that identify loan application	Varchar(20)	NO
4	Total Amount to pay	Total Amount to pay	Number(38,2)	YES
5	Disbursement date	Disbursement date	String	NO

#### Message 19

<Document>

<Data>

<Header>

<Sender>FSPSystem</Sender>

<Receiver>ESS\_UTUMISHI</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>FSP1234</MsgId>

<MessageType>LOAN\_DISBURSEMENT\_NOTIFICATION</MessageType>

</Header>

<MessageDetails>

<ApplicationNumber>1002</ApplicationNumber>

<Reason>I have desired not to apply</Reason>

<FSPReferenceNumber>TZ001</FSPReferenceNumber>

<LoanNumber>20070001</LoanNumber>

<TotalAmountToPay>2500000</TotalAmountToPay>

<DisbursementDate>2022-05-26T21:32:52</DisbursementDate>

</MessageDetails>

</Data>

<Signature>XYZ</Signature>

</Document>

### 2.3.9 Disbursement Failure Notification From FSP to ESS

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Description why disbursement failure	Varchar(255)	NO

#### Message 20

```
<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
      <MessageType>
        LOAN_DISBURSEMENT_FAILURE_NOTIFICATION
      </MessageType>
    </Header>
    <MessageDetails>
      <ApplicationNumber>ESS1002000</ApplicationNumber>
      <Reason>Technical issues</Reason>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>
```

### 2.3.10 Top up Cancellation

Employees have the ability at any particular time, before Employer Approval, to cancel their loan request and inform all involved parties i.e Employer and FSP. Below is the flow corresponding to this process: -

- i. Employee login to government platforms
- ii. Employee request cancellation (Precondition = Loan status is pending for approval)
- iii. ESS cancel loan request within the system
- iv. ESS send cancel notification to FSP
- v. FSP acknowledges the receipt of the cancellation of loan

### 2.3.11 Employee Cancellation Notification to FSP

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Reason for offer cancellation	Varchar(150)	NO
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(8)	NO
4	Loan Number	Unique FSP number that identify loan application	Varchar(20)	Yes

#### Message 21

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>FSP1234</MsgId>

<MessageType>LOAN\_CANCELLATION\_NOTIFICATION</MessageType>

</Header>

<MessageDetails>

<ApplicationNumber>1002</ApplicationNumber>

<Reason>reason</Reason>

<FSPReferenceNumber>TZ2001</FSPReferenceNumber>

<LoanNumber>20070001</LoanNumber>

</MessageDetails>

</Data>

<Signature>XYZ</Signature>

</Document>

## 2.4 Loan Restructuring

The end point for updating loan parameters ie loan amount, tenure or installments

- i. Employee login to ESS portal
- ii. Employee select existing loan for restructuring
- iii. Employee request loan balance from FSP
- iv. Employee request loan amendment (reduce or increase installment or Tenure)
- v. FSP respond requested loan amendment
- vi. Employee submit loan restructuring request to FSP
- vii. FSP accept or reject loan restructuring request
- viii. If FSP accept loan restructuring request, employer receive notification to amend deduction
- ix. If FSP reject loan restructuring request, employee receive rejection notification with comment
- x. Employer accept or reject loan restructuring request
- xi. If Employer accept loan restructuring request and amend deduction, FSP and Employee receive notification
- xii. If Employer reject loan restructuring request, FSP and Employee receive rejection notification with comment

### 2.4.1 Employee Request Loan Balance From FSP

S/N	Item Name	Item description	Type	Optional
1	Loan Number	Existing unique FSP number that identify loan application	Varchar(20)	NO
2	Check Number	Employee Identification number	Integer	NO
3	Reason for restructuring	Reason for restructuring	Varchar(255)	NO

#### Message 22

```
<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
    <MessageType>
      LOAN_RESTRUCTURING_BALANCE_REQUEST
    </MessageType>
  </Header>
  <MessageDetails>
    <LoanNumber>ESS1002000</LoanNumber>
```

```

        <Reason>Newsalary</Reason>
        <CheckNumber>11123456</CheckNumber>
    </MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>

```

#### 2.4.2 Loan Restructuring Balance Response From FSP

S/N	Item Name	Item description	Type	Optional
1	Outstanding Balance	Principal and Interest Amount	Number(38,2)	NO
2	Loan Number	Employee Loan reference number that identify loan application	Varchar(20)	NO
3	Installment Amount	Unique FSP Reference number corresponding to request	Number(38,2)	NO
4	Last repayment Date	Repayment Date	Date Time	NO
5	Maturity Date	Last Installment Date	Date Time	NO
6	Validity	Allowable days for completion of the request	Date Time	NO

#### Message 23

```

<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
    <MessageType>LOAN_RESTRUCTURING_BALANCE_RESPONSE
  </MessageType>
  </Header>
  <MessageDetails>
    <LoanNumber>A00122</LoanNumber>
    <InstallmentAmount>33112.00</InstallmentAmount>
    <OutstandingBalance>101100.00</OutstandingBalance>
    <ValidityDate>2022-05-26T21:32:52</ValidityDate>
    <LastRepaymentDate>2022-05-26T21:32:52</LastRepaymentDate>
  </MessageDetails>
  </Data>
</Document>

```



```

        <MaturityDate>2022-05-26T21:32:52</MaturityDate>
    </MessageDetails>
</Data>
    <Signature>XYZ</Signature>
</Document>

```

### 2.4.3 Employee Loan Amendment Request

S/N	Item Name	Item description	Type	Optional
1	Loan Number	unique FSP number that identify loan application	Varchar(20)	NO
2	Check number	Employee identification	Number (9)	NO
3	Basic Salary	Basic salary	Number(38,2)	NO
4	Net salary	Amount after deduction	Number(38,2)	NO
5	One third amount	Minimum amount after deduction	Number(38,2)	NO
6	Deductible amount	Net salary – 1/3 amount	Number(38,2)	NO
7	Retirement date	Current date – date of birth (Month)	Number (3)	NO
8	Requested amount	Loan amount	Number(38,2)	YES
9	Desired deductible amount	Desired deduction amount	Number(38,2)	YES
10	Tenure	Repayment period	Number (3)	YES
11	Vote Code	Vote/institution identification code	Varchar(10)	NO
12	Total Employee Deduction	Total existing employee deduction amount	Number(38,2)	NO

## Message 24

```
<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
    <MessageType>LOAN_RESTRUCTURING_CHARGES_REQUEST
  </MessageType>
  </Header>
  <MessageDetails>
    <LoanNumber>127626</LoanNumber>
    <CheckNumber>111222333</CheckNumber>
    <BasicSalary>5000.00</BasicSalary>
    <NetSalary>10000.00</NetSalary>
    <OneThirdAmount>12000.00</OneThirdAmount>
    <RequestedAmount>5000.00</RequestedAmount>
    <DeductibleAmount>12000.00</DeductibleAmount>
    <DesiredDeductibleAmount>12000.00</DesiredDeductibleAmount>
    <RetirementDate>3</RetirementDate>
    <Tenure>45</Tenure>
    <VoteCode>32</VoteCode>
    <TotalEmployeeDeduction>120000.00</TotalEmployeeDeduction>
  </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>
```

### 2.4.4 Possible Loan Restructuring Charges Response From FSP to Employee

S/N	Item Name	Item description	Type	Optional
1	Desired deductible amount	Desired deduction amount	Number(38,2)	YES
2	Total Insurance	Total Loan Insurance charges	Number(38,2)	NO
3	Total Processing Fees	Total Loan Processing Fees charges	Number(38,2)	YES
4	Total Interest Rate Amount	Total Loan Interest amount charges	Number(38,2)	NO

<b>5</b>	Other Charges	Total Loan Other Charges	Number(38,2)	YES
<b>6</b>	Net Loan Amount	Total Net Loan Amount employee can get	Number(38,2)	NO
<b>7</b>	Total Amount To Pay	Total Amount employee can pay back	Number(38,2)	NO
<b>8</b>	Tenure	Repayment period	Number (3)	NO
<b>9</b>	Monthly Return Amount	Amount employee can return in each month	Number(38,2)	NO

### Message 25

```

<Document>
<Data>
  <Header>
    <Sender>FSPName</Sender>
    <Receiver>ESS_UTUMISHI</Receiver>
    <FSPCode>A1001</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
  <MessageType>LOAN_RESTRUCTURING_CHARGES_RESPONSE
</MessageType>
  </Header>
    <MessageDetails>
      <DesiredDeductibleAmount>5000.00</DesiredDeductibleAmount>
      <TotalInsurance>5000.00</TotalInsurance>
      <TotalProcessingFees>100.00</TotalProcessingFees>
      <TotalInterestRateAmount>5000.00</TotalInterestRateAmount>
      <OtherCharges>12000.00</OtherCharges>
      <NetLoanAmount>12000.00</NetLoanAmount>
      <TotalAmountToPay>12000.00</TotalAmountToPay>
      <Tenure>36</Tenure>
      <EligibleAmount>6731040.52</EligibleAmount>
      <MonthlyReturnAmount>10000.52</MonthlyReturnAmount>
    </MessageDetails>
  </Data>
  <Signature>Signature</Signature>
</Document>

```

### 2.4.5 Loan Restructuring Request From Employee to FSP

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	First Name	Employee First Name	Varchar(30)	NO
3	Middle Name	Employee Middle Name	Varchar(30)	NO
4	Last Name	Employee Last Name	Varchar(30)	NO
5	Vote code	Employer identification	Varchar(6)	NO

