



**Software Requirement Specifications  
for  
Enhancements in UGC Scholarship portal**

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## **I) Introduction**

Canara Bank has developed a state of the art scholarship disbursal system integrated with Public Financial Management System (PFMS) as per the requirements of UGC for the monthly disbursal of scholarships of UGC. Presently the admin module access has been given to UGC. As per the requirements from UGC/MHRD and Ministry of Tribal Affairs certain enhancements are envisaged which are detailed as below.

## **II) Proposed enhancements in the System**

### **1. Revised process flow for payment generation**

- 1.1 A new process flow is proposed for payment with effect from 1st October 2018. In the existing system the payments are generated based on the continuation certificate and other details as submitted by the university and as approved by UGC. In the proposed revised process flow, system by default will generate payments for those candidates who are linked by the universities based on monthly confirmation of list of the candidates as submitted by the Universities/Institutions in the web portal. If the payment to be stopped for a candidate for a month, then university has to mark stop payment specifically for the month. System will not generate payments for those candidates who are yet to be linked by the universities.
- 1.2 Linking is the process by which university will link a candidate to the university as one time measure.
- 1.3 University/Institution should ensure to link all new candidates within 6 months of date of joining. If the date of joining is more than 6 months old, then system will generate alerts to UGC while approving the linking
- 1.4 Upon linking a candidate, system will generate a payment schedule based on which payment will be generated and will be paid based on the

- monthly confirmation from University. The maker and checker updation for the monthly conformation will be done by the university itself.
- 1.5 For a new candidate under NETJRF fellowship scheme, system will generate payment schedule w.e.f a date which is the latest of the date of joining, date of admission and the cutoff date of a batch. For all other scholarship and fellowship schemes system will generate payment schedule w.e.f the date which is the latest of joining date and cut off date of a batch
  - 1.6 For an existing candidate system will generate payment schedule starting from the actual date of payment already made. While linking, for a candidate if arrears are pending w.e.f a date which is prior to current month, then system will generate payment schedule including applicable dates of arrears.
  - 1.7 Linking of student by the university has to be approved by UGC. Upon initiation of linking by the University, the candidates will be given a provision to verify details in their login. University will be allowed to submit the details to UGC for approval only after a defined time period or on approval by candidate whichever is earlier.
  - 1.8 Upon approval of linking the candidate by UGC, system will send the account validation/beneficiary code creation to PFMS within a defined period (presently within 2 hours).
  - 1.9 Upon receiving the response from PFMS system will update the beneficiary code against the candidate.
  - 1.10 PFMS will send the details as sent by the account holder's name as per the respective Bank as part of response
  - 1.11 Universities will be provided with an option to view the response and account name as received from PFMS vis a vis the details as available in the portal.
  - 1.12 The system will compare the name as per the portal against the name as per the Bank as received from PFMS.
  - 1.13 If there is mismatch of names with more than defined percentage (50%), then beneficiary code will not be updated in the system. An option will

- be provided to the universities to exclusively verify such cases and to take corrective measure by approving or rejecting the response from PFMS.
- 1.14 In case the account number/IFSC is wrong, then the same has to be corrected. An option will be provided to the universities to modify the account number/IFSC of a candidate. Universities may use this option to modify the account number in case of rejected response from PFMS because of invalid account number, IFSC number etc. or in case of name mismatch.
  - 1.15 A report for monitoring beneficiary code creation will be provided to UGC /University.
  - 1.16 For all fellowship/ scholarships , system will create payment schedule for the maximum tenure of the fellowship/scholarship as defined by UGC time to time, and payment will be made accordingly. System will not consider inputs such as M.Phil/Ph.D or integrated for fellowship for already linked candidates. If payment has to be stopped for any candidate for any reason(eg. After M.Phil before starting Ph.D), then university may mark stop payment.
  - 1.17 A provision will be given to the universities to update the details such as M.Phil,Ph.D or M.Phil+Ph.D . For the newly linked candidates w.e.f November 2018 system will generate the payment schedule only for two years and payment will be generated for two years. An option will be provided to update the registration for Ph.D. If the the Ph.D registration details are updated then payment schedule will get revised for a further period of three years.
  - 1.18 W.e.f 1<sup>st</sup> October 2018, for all the listed Scholarship/Fellowship schemes, payments will be generated based on a monthly confirmation of payment generation as submitted by the Universities/Institutions.However if university has already uploaded certificates, system will generate payments based on the same. The University/Institution has to submit confirmation of the list of candidates under a particular scheme for whom Fellowship/ Scholarship to be disbursed within the cutoff date(Presently

