

My Name Is Navdeep Garg, I have joined ISRO on 24<sup>th</sup> May 2016 and working in MISD division under PPEG. Here I got the opportunity to develop automation and implementation of PFMS in ISRO by practicing latest technologies and also to provide up-to-date and accurate information to management for decision making process.

So, I would like to give brief about my major contributions in the given tenure ,which are :

Development of IPWS module, It is an interface module to link COINS with Public Financial Management system (PFMS) using Web Service.

Here I was responsible for the requirement elicitation, designing, testing and implementation of IPWS module and configuration of corresponding server. IPWS was developed in Java Environment using apache log4J, Quartz, Jasypt APIs and exchanged messages in SOAP format. Further developed shell scripts for transferring XML files between COINS and IPWS servers using **rsync** utility and ensured hardening and cyber security of IPWS server based on recommendation given by CSMD team.

**IPWS is serving its objective satisfactorily across all ISRO centres.**

Next I was involved in the testing and evaluation of COINS-PFMS Interface software which was jointly developed by URSC and SDSC for executing payee, budget and expenditure related transactions over internet using PFMS. In addition to this conducted **code walk through** of this system and submitted a detailed report after highlighting all major issues with business logic, bugs and short coming in functionality along with performance related issues.

PPEG is planning to automate processes in administrative related activities through Sandesh system by using J2EE and bootstrap technologies. In order to realize the same, I was involved in the development of Official Travelling Allowance system that caters the requirement of processing of all Travelling Allowance claims comprising domestic, International official tours including air fare payment to travel agent. As a part of enhancements to this system, implemented connection pooling concept and Git software version control tool to strengthen the developmental activities.

Further an Integrated email and SMS alerts system is developed to acknowledge the payment made to registered vendors that enable G2B model of **e-governance**.

After implementing this system, queries and calls between administration areas and employees has greatly reduced, --- time paper and efforts got saved, and provided effective working environment.

Next, we have developed a prototype model of integrated MIS system **using SPIRNG BOOT and Hibernate technology which** can interact with the **distributed databases** across all ISRO centers to provide an integrated result at a common place. It is an attempt towards making a comprehensive MIS for ISRO.

**Submitted technical paper** on 'e-Governance Initiatives at URSC' at ISRO Seminar on Computer and Information Technology (ISCIT) – 2018 and same has been selected for oral presentation

Next as a Division Management Representative (DMR) of my division, I hold the responsibility to coordinate and update all documents to ensure QMS process in the division.

All NCs and Internal and External Audits had happened on satisfactorily note so far.

These are all major activities carried out by me during the reporting period, which includes introduction of latest technologies and development of new modules as and when required.

And going forward I would like to deliver more software products in accordance with the organization's goal.

In recap, I feel grateful that I'm employing directly effecting the URSC system.

Thank you.