6	Vote name	Employer name	Varchar(255)	NO
7	NIN	National identification number	Varchar(22)	NO
8	Designation code	Designation Identification	Varchar(8)	NO
9	Designation name	Designation description	Varchar(255)	NO
10	Basic Salary	Basic salary	Number(38,2)	NO
11	Net salary	Amount after deduction	Number(38,2)	NO
12	One third amount	Minimum amount after deduction	Number(38,2)	NO
13	Total Employee Deduction	Total existing employee deduction amount	Number(38,2)	NO
14	Retirement date	Current date – date of birth (Month)	Number (3)	NO
15	Terms of employment	Permanent or Contractual	Varchar(30)	NO
16	Total Amount To Pay	Total amount to pay	Number(38,2)	NO
17	Desired deductible amount	Desired deduction amount	Number(38,2)	NO
18	Tenure	Repayment period	Number (3)	NO
	Interest rate	Total Interest amount	Number(38,2)	NO
19	Processing fee	Cost of loan processing percentage	Number(38,2)	NO
20	Insurance	Total Loan cover amount	Number(38,2)	NO
21	Application number	Restructuring application identification	Varchar(15)	NO
22	Loan Number	FSP unique identifier for existing loan	Varchar(20)	NO
23	Reason	Reason for requesting loan restructuring	Varchar(255)	NO
24	Contract Start Date	Employee contract start date(Optional)	Varchar(10)	YES
25	Contract End Date	Employee contract end date(Optional)	Varchar(10)	YES

26	Funding	Employee source of salary payment	Varchar(50)	No
----	---------	-----------------------------------	-------------	----

## Message 26

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>LOAN\_RESTRUCTURING\_REQUEST</MessageType>

</Header>

<MessageDetails>

<CheckNumber>111222333</CheckNumber>

<FirstName>Juma</FirstName>

<MiddleName>Ponda</MiddleName>

<LastName>Mali</LastName>

<TotalEmployeeDeduction>205500</TotalEmployeeDeduction>

<VoteCode>32</VoteCode>

<VoteName>XYZ</VoteName>

<NIN>19870527111450000124</NIN>

<BasicSalary>5000.00</BasicSalary>

<NetSalary>100.00</NetSalary>

<OneThirdAmount>120000.00</OneThirdAmount>

<TotalAmountToPay>5000.00</TotalAmountToPay>

<DesiredDeductibleAmount>12000.00

</DesiredDeductibleAmount>

<RetirementDate>3</RetirementDate>

<TermsOfEmployment>Permanent and Pensionable

</TermsOfEmployment>

<Tenure>45</Tenure>

<InterestRate>20.00</InterestRate>

<ProcessingFee>200.00</ProcessingFee>

<Insurance>500.00</Insurance>

<ApplicationNumber>0021000</ApplicationNumber>

<LoanNumber>AA0021000</LoanNumber>

<Reason>New salary</Reason>

<ContractStartDate>2011-02-25</ContractStartDate>

<ContractEndDate>2025-02-25 </ContractEndDate>

```

        <Funding>OS</Funding>
    </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

#### 2.4.6 Restructuring Request Approval Notification From FSP to ESS

This is an API to notify ESS on submitted restructuring request approval (Accepted or Rejected).

S/ N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(18)	NO
2	Reason	Reason for offer rejection	Varchar(150)	YES
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	YES
4	Other charges	Other charges	Number(38,2)	YES
5	Approval	APPROVED   REJECTED	Varchar(10)	NO
6	Loan Number	Unique FSP number that identify loan application	Varchar(20)	YES

#### Message 27

```

<Document>
    <Data>
        <Header>
            <Sender>FSPSystem</Sender>
            <Receiver>ESS_UTUMISHI</Receiver>
            <FSPCode>1001</FSPCode>
            <MsgId>FSP1234</MsgId>
        </Header>
        <MessageType>RESTRUCTURING_INITIAL_APPROVAL_NOTIFICATION
        </MessageType>
        <MessageDetails>
            <ApplicationNumber>ESS1678796729374</ApplicationNumber>
            <Reason>Ok</Reason>
            <FSPReferenceNumber>TZ0010</FSPReferenceNumber>
            <LoanNumber>20070001</LoanNumber>
            <TotalAmountToPay>2500000</TotalAmountToPay>
        </MessageDetails>
    </Data>
</Document>

```

```

        <OtherCharges>2500</OtherCharges>
        <Approval>APPROVED|| REJECTED</Approval>
    </MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>

```

#### 2.4.7 Restructuring Verification and Approval

Restructuring Approval Status Notification to FSP

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Reason for offer rejection	Varchar(150)	YES
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	NO
4	Approval	APPROVED    REJECTED	Varchar(10)	NO
5	Loan Number	Unique FSP number that identify restructuring application	Varchar(20)	YES

#### Message 28

```

<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>A1001</FSPCode>
      <MsgId>FSP1234</MsgId>
      <MessageType>RESTRUCTURING_FINAL_APPROVAL_NOTIFICATION</MessageType>
    </Header>
    <MessageDetails>
      <ApplicationNumber>ESS101</ApplicationNumber>
      <Reason>Not allowed</Reason>
      <FSPReferenceNumber>TZ001</FSPReferenceNumber>
      <LoanNumber>20070001</LoanNumber>
      <Approval>APPROVED || REJECTED</Approval>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>

```

## 2.5 LOAN TAKEOVER

This explains steps to be taken when one FSP buys off another FSP's Loan. It is a normal practice for Employees to sell off their loans to different FSPs. Hence, the detailed information below describes the flow when this scenario happens.

- i. Employee login to government platforms
- ii. Employee select existing loan
- iii. Employee select loan Takeover
- iv. Employee inquire loan balance and payment details from FSP1
- v. FSP1 provides loan balance and payment details synchronously
- vi. Employee select FSP2 product
- vii. Employee request loan eligibility to FSP2
- viii. FSP2 provide loan eligibility criteria
- ix. Employee save and submit takeover request to FSP2
- x. FSP2 receive and validate details
- xi. FSP2 Approve loan offer(Reject or Accept)
- xii. Employee Receive loan offer approval notification from FSP2
- xiii. Employee decide on loan offer (Reject or Accept)
  - i. If Employee reject loan offer set reason and FSP2 will receive rejection notification
  - i. If Employee Accept the offer then loan offer submitted to employer
  - i. Employer accept or reject loan request
- i. If employer accept FSP1 deduction will be paused and FSP2 deduction initiated
  - i. Employee and FSP2 receive employer acceptance approval notification
  - i. FSP2 disburse loan and make payment to FSP1
  - i. FSP2 send Payment and disbursement notification to ESS system
  - i. ESS system send FSP2 payment details to FSP1 for confirmation
  - i. FSP1 send confirmation notification to ESS system
  - i. If no confirmation from FSP1 within two hours, ESS system send disbursement and payment notification to employer
  - i. If either payment or disbursement failed, FSP2 send take over disbursement failure notification to ESS system
  - i. If no notification from FSP2 in two days, ESS system will reinstate original deduction to FSP1 and process ends
  - i. ESS system notifies Employer system on failure as started in xxiv
  - i. Employer system remove FSP2 deduction and activate FSP1 deduction

### 2.5.1 Loan Takeover Balance and Payment Details Request to FSP1

S/ N	Item Name	Item description	Type	Optional
1	Check Number	Employee identification	Number (15)	NO
2	Loan Number	Loan number	Varchar(25)	NO
3	First Name	Employee first name	Varchar(30)	NO



4	Middle Name	Employee middle name	Varchar(30)	NO
5	Last Name	Employee last name	Varchar(30)	NO
6	Vote Code	Employer identification	Varchar(6)	NO
7	Vote Name	Employer name	Varchar(255)	NO
8	Deduction Amount	Deduction amount	Number(38,2)	NO
9	Deduction Code	Deduction Identification	Varchar(8)	NO
10	Deduction Name	Deduction description	Varchar(255)	NO
11	Deduction Balance	Deduction balance	Number(38,2)	NO
12	Payment Option	Full Payment option	Varchar(50)	NO

### Message 29

```

<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
    <MessageType>TAKEOVER_PAY_OFF_BALANCE_REQUEST</MessageType>
    </Header>
    <MessageDetails>
      <CheckNumber>111276112</CheckNumber>
      <LoanNumber>AA11100000</LoanNumber>
      <FirstName>Simba</FirstName>
      <MiddleName>Mapunda</MiddleName>
      <LastName>Nguchiro</LastName>
      <VoteCode>32A</VoteCode>
      <VoteName>Watumishi</VoteName>
      <DeductionAmount>300000.89</DeductionAmount>
      <DeductionCode>NY908</DeductionCode>
      <DeductionName>Mawenzi Deduction</DeductionName>
      <DeductionBalance>4000800000.05</DeductionBalance>
      <PaymentOption>Full Payment</PaymentOption>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>

```

### 2.5.2 Loan Takeover Balance and Payment Details Response From FSP1

FSP1 provide balance and payment details response with detail as shown here below or else use General response in case of failure or provide any message to employee.

S/N	Item Name	Item description	Type	Optional
1	Loan Number	Unique number that identify loan	Varchar(20)	NO
2	Total Payoff Amount	Total amount to pay	Number(38,2)	NO
3	FSP Code	FSP identification	Varchar(10)	NO
4	Deduction End Date	Maturity Date of existing deduction	Date time	NO
5	Last Deduction Date	Date of FSP receive deduction from Hazina or Payroll date	Date time	NO
6	FSP Bank Account	Account Number	Varchar(20)	NO
7	FSP Bank Account Name	Account Name	Varchar(255)	NO
8	SWIFT Code	Bank SWIFT Code	Varchar(8)	NO
9	MNO Channels	Mobile Number or Til number	Varchar(15)	YES
10	Payment Reference Number	Unique transaction reference number	Varchar(30)	NO
11	Final Payment Date	Date for payment to be accepted or settled	Date time	NO
12	Outstanding Balance	Total Outstanding Balance	Number(38,2)	NO
14	FSP Reference Number	Unique FSP number corresponding to request	Varchar(8)	NO

### Message 30