15<sup>th</sup> of every month). If confirmation is not given by the University/Institution for a scheme for a particular month within the cutoff date of month, then payment will not be generated for any Candidate under that scheme for the University. The monthly confirmation option will be enabled with Maker-Checker functionality. Both the initiation and approval by Maker and Checker users respectively will be done by the University itself. No further approval from UGC is required for the same. All Universities/Institutions should obtain minimum two users (one for Maker and one for Checker) from UGC for this purpose. If payment has to be stopped for any Candidate, then University/Institution has to submit stop payment instruction for that candidate through a specific option as provided in the Web portal.

There are two types of Monthly payment confirmation for a scheme.

a) Confirmation for current month payment

This confirmation is for the list of Candidates eligible for generation of payments which is due for current month.

b) Confirmation for arrear payment

This confirmation is for the list of candidates eligible for generation of arrear payments pending if any.

1.19 Upon giving monthly confirmation, system will generate payments for all those candidates who are linked to that University and who are coming under the scheme for which confirmation is given.

1.20 Option for stop payments will be provided component wise and studentwise. Stop payment can be marked by maker itself. No approval by Checker is required for stop payment. The stop payment will be allowed to mark maximum three months prior to current month, if payment is already made. If payment is not made yet then system will allow to mark stop payment with effect from any date. This is parameterized in the system. If stop payment has to be allowed w.e.f a

previous month then the maximum number of months prior to current month to be allowed for stop payment has to be communicated by UGC to Bank. Bank will set the parameter accordingly in the system.

- 1.21 An option to revoke the stop payment will be provided in the system. The revocation of stop payment will be provided with maker checker functionality. The approval of stop payment revocation can be done by University itself. No further approval from UGC is required for the same. Upon revocation of stop payments , system will make the payments with arrears if applicable.
- 1.22 There will be a provision in the system to create reversal transactions and to adjust the future payments in case of any payments generated in excess for any reason. The report for the details of such adjusted payments will be made available to the student, university and UGC.
- 1.23 A provision will be provided to UGC to change the stream except NER( Ishan uday scheme). The minimum date w.e.f which change of stream to be allowed will be configured in the system. UGC will provide the details of minimum number of months prior to current month w.e.f change of stream to be allowed
- 1.24 Provision will be created in the system for correction of joining date, registration date and cut off date of batch.
- 1.25 For NETJRF fellowship scheme ,system will start payments w.e.f a date which is latest of the date of joining,date of admission and the cutoff date of a batch. For all other scholarship and fellowship schemes system will generate payments w.e.f the date which is the latest of joining date and cut off date of a batch. This change will be effected from 1<sup>st</sup> October 2018. For the existing candidates the present starting date of fellowship will continue.
- 1.26 Provision for change of university will be provided in the system as below .
  - An option will be provided to transferor university to transfer out the candidate to the transferee university

- The transferee university will be provided with an option to transfer in the candidate
  - After transfer in and transfer out by the respective universities , UGC will be provided with an option to approve the transfer based on which system will complete and update the transfer process
- 1.27 Provision for linking a course against a candidate in NER scheme will be provided. For NER, the period of payment varies depending upon the course . UGC will give the course master to Canara Bank which will be updated in the portal. University, while linking the candidate will select the course, based on which system will define the payment period/schedule. For already linked candidate UGC may give candidate wise course details which will be updated as in the system as a one time measure.
- 1.28 An option for discontinuing a candidate will be provided in the system. The option will be provided only by maker. No approval by the checker is required for the same. If discontinued, it cannot be reverted back. If discontinuation is marked with effect from a previous date and any payment has already been made , then university has to manually recover the amount and has to remit to UGC.
- 1.28.1 Components of payments
- Fellowship/scholarship
    - The system will generate payment as per the defined rate applicable to the scheme on a monthly basis.
    - In the beginning month,last month and month of upgradation fellowship/scholarship amount will be calculated on a prorated basis.
  - HRA
    - A provision will be given to the universities to enter the applicable monthly amount of HRA for a candidate while linking. System will validate the maximum allowed amount as per the rates defined for the university while

data entry. In case of fellowship , the validation of maximum amount will be provided based on the percentage of SRF rate. But payment will be generated based on the status of candidate(JRF/SRF).