```
<Document>
<Data>
  <Header>
    <Sender>FSPSystem</Sender>
    <Receiver>ESS_UTUMISHI</Receiver>
    <FSPCode>A1001</FSPCode>
    <MsgId>FSP12346</MsgId>
  </Header>
  <MessageType>LOAN_TAKEOVER_BALANCE_RESPONSE</MessageType>
  <MessageDetails>
    <LoanNumber>A1200000002</LoanNumber>
    <FSPCode>1001</FSPCode>
    <FSPReferenceNumber>2343453345</FSPReferenceNumber>
    <PaymentReferenceNumber>A22211</PaymentReferenceNumber>
    <TotalPayOffAmount>77122876112.60</TotalPayOffAmount>
    <OutstandingBalance>1150397</OutstandingBalance>
    <FSPBankAccount>A12356778888</FSPBankAccount>
    <FSPBankAccountName>LOAN</FSPBankAccountName>
    <SWIFTCode>A5000</SWIFTCode>
    <MNOChannels>255758482039</MNOChannels>
    <FinalPaymentDate>2022-04-23T10:20:15</FinalPaymentDate>
    <LastDeductionDate>2022-02-23T10:20:15</LastDeductionDate>
    <DeductionEndDate>2022-03-23T10:20:15</DeductionEndDate>
  </MessageDetails>
</Data>
  <Signature>XYZ</Signature>
</Document>
```

### 2.5.3 Loan Charges Request From Employee to FSP

This is on demand and sync API request to get possible loan charges from FSP. Response will as in table below or general response in case of failure or FSP want to provide a message to employee.

S/N	Item Name	Item description	Type	Optional
1	Check Number	Employee identification	Number (9)	NO
2	Designation Code	Designation Identification	Varchar(8)	NO
3	Designation Name	Designation description	Varchar(255)	NO
4	Basic Salary	Basic salary	Number(38,2)	NO
5	Net Salary	Amount after deduction	Number(38,2)	NO
6	One Third Amount	Minimum amount after deduction	Number(38,2)	NO
7	Deductible Amount	Net salary – 1/3 amount	Number(38,2)	NO

8	Retirement Date	Current date – date of birth (Month)	Number (3)	NO
9	Terms of Employment	Permanent or Contractual	Varchar(30)	NO
10	Requested Amount	Loan amount	Number(38,2)	YES
11	Desired Deductible Amount	Desired deduction amount	Number(38,2)	YES
12	Tenure	Repayment period	Number (3)	YES
13	FSP code	FSP identification	Varchar(10)	NO
14	Product Code	Product identification	Varchar(8)	NO
15	Vote Code	Vote/institution identification code	Varchar(10)	NO
16	Total Employee Deduction	Total existing employee deduction amount	Number(38,2)	NO
17	Job Class Code	Identifier for a Group of Designations	Varchar(10)	NO

### Message 31

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>LOAN\_CHARGES\_REQUEST</MessageType>

</Header>

<MessageDetails>

<CheckNumber>111222303</CheckNumber>

<DesignationCode>TZ800186</DesignationCode>

<DesignationName>ICTO II</DesignationName>

<BasicSalary>5000.00</BasicSalary>

<NetSalary>10000.00</NetSalary>

<OneThirdAmount>12000.00</OneThirdAmount>

<RequestedAmount>5000.00</RequestedAmount>

<DeductibleAmount>12000.00</DeductibleAmount>

<DesiredDeductibleAmount>12000.00</DesiredDeductibleAmount>

<RetirementDate>3</RetirementDate>

<TermsOfEmployment>Permanent and Pensionable

</TermsOfEmployment>

```

    <Tenure>45</Tenure>
    <ProductCode>22346</ProductCode>
    <VoteCode>32A</VoteCode>
    <TotalEmployeeDeduction>120000.00</TotalEmployeeDeduction>
    <JobClassCode>JB0012</JobClassCode>
  </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

#### 2.5.4 Possible Loan Charges Response From FSP to Employee

S/N	Item Name	Item description	Type	Optional
1	Desired Deductible Amount	Desired deduction amount	Number(38,2)	YES
2	Total Insurance	Total Loan Insurance charges	Number(38,2)	NO
3	Total Processing Fees	Total Loan Processing Fees charges	Number(38,2)	YES
4	Total Interest Rate Amount	Total Loan Interest Rate amount charges	Number(38,2)	NO
5	Other Charges	Total Loan Other Charges	Number(38,2)	YES
6	Net Loan Amount	Total Net Loan Amount employee can get	Number(38,2)	NO
7	Total Amount To Pay	Total Amount employee can pay back	Number(38,2)	NO
8	Tenure	Repayment period	Number (3)	NO
9	Eligible Amount	Maximum loan employee can get	Number(38,2)	YES
10	Monthly Return Amount	Amount employee can return in each month	Number(38,2)	NO

#### Message 32

```

<Document>
<Data>
  <Header>
    <Sender>ESS_UTUMISHI</Sender>
    <Receiver>FSPName</Receiver>
    <FSPCode>A1001</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
    <MessageType>LOAN_CHARGES_RESPONSE</MessageType>
  </Header>
  <MessageDetails>
    <DesiredDeductibleAmount>5000.00</DesiredDeductibleAmount>

```

```

<TotalInsurance>5000.00</TotalInsurance>
<TotalProcessingFees>100.00</TotalProcessingFees>
<TotalInterestRateAmount>5000.00</TotalInterestRateAmount>
<OtherCharges>12000.00</OtherCharges>
<NetLoanAmount>12000.00</NetLoanAmount>
<TotalAmountToPay>12000.00</TotalAmountToPay>
<Tenure>36</Tenure>
<EligibleAmount>6731040.52</EligibleAmount>
<MonthlyReturnAmount>10000.52</MonthlyReturnAmount>
</MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

#### 2.5.5 Loan Offer Request from Employee to FSP2

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	First Name	Employee First Name	Varchar(30)	NO
3	Middle Name	Employee Middle Name	Varchar(30)	NO
4	Last Name	Employee Last Name	Varchar(30)	NO
5	Sex	Employee sex	Varchar(1)	NO
6	Employment Date	Employee Employment Date	Varchar(10)	NO
7	Marital Status	Employee marital status	Varchar(10)	NO
8	Confirmation Date	Employee confirmation date	Varchar(10)	YES
9	Bank Account Number	Employee bank account number	Varchar(20)	NO
10	Nearest Branch Name	Employee nearest bank branch	Varchar(50)	YES
11	Nearest Branch Code	Employee nearest bank code	Varchar(50)	YES
12	Vote code	Employer identification	Varchar(6)	NO
13	Vote name	Employer name	Varchar(255)	NO
14	NIN	National identification number	Varchar(22)	NO
15	Designation code	Designation Identification	Varchar(8)	NO
16	Designation name	Designation description	Varchar(255)	NO
17	Basic Salary	Basic salary	Number(38,2)	NO

<b>18</b>	Net salary	Amount after deduction	Number(38,2)	NO
<b>19</b>	One third amount	Minimum amount after deduction	Number(38,2)	NO
<b>20</b>	Deductible amount	Net salary – 1/3 amount	Number(38,2)	NO
<b>21</b>	Total Employee Deduction	Total existing employee deduction amount	Number(38,2)	NO
<b>22</b>	Retirement date	Current date – date of birth (Month)	Number (3)	NO
<b>23</b>	Terms of Employment	Permanent or Contractual	Varchar(30)	NO
<b>24</b>	Requested Amount	Loan amount	Number(38,2)	YES
<b>25</b>	Desired Deductible Amount	Desired deduction amount	Number(38,2)	YES
<b>26</b>	Tenure	Repayment period	Number (3)	NO
<b>27</b>	FSP Code	FSP2 identification code	Varchar(10)	NO
<b>28</b>	Product Code	FSP2 Product identification	Varchar(8)	NO
<b>29</b>	Interest Rate	Total Interest amount to be paid	Number(38,2)	NO
<b>30</b>	Processing Fee	Total Loan fees	Number(38,2)	NO
<b>31</b>	Insurance	Loan cover amount	Number(38,2)	NO
<b>32</b>	Physical Address	Physical address	Varchar(50)	NO
<b>33</b>	Telephone Number	Telephone number	Varchar(12)	YES
<b>34</b>	Email Address	Email address	Varchar(50)	NO
<b>35</b>	Mobile Number	Mobile number	Varchar(12)	NO
<b>36</b>	Application Number	Loan application identification	Varchar(15)	NO
<b>37</b>	Loan Purpose	Reason for loan request	Varchar(250)	NO
<b>38</b>	Contract Start Date	Employee contract start date(Optional)	Varchar(10)	YES
<b>39</b>	Contract End	Employee contract end	Varchar(10)	YES

	Date	date(Optional)		
40	Swift Code	FSP2 Bank swift code	Varchar(50)	No
41	Funding	Employee source of salary payment	Varchar(50)	No
42	FSP1 Bank Account	FSP1 Account Number	Varchar(15)	NO
43	FSP1 Bank Account Name	FSP1 Account Name	Varchar(50)	NO
44	FSP1 SWIFT Code	FSP1 Bank SWIFT Code	Varchar(12)	NO
45	FSP1 MNO Channel	Mobile Number	Varchar(15)	YES
46	FSP1 Payment Reference Number	Unique transaction number	Varchar(30)	NO
47	FSP1 Final Payment Date	Last date for payment to be accepted or settlement done	Datetime	NO
48	FSP1 Loan Number	FSP1 unique identifier for existing loan	Varchar(20)	NO
49	FSP1 Takeover Amount	FSP1 Takeover Amount to be paid or settled by FSP2	Number(38,2)	NO
50	FSP1 Code	FSP Identifier	Varchar(20)	NO

### Message 33

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>FSP1234</MsgId>

<MessageType>

LOAN TAKEOVER OFFER REQUEST

</MessageType>

</Header>

<MessageDetails>

<CheckNumber>111222333</CheckNumber>

<FirstName>Juma</FirstName>



<MiddleName>Ponda</MiddleName>  
<LastName>Mali</LastName>  
<Sex>M</Sex>  
<EmploymentStatus>FT</EmploymentStatus>  
<BankAccountNumber>011445888578</BankAccountNumber>  
<EmploymentDate>2020-07-01</EmploymentDate>  
<MaritalStatus>Married</MaritalStatus>  
<ConfirmationDate>2021-07-01</ConfirmationDate>  
<TotalEmployeeDeduction>205500</TotalEmployeeDeduction>  
<NearestBranchName>A Manyoni</NearestBranchName>  
<NearestBranchCode>AX002</NearestBranchCode>  
<VoteCode>32</VoteCode>  
<VoteName>XYZ</VoteName>  
<NIN>19870527111450000124</NIN>  
<DesignationCode>TZ800186</DesignationCode>  
<DesignationName>ICTOII</DesignationName>  
<BasicSalary>5000.00</BasicSalary>  
<NetSalary>100.00</NetSalary>  
<OneThirdAmount>120000.00</OneThirdAmount>  
<DeductibleAmount>6000.00</DeductibleAmount>  
<RequestedAmount>5000.00</RequestedAmount>  
<DesiredDeductibleAmount>12000.00  
</DesiredDeductibleAmount>  
<RetirementDate>3</RetirementDate>  
<TermsOfEmployment>Permanent and Pensionable  
</TermsOfEmployment>  
<Tenure>45</Tenure>  
<ProductCode>A22346</ProductCode>  
<InterestRate>20.00</InterestRate>  
<ProcessingFee>200.00</ProcessingFee>  
<Insurance>500.00</Insurance>  
<PhysicalAddress>Arusha</PhysicalAddress>  
<EmailAddress>abc.abc@instution.com</EmailAddress>  
<MobileNumber>0758484339</MobileNumber>  
<TelephoneNumber>0758484339</TelephoneNumber>  
<ApplicationNumber>AA0021000</ApplicationNumber>  
<LoanPurpose> Mkopo wakujenga nyumba </LoanPurpose>  
<ContractStartDate>2011-02-25</ContractStartDate>  
<ContractEndDate>2025-02-25 </ContractEndDate>  
<SwiftCode>AXB02</SwiftCode>  
<Funding>OS</Funding>  
<FSP1Code>445BN</FSP1Code>  
<FSP1SWIFTCode>99099</FSP1SWIFTCode>  
<FSP1BankAccount>758595X088</FSP1BankAccount>

```

        <FSP1BankAccountName>XYZ</FSP1BankAccountName>
        <FSP1MNOChannel>Channel</FSP1MNOChannel>
        <FSP1LoanNumber>077890XX444</FSP1LoanNumber>
        <FSP1PaymentReferenceNumber>858949494
        </FSP1PaymentReferenceNumbe>
        <FSP1FinalPaymentDate>2022-05-26T21:32:52
        </FSP1FinalPaymentDate>
        <TakeOverAmount>3000000.02</TakeOverAmount>

</MessageDetails>
</Data>
    <Signature>XYZ</Signature>
</Document>

```

### 2.5.6 Loan Takeover Approval Notification From FSP2 to ESS

This is API to notify ESS on submitted loan takeover offer approval (Accepted or Rejected)

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Reason for offer rejection	Varchar(150)	YES
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(8)	YES
4	Other charges	Other charges	Number(38,2)	YES
5	Approval	Acceptance use APPROVED or Rejection use REJECTED	Varchar(10)	NO
6	Loan Number	Unique FSP number that identify loan application	Varchar(20)	YES

#### Message 34

```

<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
    <MessageType>LOAN_TAKEOVER_APPROVAL_NOTIFICATION
  </MessageType>

```

```

</Header>
<MessageDetails>
  <ApplicationNumber>1002</ApplicationNumber>
  <Reason>Not allowed</Reason>
  <FSPReferenceNumber>TZ001</FSPReferenceNumber>
  <LoanNumber>20070001</LoanNumber>
  <TotalAmountToPay>2500000.0</TotalAmountToPay>
  <OtherCharges>2500.0</OtherCharges>
  <Approval>APPROVED || REJECTED</Approval>
</MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>

```

### 2.5.7 Rejection by Employee to FSP2

This API is for notifying FSP1 on employee takeover offer rejection . The FSP1 response will be general response.

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Reason for offer rejection	Text	NO
3	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	NO
4	Loan Number	Unique FSP number that identify loan application	Varchar(20)	YES

### Message 35

```

<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
    <MessageType>TAKEOVER_REJECTION_NOTIFICATION</MessageType>
    </Header>
    <MessageDetails>
      <ApplicationNumber>1002</ApplicationNumber>
      <Reason>reason</Reason>
      <FSPReferenceNumber>TZ2001</FSPReferenceNumber>
      <LoanNumber>20070001</LoanNumber>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>

```

#### 2.5.8 Loan Takeover Verification and Approval

- i. Employee decides on the offer
- ii. Employee applies for loan
- iii. FSP2 receive and validate loan details
- iv. FSP2 verify the loan application
- v. FSP2 approve loan application.
- vi. Employee accept offer(on accept send notification to FSP 2 and Employer) or reject offer(on reject send notification to FSP 2)
- vii. Employer approve the loan application
- viii. System send approval notification to employee and FSP2
- ix. FSP2 disburse loan
- x. Employee receive amount credit notification
- xi. FSP2 make payments to FSP1
- xii. FSP2 notify ESS system
- xiii. ESS system send confirmation to Employer
- xiv. Employer receives loan clearance notification from FSP1
- xv. Employer initiate monthly deduction
- xvi. Employer submit deduction notification to FSP2

### 2.5.9 Disbursement Notification from FSP2 to ESS

This API is for notifying ESS on payment made by FSP2 to FSP1 and disbursement on employee bank account . The ESS response will be general response.

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	FSP Reference number	Unique FSP Reference number corresponding to request	Varchar(20)	NO
3	Total Amount to pay	Loan amount including interest	Number(38,2)	NO
4	Disbursement date	Date Money deposited into Employee account	Date Time	NO
5	Reason	disbursement reason	Varchar(100)	NO
6	Payment advice	Content of payment advice in MT/ISO20022 format	Text	NO
7	Payment advice Attachment	PDF Payment Details Attachment in base 64 format	Text	NO

#### Message 36

```
<Document>
<Data>
  <Header>
    <Sender>ESS_UTUMISHI</Sender>
    <Receiver>FSPSystem</Receiver>
    <FSPCode>1001</FSPCode>
    <MsgId>FSP1234</MsgId>
  </Header>
  <MessageType>TAKEOVER_DISBURSEMENT_NOTIFICATION</MessageType>
  <MessageDetails>
    <ApplicationNumber>1002</ApplicationNumber>
    <Reason>Disbursed</Reason>
    <FSPReferenceNumber>TZ001</FSPReferenceNumber>
    <LoanNumber>20070001</LoanNumber>
    <TotalAmountToPay>2500000</TotalAmountToPay>
    <DisbursementDate>2022-05-26T21:32:52</DisbursementDate>
    <PaymentAdvice>MT/ISO20022</PaymentAdvice>
    <PaymentAdviceAttachment>base64string</PaymentAdviceAttachment>
  </MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>
```

#### 2.5.10 Disbursement Failure Notification From FSP2 to ESS

This API is for notifying ESS on payment failure from FSP2 to FSP1 or disbursement failure on employee account . The response from ESS will be general response.

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Reason	Description why disbursement failure	Varchar(255)	NO

#### Message 37