- An option will be provided in the system for modification of HRA.In case of any modification of HRA amount, university may exercise this option.
  - As per the above HRA amount will be generated by the system on a monthly basis.
  - For some candidates HRA will not applicable. In such case university may mark stop payment for HRA for the specific candidate.
  - For already linked candidate HRA will be calculated as per the latest payment already made.
  - In the beginning month,last month and month of upgradation HRA amount will be calculated on a prorate basis.
- Contingency payment
    - Contingency payment will be generated on a quarterly basis in arrears, based on the parameter defined in the system.
    - The generation of contingency by the system does not require any inputs such as utilization certificate from University.
    - For some candidates contingency will not applicable. In such case university may mark stop payment for contingency for the specific candidate.
    - Contingency amount will be generated along with the payments in the quarter ends(i.e In the months of March,June,September and December).
    - In the beginning month,last month and month of upgradation contingency amount will be calculated on a prorate basis.

- Escort payment
  - Escort payment will be generated on a monthly basis based on the parameter defined in the system if the disabled flag is Y in the master data.
  - Provision will be provided to mark stop payment
  - In the beginning month, last month and month of upgradation contingency amount will be calculated on a prorated basis.

#### 1.28.2 JRF to SRF conversion

- System will automatically convert a candidate from JRF to SRF upon the completion of defined period (Now 2 years for 5 years fellowship schemes which has to be parameterised) for all applicable schemes.
- A separate provision will be provided to the university in the system to stop payment/release JRF to SRF upgradation for a student for period.

1.28.3 For Emeritus scheme, payment will be generated upto the maximum age or as defined in the parameter or course end date whichever is earlier. Presently it is 70 years

1.28.4 For the schemes such as Dr.Kothari, Dr.Radhakrishnan Fellowship yearly increment functionality has to be implemented

1.28.5 For SVSGC the present yearly increment functionality has to be changed. UGC will give new guidelines to Canara Bank to make necessary changes in the system.

1.28.6 For BSR faculty scheme maximum age upto which payment permitted has to be defined.

1.28.7 For PGGATE scheme incremental amount based on percentage of mark has to be implemented. In the first semester by default all the candidates will be eligible for higher amount. In the 2nd Semester onwards by default the payment will be made as per lower amount. University has to mark the percentage of mark obtained for the students for the previous semesters. An incremental amount will be paid in as semester for those students who get 60% or above mark in the previous semester.

1.28.8 UGC will define and inform Canara Bank ,the maximum period within which linking of candidate will be allowed in the system.

1.28.9 Gap period handling

- A provision will be provided in the portal for maintenance of parameter for max gap period allowed for each fellowship/scholarship scheme
- UGC will provide schemewise maximum allowed gap period to Canara Bank which will be configured in the system
- If the gap period is entered beyond the maximum allowed gap period, then system will mark withheld for the candidate automatically.
- The maximum extension in fellowship/scholarship allowed because of gap period will be set as one year.
- If the gap period entered in the system is within the maximum allowed gap period then system will make the payments upto the maximum extended period excluding the period of gap entered .i.e System will not generate payments for gap period.
- If gap period entered for any period for which payment already made system will create reversal entries which will get adjusted with the future payments as and when system generates payments

1.28.10 Grievance redressal

- In student's portal the details of payment schedule,stop payment etc will be displayed.
- Students will be given provision to raise grievance in the system. Depending upon the category of the problem UGC/University/Canara Bank will be given the provision to address the issue and to update the resolution.
- Students will be provide with a provision for self registration in the portal for creation of login ID and password.

- The self registration will be available based on the email ID of the student as available in the master data.
- A provision for modification/updation of email ID for a student will be given to University with the due approval from UGC.

## **2. Enhanced Login security by enabling OTP through Email and SMS**

2.1 A provision has to be developed to generate and send OTP while logging into the system to the registered email and mobile number .

2.2 The OTP so generated will be valid for a specified period. The validity period for OTP has to be parameterized in the system

2.3 The system will prompt the user to enter the OTP as received either through SMS or email while trying to login.

2.4 Upon entry of OTP by the user, system will validate the OTP and password entered. Upon successful validation system will allow login

## **3 Enhancements in AADHAAR upation and AADHAAR based payments system**

### **3.1 AADHAR collection and updation in the portal**

The Universities/colleges handling scholarship/fellowship schemes have to obtain the AADHAAR details from the students and update in the UGC scholarship portal as follows.