```
<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
      <MessageType>
        LOAN_DISBURSEMENT_FAILURE_NOTIFICATION
      </MessageType>
    </Header>
    <MessageDetails>
      <ApplicationNumber>ESS1002000</ApplicationNumber>
      <Reason>Technical issues</Reason>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>
```

#### 2.5.11 Payment Notification From ESS to FSP1

This API is for notifying FSP1 on payment done by FSP2 . The response from FSP1 will be general response.

S/N	Item Name	Item description	Type	Optional
1	Loan number	Loan application identification	Varchar(15)	NO
2	Payment Reference number	Unique transaction reference number	Varchar(30)	NO
3	FSP Reference number	FSP Reference number corresponding to request	Varchar(20)	NO

4	Total Payoff Amount	Total paid Amount	Number(38,2)	NO
5	Payment date	A date when Money deposited into FSP1 account	Date Time	NO
6	Payment advice	Content of payment advice in MT/ISO20022 format	Text	NO
7	Payment advice Attachment	PDF Payment Details Attachment in base 64 format	Text	NO

### Message 38

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>FSP1234</MsgId>

<MessageType>TAKEOVER\_PAYMENT\_NOTIFICATION</MessageType>

</Header>

<MessageDetails>

<LoanNumber>1002</LoanNumber>

<Reason>Disbursed</Reason>

<FSPReferenceNumber>TZ001</FSPReferenceNumber>

<PaymentReferenceNumber>20070001</PaymentReferenceNumber>

<TotalPayoffAmount>2500000.00</TotalPayoffAmount>

<PaymentDate>2022-05-26T21:32:52</PaymentDate>

<PaymentAdvice>MT/ISO20022</PaymentAdvice>

<PaymentAdviceAttachment>MMO</PaymentAdviceAttachment>

</MessageDetails>

</Data>

<Signature>XYZ</Signature>

</Document>

## 2.6 Loan Repayments and monitoring (all loans)

After completion of loan processing and disbursement, the next process is repayment of the loaned product. This will depend on the loan repayment schedule (i.e monthly, annually, bi monthly e.t.c). This process explains how the loan will be repaid, information submitted to FSP and response exchanges between different Systems.

### 2.6.1 Loan Repayments From Employer/Month Deduction

- i. Employer Deducts installment amount
- i. Employer provides monthly deduction details to FSP
- i. Employer makes payment to FSP
- i. FSP reconcile and confirm payment
- i. FSP acknowledge payment to employer
- i. FSP affects the installment to the respective loan accounts.

FSP repayment request details (On demand for previous months data)

S/ N	Item Name	Item description	Type	Optional
1	Deduction code	Deduction Identification	Varchar(8)	NO
2	Vote code	Employer identifier (Employee Institution)	Varchar(8)	NO
3	Vote Name	Name of the Employee Institution	Varchar(255)	NO
4	Check Number	Employee identifier	Number(9)	NO
5	FirstName	Employee first name	Varchar(30)	NO
6	MiddleName	Employee middle name	Varchar(30)	NO
7	LastName	Employee last name	Varchar(30)	NO
8	FSP code	FSP identification	Varchar(10)	NO
9	Pay date	Date of repayment	Date	NO

### Message 39

```
<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPName</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
      <MessageType>FSP_REPAYMENT_REQUEST</MessageType>
    </Header>
    <MessageDetails>
      <DeductionCode>00101</DeductionCode>
      <VoteCode> 32</VoteCode>
```



```

        <VoteName> UTUMISHI</VoteName>
        <CheckNumber>123456789 </CheckNumber>
        <FirstName>Simba</FirstName>
        <MiddleName>Mapunda</MiddleName>
        <LastName>Nguchiro</LastName>
        <PayDate>2022-05-26T21:32:52</PayDate>
    </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

Deduction payment details to FSP

S/N	Item Name	Item description	Type	Optional
	FSP Bank account	Account number	Varchar(8)	NO
	FSP Bank account name	Account Name	Varchar(10)	NO
	SWIFT code	Bank SWIFT Code	Varchar(8)	YES
	Payment reference	Payment reference number	Varchar(8)	NO
	Total amount	Amount paid	Number(38,2)	NO
	Payment description	Description as to what payment is being made	Varchar(50)	NO
	Payment date	Date payment made	Date	NO

#### Message 40

```

<Document>
    <Data>
        <Header>
            <Sender>FSPSystem</Sender>
            <Receiver>ESS_UTUMISHI</Receiver>
            <FSPCode>1001</FSPCode>
            <MsgId>FSP1234</MsgId>
        <MessageType>
            REPAYMENT_OFF_BALANCE_REQUEST_TO_FSP
        </MessageType>
        </Header>
        <MessageDetails>
            <TotalPayOffAmount>1200000</TotalPayOffAmount>
            <LoanNumber>12</LoanNumber>
            <LastDeductionDate>2022-05-26T21:32:52</LastDeductionDate>
            <FSPBankAccount>12356778888</FSPBankAccount>
            <FSPBankAccountName>LOAN</FSPBankAccountName>
            <SWIFTCode>5000</SWIFTCode>
            <MNOChannels>0089</MNOChannels>
            <PaymentReferenceNumber>22211</PaymentReferenceNumber>
        </MessageDetails>
    </Data>
</Document>

```

```

        <FinalPaymentDate>2022-05-26T21:32:52</FinalPaymentDate>
        <EndDate>2022-05-26T21:32:52</EndDate>
    </MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>

```

### 2.6.2 Loan Repayments From Employee

From time to time employees do decide to liquidate their loaned Item before maturity time. In this case employees do pay off the outstanding loan amount after communicating with their respective FSP and being served with a revised final pay off amount. This process has two scenarios where one Employee needs to liquidate the whole loan and the other Employee needs to partially reduce the loan by either paying off some of the principal amount or reducing the repayment time.

- i. Employee login to government platform
- ii. Employee select payment option

#### B1. Full payment

- i. Employee Enquire loan payoff balance
- ii. FSP provides loan balance and payment details(reference number)
- iii. Employee make payment using reference number
- iv. FSP acknowledge payment to employee
- v. FSP notify the employer about the loan payment
- vi. Employer update loan details

#### **NB. Employee notify FSP and Employer in case of failure**

#### Loan payoff request details

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	Loan number	Loan number	Varchar(8)	NO
3	First Name	Employee first name	Varchar(30)	NO
4	Middle Name	Employee middle name	Varchar(30)	NO
5	Last Name	Employee last name	Varchar(30)	NO
6	Vote code	Employer identification	Varchar(6)	NO
7	Vote name	Employer name	Varchar(255)	NO
8	Deduction amount	Deduction amount	Number(38,2)	NO
9	Deduction	Designation Identification	Varchar(8)	NO

	code			
10	Deduction name	Designation description	Varchar(255)	NO
11	Deduction balance	Deduction balance	Number(38,2)	NO
12	FSP code	FSP identification	Varchar(10)	NO
13	Payment option	Full Payment option	Varchar(50)	NO

### Message 41

```

<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
    <MessageType>FULL_LOAN_REPAYMENT_REQUEST</MessageType>
  </Header>
  <MessageDetails>
    <CheckNumber>77122876112</CheckNumber>
    <LoanNumber>1111</LoanNumber>
    <FirstName>Simba</FirstName>
    <MiddleName>Mapunda</MiddleName>
    <LastName>Nguchiro</LastName>
    <VoteCode>23</VoteCode>
    <VoteName>UTUMISHI</VoteName>
    <DeductionAmount>500000</DeductionAmount>
    <DeductionCode>0089</DeductionCode>
    <DeductionName>deduction</DeductionName>
    <DeductionBalance>50000</DeductionBalance>
    <PaymentOption>Full payment</PaymentOption>
  </MessageDetails>
</Data>
  <Signature>XYZ</Signature>
</Document>

```

Loan pay off payment details/Response from FSP

S/N	Item Name	Item description	Type	Optional
1	Loan number	Loan number	Varchar(8)	NO
2	Total payoff amount	Total amount to pay	Number(38,2)	NO
3	FSP code	FSP identification	Varchar(10)	NO
4	End date	Loan end date	Varchar(8)	NO
5	Last deduction date	Last payment date	Date	NO
6	FSP Bank account	Account Number	Varchar(8)	NO
7	FSP Bank account name	Account Name	Varchar(10)	NO
8	SWIFT code	Bank SWIFT Code	Varchar(8)	NO
9	MNO Channels	Mobile Number Operator name	Varchar(50)	YES
10	Payment reference number	Payment reference number	Varchar(8)	NO
11	Final Payment date	Last date for payment to be accepted	Date time	NO

**Message 42**

```

<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
      <MessageType>FULL_REPAYMENT_OFF_BALANCE_RESPONSE
    </MessageType>
    </Header>
    <MessageDetails>
      <TotalPayOffAmount>1200000</TotalPayOffAmount>
      <LoanNumber>12</LoanNumber>
      <LastDeductionDate>2022-05-26T21:32:52</LastDeductionDate>
      <FSPBankAccount>12356778888</FSPBankAccount>
      <FSPBankAccountName>LOAN</FSPBankAccountName>
      <SWIFTCode>5000</SWIFTCode>
      <MNOChannels>0089</MNOChannels>
      <PaymentReferenceNumber>22211</PaymentReferenceNumber>
    </MessageDetails>
  </Data>
</Document>

```

```

<FinalPaymentDate>2022-05-26T21:32:52</FinalPaymentDate>
<EndDate>2022-05-26T21:32:52</EndDate>
</MessageDetails>
</Data>
  <Signature>XYZ</Signature>
</Document>

```

Deduction repayment notification from FSP to ESS

S/N	Item Name	Item description	Type	Optional
	Payment reference	Payment reference number	Varchar(8)	NO
	Payment amount	Amount to be paid	Number(38,2)	NO
	Payment description	Description as to what payment is being made	Varchar(255)	YES
	Payment date	Date of making payment	Date	NO
	Deduction code	Loan Deduction Identifier	Varchar(8)	NO
	Loan number	Loan Identifier	Varchar(8)	NO
	Application number	Loan application identification	Varchar(15)	NO
	Check number	Employee Identifier	Number(9)	NO
	Loan Balance	Outstanding Loan Amount	Number(38,2)	NO