- 3.2 A specific option will be enabled in the UGC scholarship portal to enter the AADHAAR of the candidates by the Universities/colleges.
- 3.3 University should obtain the details of AADHAAR No from the student along with the mandate form for AADHAAR seeding/for availing AADHAAR based service.
- 3.4 After obtaining the details from the candidates AADHAAR should be updated in the web portal. Universities should enter the details of AADHAAR against a particular student through specific AADHAAR updation option.
- 3.5 Upon entering the AADHAAR details the same has to be validated using the validate button as provided in the screen
- 3.6 If the account of the candidate is in Canara Bank , system will verify the AADHAAR against the AADHAAR seeded in the account in Canara Bank

- CBS. If the AADHAAR entered is matching with the AADHAAR as available in CBS and if the consent is available in CBS then the AADHAAR number entered will be updated in the system.
- 3.7 If the AADHAAR is available in CBS and consent not available in CBS then system will call the AADHAAR authentication API using OTP methodology. Upon calling AADHAAR authentication API the candidate will get the OTP in his/her mobile. System will prompt for entering the OTP. The candidate should provide the OTP to university user so as to enter the same in the screen as prompted by the system. Upon entering the OTP and submission the authentication process will be completed. Upon successful authentication AADHAAR number will be updated successfully in the system. For the candidates who are having account with other Banks also system will update the AADHAAR number after OTP based authentication as above.
  - 3.8 Also an option will be provided in the candidate's login to do AADHAAR authentication for the AADHAAR as updated by University.
  - 3.9 Further the scholarship portal will be automatically updated with AADHAAR details for each student who is having account in Canara Bank based on the AADHAAR seeding data in CBS. This will be done by the system even if the AADHAAR is not updated by the universities/colleges through the option. i.e if a candidate having account number in Canara Bank has already done the seeding in CBS of Canara Bank against his account number, then his/her AADHAAR number will get automatically updated to the scholarship portal. This will avoid the duplicity of AADHAAR updation work for such students.
  - 3.10 Payments through AADHAAR Payment Bridge System of NPCI integrated with PFMS
  - 3.11 Before initiating payments, beneficiary codes will be created through PFMS for the candidates. PFMS will give the details of beneficiary code creation (based on Account/based on AADHAAR or based on both) in the response which will be updated in the student master records.
  - 3.12 Government Business Branch will be provided with an option to enable/disable AADHAAR based payments in the scholarship portal. If the AADHAAR based payments are enabled for a scheme, then while initiating the monthly scholarship payments, for candidates for whom beneficiary code created based AADHAAR/both the payments will be initiated through

AADHAAR through PFMS interface. For all other students payments will be initiated through account number through PFMS interface.

#### **4. Provision for master data approval by UGC**

4.1 Presently the master data as submitted by UGC to the link branch has been uploaded to the portal by the link branch.

4.2 To ensure consistency and integrity it is proposed to provide the option to upload the master data t UGC

4.4 Proper reports have to be enabled to monitor records which are pending for approval

#### **5. Provision for User creation request**

- A provision has to be enabled in the portal for the universities to raise a request for user creation.
- The first user creation will be done by UGC by getting the request from the University directly. UGC will do the due diligence before creation of the user. After creation of user the same will be communicated to University by UGC directly.
- If any users are required further then universities can use this option to request UGC for user creation.
- UGC will get option the view the requests and the same can be approved after verifying the details. Upon approval email will be sent to the email of the user created.

#### **6. Provision for Exception**

- An option will be given to UGC as well as Government Business branch to add an exception for a parameter already set in the system.
- Depending upon the parameter the exception can be added for a student or for a university
- If exception added then system will process that payment/option as per the value added in exception .
- Illustration

Some of the examples of Exception which can be added for parameter are given as follows

- i) number of hours allowed for verification of linking details by candidates
- ii) Maximum gap period allowed for a candidate
- iii) Maximum number of months prior to current month stop payment allowed if payment already made
- iv) The starting date of a month from which stop payment marking allowed
- v) The ending date of a month upto which stop payment marking allowed.