### Message 43

```

<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
    <MessageType>FULL_LOAN_REPAYMENT_NOTIFICATION</
    MessageType>
    </Header>
    <MessageDetails>
      <CheckNumber>1230089</CheckNumber>
      <ApplicationNumber>AAA5</ApplicationNumber>
      <LoanNumber>A225</LoanNumber>
      <PaymentReference>77122876112</PaymentReference>
      <DeductionCode>FSC03</DeductionCode>
      <PaymentDescription>description</PaymentDescription>
      <PaymentDate>2022-05-26T21:32:52</PaymentDate>
    </MessageDetails>
  </Data>
</Document>

```

```

        <PaymentAmount>10000.55</PaymentAmount>
        <LoanBalance>00.00</LoanBalance>
    </MessageDetails>
</Data>
<Signature>XYZ</Signature>
</Document>

```

## B2. Partial payment

- i. Employee Inquire loan payoff balance
- ii. Employee select payment intention option(reduce tenure/reduce installment)
- iii. Employee provide available amount for payment
- iv. FSP provides loan balance and payment details(reference number)
- vii. Employee make payment using reference number
- v. FSP acknowledge payment to employee
- vi. FSP notify the employer about the loan payment
- vii. Employer update loan details

***NB. Employee notify FSP and Employer in case of failure***

## Partial Loan repayment request details

S/N	Item Name	Item description	Type	Optional
	Check number	Employee identification	Number (9)	NO
	Loan number	Loan number	Varchar(8)	NO
	FirstName	Employee first name	Varchar(30)	NO
	MiddleName	Employee middle name	Varchar(30)	NO
	LastName	Employee last name	Varchar(30)	NO
	Vote code	Employer identification	Varchar(6)	NO
	Vote name	Employer name	Varchar(255)	NO
	Deduction amount	Deduction amount	Number(38,2)	NO
	Deduction code	Designation Identification	Varchar(8)	NO
	Deduction name	Designation description	Varchar(255)	NO
	Deduction balance	Deduction balance	Number(38,2)	NO
	FSP code	FSP identification	Varchar(10)	NO
	Payment option	Partial Payment option	Varchar(50)	NO
	Intention of	reduce tenure/reduce	Varchar(50)	NO

	partial payment	installment		
	Amount to pay	Amount to pay	Number(38,2)	NO

#### Message 44

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPSystem</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>FSP1234</MsgId>

<MessageType>PARTIAL\_LOAN\_REPAYMENT\_REQUEST</MessageType>

</Header>

<MessageDetails>

<LoanNumber>77122876112</LoanNumber>

<CheckNumber>1234444</CheckNumber>

<FirstName>Simba</FirstName>

<MiddleName>Mapunda</MiddleName>

<LastName>Nguchiro</LastName>

<VoteCode>23</VoteCode>

<VoteName>UTUMISHI</VoteName>

<DeductionAmount>5000000</DeductionAmount>

<DeductionCode>0089</DeductionCode>

<DeductionName>deduction</DeductionName>

<DeductionBalance>20000</DeductionBalance>

<FSPCode>FC001</FSPCode>

<PaymentOption>Partial Payment</PaymentOption>

<Intention>Reduce tenure</Intention>

<AmountToPay>600000</AmountToPay>

</MessageDetails>

</Data>

<Signature>XYZ</Signature>

</Document>

Outstanding balance details for payment (from FSP to ESS)

S/N	Item Name	Item description	Type	Optional
1	Loan number	Loan number	Varchar(8)	NO
2	Expected Outstanding balance	Total amount to pay after payment	Number(38,2 )	NO
3	Payment amount	Amount intended to pay	Number(38,2 )	NO
4	FSP code	FSP identification	Varchar(10)	NO
5	Expected End	Loan end date	Varchar(8)	NO

	date			
6	Last deduction date	Last payment date	Date	NO
7	FSP Bank account	Account Number	Varchar(8)	NO
8	FSP Bank account name	Account Name	Varchar(10)	NO
9	SWIFT code	Bank SWIFT Code	Varchar(10)	NO
10	MNO Channels	Mobile Number Operator name	Varchar(50)	YES
11	Payment reference number	Payment reference number	Varchar(8)	NO
12	Final Payment date	Last date for payment to be accepted	Date	NO

#### Message 45

```

<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
      <MessageType>
        PARTIAL_REPAYMENT_OFF_BALANCE_RESPONSE
      </MessageType>
    </Header>
    <MessageDetails>
      <TotalPayOffAmount>1200000</TotalPayOffAmount>
      <LoanNumber>12</LoanNumber>
    </MessageDetails>
    <LastDeductionDate>2022-05-26T21:32:52</LastDeductionDate>
    <FSPBankAccount>12356778888</FSPBankAccount>
    <FSPBankAccountName>LOAN</FSPBankAccountName>
    <SWIFTCode>5000</SWIFTCode>
    <MNOChannels>0089</MNOChannels>
    <PaymentReferenceNumber>22211</PaymentReferenceNumber>
    <FinalPaymentDate>2022-05-26T21:32:52</FinalPaymentDate>
    <EndDate>2022-05-26T21:32:52</EndDate>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>

```



#### Deduction repayment notification from FSP to employer

S/N	Item Name	Item description	Type	Optional
1	Payment reference	Reference code for payment made	Varchar(10)	NO
2	Payment amount	Amount paid	Number(38,2)	NO
3	Payment description	Description as to what payment is being made	Varchar(10)	NO
4	Payment date	Date payment made	Date	NO
5	Deduction code	Code for Loan Deduction	Varchar(10)	NO
6	Loan number	Loan Identifier	Varchar(10)	NO
7	Application number	Loan application identification	Varchar(15)	NO
8	Check number	Employee Identifier	Number(9)	NO
9	Loan Balance	Outstanding Loan balance	Number(38,2)	NO
10	Maturity date	New end date	Date	NO

#### Message 46

```

<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP12346</MsgId>
    <MessageType>PARTIAL_LOAN_REPAYMENT_NOTIFICATION</
    MessageType>
  </Header>
  <MessageDetails>
    <CheckNumber>1230089</CheckNumber>
    <ApplicationNumber>AAA5</ApplicationNumber>
    <LoanNumber>A225</LoanNumber>
    <PaymentReference>77122876112</PaymentReference>
    <DeductionCode>003</DeductionCode>
    <PaymentDescription>description</PaymentDescription>
    <PaymentDate>2022-05-26T21:32:52</PaymentDate>
    <MaturityDate>2022-05-26T21:32:52</MaturityDate>
    <PaymentAmount>10000.55</PaymentAmount>
    <LoanBalance>50000.00</LoanBalance>
  </MessageDetails>
  </Data>
</Document>

```

```

        </MessageDetails>
    </Data>
    <Signature>XYZ</Signature>
</Document>

```

## 2.7 Loan defaults recovery

Loaned Employee may become defaulters due to different reasons, some being: -

- a) Termination of Employment due to various causes.
- b) Disciplinary issues that may lead to Employee Salary being reduced
- c) Disciplinary Issues that cause Employee Salary to be stopped.
- a) Employee going on Leave without pay.

This process addresses these scenarios by trying to Identify potential defaulters before they become one and notify FSPs beforehand so that proper action(s) can be taken in order to recover the outstanding loan amount.

***N.B This process require mutual agreement between Employers and FSPs to exchange information before some decisions on Employers side a taken so as to make FSPs be on guard of likely a loanee becoming a defaulter.***

- i. Employer provide details to FSP
- ii. FSP reconcile accounts in arrears
- iii. FSP enquire details from employer (on exceptional basis)
- iv. FSP deploys a recovery process.

### 2.7.1 Defaulter Details From FSP to Employer

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	Loan number	Loan number	Varchar(8)	NO
3	First Name	Employee first name	Varchar(30)	NO
4	Middle Name	Employee middle name	Varchar(30)	NO
5	Last Name	Employee last name	Varchar(30)	NO
6	Vote code	Employer identification	Varchar(6)	NO
7	Vote name	Employer name	Varchar(255)	NO
8	Installment amount	Installment amount	Number(38,2)	NO
9	Deduction code	Designation Identification	Varchar(8)	NO
10	Deduction	Designation description	Varchar(255)	NO

	name			
11	Outstanding balance	Outstanding balance	Number(38,2)	NO
12	FSP code	FSP identification	Varchar(10)	NO
13	Last pay date	Last installment payment date	Date	NO

## Message 47

```

<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>FSP1234</MsgId>
    <MessageType>DEFAULTER_DETAILS_TO_EMPLOYER</MessageType>
  </Header>
  <MessageDetails>
    <VoteCode>20</VoteCode>
    <VoteName>Utumishi</VoteName>
    <CheckNumber>9723101</CheckNumber>
    <LoanNumber>101</LoanNumber>
    <FirstName>Simba</FirstName>
    <MiddleName>Mapunda</MiddleName>
    <LastName>Nguchiro</LastName>
    <InstallationAmount>30000</InstallationAmount>
    <DeductionName> Salary Loan</DeductionName>
    <DeductionCode>00101</DeductionCode>
    <OutstandingBalance>3002000</OutstandingBalance>
    <LastPayDate>2022-05-26T21:32:52</LastPayDate>
  </MessageDetails>
</Data>
  <Signature>XYZ</Signature>
</Document>

```

### 2.7.2 Defaulter details from employer to FSP

S/N	Item Name	Item description	Type	Optional
1	Check number	Employee identification	Number (9)	NO
2	Loan number	Loan number	Varchar(8)	NO
3	FSP code	FSP identification	Varchar(10)	NO
4	Last pay date	Last installment payment date	Date	NO

5	Employee Status	Status of Employee (Active/Inactive)	Varchar(8)	NO
6	Workstation	Employee Station of Duty	Varchar(50)	YES
7	Physical address	Physical address	Varchar(255)	YES
8	Telephone number	Telephone number	Varchar(12)	YES
9	Email address	Email address	Varchar(50)	NO
10	Mobile number	Mobile number	Varchar(12)	NO
11	Contact person	Loan officer	Varchar(90)	NO
12	Institution	Institution name	Varchar(255)	NO

#### Message 48

```

<Document>
<Data>
  <Header>
    <Sender>ESS_UTUMISHI</Sender>
    <Receiver>FSPSystem</Receiver>
    <FSPCode>1001</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
    <MessageType>DEFAULTER_DETAILS_TO_FSP</MessageType>
  </Header>
  <MessageDetails>
    <CheckNumber>111276112</CheckNumber>
    <LoanNumber>101</LoanNumber>
    <FSPCode>01011</FSPCode>
    <LastPaymentDate>2022-05-26T21:32:52</LastPaymentDate>
    <EmploymentStatus>FT</EmploymentStatus>
    <WorkStation>Nanjilinji</WorkStation>
    <PhysicalAddress>Box 201</PhysicalAddress>
    <TelephoneNumber>+2552233001</TelephoneNumber>
    <EmailAddress>john.pesa@watumishi.go.tz</EmailAddress>
    <Fax>22330012</Fax>
    <MobileNumber>0709712312</MobileNumber>
    <ContactPerson>Loan Officer Name</ContactPerson>

  </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

## 2.8 Account validation

This end point is for validating employee accounts with both account number and account name.

Account validation request to FSP

S/N	Item Name	Item description	Type	Optional
1	Account Number	Employee account number	Varchar (30)	NO
2	FirstName	Employee first name	Varchar(30)	NO
3	MiddleName	Employee middle name	Varchar(30)	NO
4	LastName	Employee last name	Varchar(30)	NO

### Message 47

```
<Document>
<Data>
  <Header>
    <Sender>ESS_UTUMISHI</Sender>
    <Receiver>FSPSystem</Receiver>
    <FSPCode>1001A</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
    <MessageType>ACCOUNT_VALIDATION</MessageType>
  </Header>
  <MessageDetails>
    <AccountNumber>010101414</AccountNumber>
    <FirstName>Simba</FirstName>
    <MiddleName>Mapunda</MiddleName>
    <LastName>Nguchiro</LastName>
  </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>
```

### 2.8.1 Account validation response from FSP

S/N	Item Name	Item description	Type	Optional
1	Valid	Account validity or status	Boolean	NO
2	Reason	Reason if not valid	Varchar(100)	Yes

### Message 48

```
<Document>
<Data>
  <Header>
    <Sender> FSPSystem</Sender>
    <Receiver>ESS_UTUMISHI</Receiver>
    <FSPCode>007</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
  <MessageType>ACCOUNT_VALIDATION_RESPONSE</MessageType>
</Header>
  <MessageDetails>
    <Valid> true || false </Valid>
    <Reason>Account number blocked</Reason>
  </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>
```

### 2.9 Financial Service Provider Bank branch

The purpose of this API is to get all FSP service branch information to allow employee to select nearest branch for help.

S/ N	Item Name	Item description	Type	Optional
1	District Code	District identification code	Varchar(100)	NO
2	Branch Code	FSP branch identification code	Varchar(100)	NO
3	Branch Name	FSP branch name	Varchar((255)	NO

### Message 49

```
<Document>
<Data>
  <Header>
    <Sender> FSPSystem</Sender>
    <Receiver>ESS_UTUMISHI</Receiver>
    <FSPCode>1001A</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
  <MessageType>FSP_BRANCHES</MessageType>
</Header>
  <MessageDetails>
    <BranchDetail>
      <DistrictCode>D001</DistrictCode>
      <Branch>
```

```

        <BranchCode>D001001</BranchCode>
        <BranchName>Hai1</BranchName>
    </Branch>
    <Branch>
        <BranchCode>D001002</BranchCode>
        <BranchName>Hai2</BranchName>
    </Branch>
    <Branch>
        <BranchCode>D001003</BranchCode>
        <BranchName>Hai3</BranchName>
    </Branch>
</BranchDetail>
<BranchDetail>
    <DistrictCode>D002</DistrictCode>
    <Branch>
        <BranchCode>D002001</BranchCode>
        <BranchName>Posta1</BranchName>
    </Branch>
    <Branch>
        <BranchCode>D002002</BranchCode>
        <BranchName>Posta2</BranchName>
    </Branch>
    <Branch>
        <BranchCode>D002001</BranchCode>
        <BranchName>Posta3</BranchName>
    </Branch>
</BranchDetail>
<BranchDetail>
    <DistrictCode>D003</DistrictCode>
    <Branch>
        <BranchCode>D003001</BranchCode>
        <BranchName>Mlimani1</BranchName>
    </Branch>
    <Branch>
        <BranchCode>D003002</BranchCode>
        <BranchName>Mlimani1</BranchName>
    </Branch>
    <Branch>
        <BranchCode>D003003</BranchCode>
        <BranchName>Mlimani1</BranchName>
    </Branch>
</BranchDetail>
</MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

## 2.10 Monthly Deduction record to FSP

API to send employees monthly deductions to financial service providers on each payroll.

S/N	Item Name	Item description	Type	Optional
1	Loan Number	Unique FSP number that identify loan application	Varchar(20)	NO
2	Check number	Employee identification	Number (18)	NO
3	First Name	Employee First Name	Varchar(30)	NO
4	Middle Name	Employee Middle Name	Varchar(30)	NO
5	Last Name	Employee Last Name	Varchar(30)	NO
6	National Id	National identification number	Varchar(22)	NO
7	Vote Code	Employer identification	Varchar(10)	NO
8	Vote Name	Employer name	Varchar(255)	NO
9	Department Code	Employee department identification	Varchar(10)	NO
10	Department Name	Employee department name	Varchar(255)	NO
11	Deduction Code	Employee Deduction identification	Varchar(10)	NO
12	Deduction Description	Employee Deduction Description	Varchar(255)	NO
13	Balance Amount	Amount left after monthly deduction	Number(38,2)	NO
14	Deduction Amount	Monthly return amount	Number(38,2)	NO
15	Has Stop Pay	Status if employee has stop payment(true or false)	Boolean	YES
16	Stop Pay Reason	Description why employee has stop payment	Varchar(255)	YES
17	Check Date	Payroll date	Date	NO



## Message 50

```
<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPName</Receiver>
      <FSPCode>1001</FSPCode>
      <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
      <MessageType>FSP_MONTHLY_DEDUCTIONS</MessageType>
    </Header>
  <MessageSummary>
    <BatchRecordSize>3123407</BatchRecordSize>
    <BatchNumber>39</BatchNumber>
    <TotalBatch>313</TotalBatch>
    <PayrollDate>2022-10-31</PayrollDate>
  </MessageSummary>
  <MessageDetails>
    <DeductionRecord>
      <LoanNumber>20070002</LoanNumber>
      <CheckNumber>110648922</CheckNumber>
      <FirstName>Alima</FirstName>
      <LastName>Hamis</LastName>
      <MiddleName>Juma</MiddleName>
      <NationalId>19000310476100000121</NationalId>
      <VoteCode>79E6</VoteCode>
      <VoteName>Kilifi District Council</VoteName>
      <DepartmentCode>2207</DepartmentCode>
      <DepartmentName>PRIMARY EDUCATION</DepartmentName>
      <DeductionCode>FL0001</DeductionCode>
      <DeductionDescription>FSP Bank Loan</DeductionDescription>
      <BalanceAmount>50000.05</BalanceAmount>
      <DeductionAmount>1000.01</DeductionAmount>
      <HasStopPay>true</HasStopPay>
      <StopPayReason>Death</StopPayReason>
      <CheckDate>2022-10-31</CheckDate>
    </DeductionRecord>
    <DeductionRecord>
      <LoanNumber>20070001</LoanNumber>
      <CheckNumber>110648976</CheckNumber>
      <FirstName>Miraji</FirstName>
      <LastName>Fumbo</LastName>
      <MiddleName>Mussa</MiddleName>
      <NationalId>19000310476100000121</NationalId>
      <VoteCode>79E6</VoteCode>
      <VoteName>Kilifi District Council</VoteName>
      <DepartmentCode>2207</DepartmentCode>
      <DepartmentName>PRIMARY EDUCATION</DepartmentName>
      <DeductionCode>FL0001</DeductionCode>
      <DeductionDescription>FSP Bank Loan</DeductionDescription>
      <BalanceAmount>50000.05</BalanceAmount>
      <DeductionAmount>1000.01</DeductionAmount>
```

```

        <HasStopPay>false</HasStopPay>
        <CheckDate>2022-10-31</CheckDate>
    </DeductionRecord>
</MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>

```

## 2.11 Deduction stop notification to FSP

API to send notification to financial service providers when an employer stops employee deduction.

S/N	Item Name	Item description	Type	Optional
1	Loan Number	Unique FSP number that identify loan application	Varchar(20)	NO
2	Check number	Employee identification	Number (18)	NO
3	Deduction Code	Employee Deduction identification	Varchar(10)	NO
4	Deduction Description	Employee Deduction Description	Varchar(255)	NO
5	Balance Amount	Amount left after deduction	Number(38,2)	NO
6	Deduction Amount	Monthly return amount	Number(38,2)	NO
7	Stop Reason	Description why employer has stop deduction	Varchar(255)	Yes
8	Stop Date	Deduction stop date	Date	YES

### Message 51

```

<Document>
  <Data>
    <Header>
      <Sender>ESS_UTUMISHI</Sender>
      <Receiver>FSPSystem</Receiver>
      <FSPCode>A1001</FSPCode>
      <MsgId>FSP12346</MsgId>
    <MessageType>DEDUCTION_STOP_NOTIFICATION</MessageType>
    </Header>
    <MessageDetails>
      <LoanNumber>20070001</LoanNumber>
      <CheckNumber>110648976</CheckNumber>
      <DeductionCode>FL0001</DeductionCode>
    </MessageDetails>
  </Data>
</Document>

```

```

        <DeductionDescription>FSP Bank
Loan</DeductionDescription>
        <BalanceAmount>50000.05</BalanceAmount>
        <DeductionAmount>1000.01</DeductionAmount>
        <StopDate>2022-10-20</StopDate>
        <StopReason>Dismissal</StopReason>
    </MessageDetails>
</Data>
    <Signature>XYZ</Signature>
</Document>

```

## 2.10 Loan Liquidation notification message

S/N	Item Name	Item description	Type	Optional
1	Application number	Loan application identification	Varchar(15)	NO
2	Loan number	Loan Identifier	Varchar(20)	NO
3	Remarks	Reason why you intend to end deduction	Varchar(255)	Yes

### Message 52

```

<Document>
  <Data>
    <Header>
      <Sender>FSPSystem</Sender>
      <Receiver>ESS_UTUMISHI</Receiver>
      <FSPCode>A1001</FSPCode>
      <MsgId>FSP12346</MsgId>
      <MessageType>LOAN_LIQUIDATION_NOTIFICATION</MessageType>
    </Header>
    <MessageDetails>
      <ApplicationNumber>ESS1002000</ApplicationNumber>
      <LoanNumber>A00122</LoanNumber>
      <Remarks>Loan finalized</Remarks>
    </MessageDetails>
  </Data>
  <Signature>XYZ</Signature>
</Document>

```

## 2.11 Loan Status Request

FSP Send loan application to get loan status

S/N	Item Name	Item description	Type	Optional
1	Application number	ESS Loan application identification	Varchar(15)	NO

### Message 53

```
<Document>
<Data>
  <Header>
    <Sender>FSPName</Sender>
    <Receiver>ESS_UTUMISHI </Receiver>
    <FSPCode>1001</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
    <MessageType>LOAN_STATUS_REQUEST</MessageType>
  </Header>
  <MessageDetails>
    <ApplicationNumber>ESS17558988000</ApplicationNumber>
  </MessageDetails>
</Data>
<Signature>Signature</Signature>
</Document>
```

## 2.12 Loan Status Response

ESS system respond with loan status description

S/N	Item Name	Item description	Type	Optional
1	Response Code	Success or failure code	Integer (5)	NO
2	Description	Success or failure description/message	Varchar(255)	NO

### Message 54

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPName</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>RESPONSE</MessageType>

</Header>

<MessageDetails>

<ResponseCode>8000</ResponseCode>

<Description>Loan with application ESS17558988000 is at FSP, last action done at 2022-05-26T21:32:52</Description>

</MessageDetails>

</Data>

<Signature>Signature</Signature>

</Document>

### 2.13 General Response message

S/N	Item Name	Item description	Type	Optional
1	Response Code	Success or failure code	Integer (5)	NO
2	Description	Success or failure description/message	Varchar(255)	NO

#### Message 55

<Document>

<Data>

<Header>

<Sender>ESS\_UTUMISHI</Sender>

<Receiver>FSPName</Receiver>

<FSPCode>1001</FSPCode>

<MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>

<MessageType>RESPONSE</MessageType>

</Header>

<MessageDetails>

<ResponseCode>8000</ResponseCode>

<Description>Success</Description>

</MessageDetails>

</Data>

<Signature>Signature</Signature>

</Document>

### 3 Digital Signature Security

#### 3.1 Overview

Digital signature will be used for messages exchange between the ESS and Financial Service Provider. The FSP will be required to apply for digital signature from Certificate Authority (CA). The exchange of messages will also be done using digital signatures. Prior to being confirmed(verified) using the participant's public key, the message(s) must be signed with the participant's private key.

#### 3.2 Digital Signature

The security architecture used by the ESS is based on Public Key Infrastructure (PKI) technology in which two keys (Public and Private) are used to provide the highest levels of security and universal acceptance. There are typically three algorithms involved with the digital signature process:

- I.Key generation - This algorithm provides a private key along with its corresponding public key from CA.
- I.Signing - This algorithm produces a signature upon receiving a private key and the message that is being signed.
- I. Verification - This algorithm checks for the authenticity of the message by verifying it along with the signature and the public key.

#### 3.3 Digital Signature File Format

ESS accepts and shares public key certificate in .cer or .crt format. The expected filename extension fspNameCertificate.cer or fspNameCertificate.crt

#### 3.4 Signature Algorithm

The supported signature algorithm is SHA256withRSA with base64 string encoded of character length 344.

#### 3.5 Signed Final Payload Format

ESS expects message to be digitally signed and obey the following rules:-

Sample content to be signed:

```
<Data>
  <Header>
    <Sender>ESS_UTUMISHI</Sender>
    <Receiver>FSPName</Receiver>
    <FSPCode>1001</FSPCode>
    <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
    <MessageType>RESPONSE</MessageType>
  </Header>
  <MessageDetails>
    <ResponseCode>8000</ResponseCode>
    <Description>Success</Description>
  </MessageDetails>
</Data>
```

Final payload after signing:

```
<Document>
  <Data>
```

```
<Header>
  <Sender>ESS_UTUMISHI</Sender>
  <Receiver>FSPName</Receiver>
  <FSPCode>1001</FSPCode>
  <MsgId>90769af68ef011ecb3a6432feaa9296f</MsgId>
  <MessageType>RESPONSE</MessageType>
</Header>
  <MessageDetails>
    <ResponseCode>8000</ResponseCode>
    <Description>Success</Description>
  </MessageDetails>
</Data>
<Signature>
XiMiKOSrePDw4w05uyvX/
ro0XpgEqQ5bXgHF6g9tgYSFwsX3vj+Fy44rDgFCU3W3Dc0O62CbT
MHZ5Kc1vixHHGFvDknuFqUqL5zNapQEq2DAnoTIONGRmyBhfJZ9y
2NqvoKfAnrqgwasDEfC79QR0WH8p2sfPCd0wOVyv5JKIE2QqxF4et
6nBO2kmzTPmc35ytTGPItn1ZI7nmaJ6au5in8X8qhFrqqW+7mLe6Lm
A8ASgWvUZ9JXhKUfic8k8kJYRyEUNEPj0cbKsjtHzqOENfYIHKVgwB
ARBJnqF9Dbyet52ZqRq13QWi7F8UbTtvNvXZLMbnIMWOr+cH6og==
</Signature>
</Document>
```



## 4 Appendices

### 4.1 Loan states

State	Description	Action owner
<b>Initiated</b>	Created but not submitted	Employee
<b>Loan offer At FSP</b>	Loan submitted to FSP by employee	FSP
<b>FSP Rejected</b>	Loan closed	Not Applicable
<b>Loan Offer at employee</b>	FSP respond with loan offer	Employee
<b>Employee Rejected</b>	Loan Closed by FSP	
<b>Pending for approval</b>	Employee accept offer and submit to employer	Employer
<b>Employee canceled</b>	Loan request canceled by Employee(precondition=pending for Approval)	Employee
<b>Employer Rejected</b>	Loan Closed by Employer	Employer
<b>Submitted for disbursement</b>	Loan Approved waiting money disbursement into Employee Account	FSP
<b>FSP Canceled</b>	Loan request canceled by FSP	FSP
<b>Completed</b>	Loan Completed	FSP
<b>Waiting for liquidation</b>	Loan Waiting to be liquidated	FSP
<b>Disbursement Failure</b>	Loan disbursement Failure	FSP

### 4.2 Loan state transition

#### New Loan

Initiated -> Loan offer At FSP -> FSP Rejected| Loan Offer at employee -> Employee Rejected| Pending for approval -> Employee canceled| Employer Rejected| Submitted for disbursement -> FSP Canceled| Completed

#### Loan Take over

Initiated -> Loan offer At FSP -> FSP Rejected| Loan Offer at employee -> Employee Rejected| Pending for approval -> Employee canceled| Employer Rejected -> Waiting for liquidation -> Submitted for disbursement ->FSP Canceled | Completed

### 4.3 Response Code

No	Code	Description
	8000	Successful/Received
	8001	Required header is not given
	8002	Unauthorized
	8003	Invalid Financial service provider code
	8004	Service provider is not active
	8005	General Failure
	8006	Duplicate Request
	8007	Invalid bank account
	8008	Bank account not active
	8009	Invalid Signature
	8010	Invalid Signature Configuration missing one of parameter passphrase, key alias, filename)
	8011	Error on processing request
	8012	Request cannot completed at this time, try later
	8013	Inactive communication protocol
	8014	Invalid code, mismatch of supplied code on information and header
	8015	Invalid deduction code
	8016	Check Number does not exist
	8017	Vote code does not exist
	8018	Invalid product code
	8019	Invalid Application number
	8020	Payment reference number does not exist