

INITIATIVES ON PREVENTIVE VIGILANCE



Independent India @75: Self Reliance with Integrity: स्वतंत्र भारत @75: सत्यनिष्ठा से आत्मनिर्भरता

Vigilance Awareness Week 2021
Central Vigilance Commission



CVC Office, New Delhi



The Commission has been bringing out compilations on Preventive Vigilance initiatives undertaken by various organizations from time to time. This Booklet is a compilation of initiatives undertaken during the period 2020-21. This period has been marked by a Global Pandemic that has badly affected the working of various organizations. It is heartening to note that despite these crippling handicaps, a number of excellent measures to strengthen the Preventive Vigilance mechanism have been undertaken. These initiatives include those on leveraging technology in a big way to bring out systems improvement and transparency. Automation of processes has also taken place. Many initiatives relate to improving the interface of organizations with outside stakeholders, be it vendors, contractors, or customers. Several organizations have developed IT-based portals for vendors and contractors wherein they can track the processes and payments of bills. Others have used technology to develop better systems for Vigilance Administration.

The Commission received an overwhelming response from the organizations to its request for write-ups on Preventive Vigilance initiatives. Out of the over 140 write-ups received by the Commission, 61 have been shortlisted to be published in this Booklet. A Committee of five Chief Vigilance Officers, namely - Ms. Trishaljit Sethi, CVO, NTPC, Shri Alok Ranjan, CVO, BHEL, Shri Anant Kumar Singh, CVO, IOCL, Ms. Simmi R. Nakra, CVO, PFC, and Shri Vijay Kumar Tyagi, CVO, PNB assisted by Shri Nitin Kumar, Director, CVC, and Shri Rakesh Kumar, Dy. Advisor, CVC scrutinized these initiatives and shortlisted the ones to be published in this Booklet. These initiatives range from Improvements in Human Resources Management, Banking and Financial Services, Improvements in Contracts and Inventory Management, Project Management and Policy Initiatives, Automation of Operations, Transport & Infrastructure Management System, and Strengthening Vigilance Administration.

This compilation can be used by other organizations which can replicate these ideas, duly customized for their needs. I am grateful to the Commission for its support and guidance in bringing out this Booklet.

New Delhi
12th Oct 2021

(P. Daniel)
Additional Secretary, CVC





Preventive Vigilance Initiatives



Entry gate to Central Vigilance Commission ['Satarkata Bhavan']





MESSAGE FROM THE COMMISSION



The Central Vigilance Commission is observing Vigilance Awareness Week (VAW) 2021 from 26th October to 1st November 2021 with the following theme :-

Independent India @ 75: Self Reliance with Integrity

स्वतंत्र भारत @ 75: सत्यनिष्ठा से आत्मनिर्भरता

2. This year, we are celebrating Azadi Ka Amrit Mahotsav, commemorating 75 years of progressive India and the glorious history of our people, culture, and achievements.
3. I firmly believe that it is the “Integrity” which plays a significant and key role in the development and achieving self-reliance, as integrity leads to efficiency, economy, and effectiveness.
4. I congratulate the entire editorial team who have worked hard in preparing and publishing this booklet on Preventive Vigilance initiatives. I also thank the concerned organizations, who have shared their valuable initiatives on Preventive Vigilance.
5. I am sure this booklet on Preventive Vigilance initiatives shall help the other organizations to formulate/emulate similar practices in their organizations, which will further strengthen the Vigilance mechanism.

New Delhi
12th Oct 2021

(Suresh N. Patel)
Central Vigilance Commissioner





Preventive Vigilance Initiatives



Fountain at Central Vigilance Commission Premises ['Satarkata Bhavan']





MESSAGE FROM THE SECRETARY



It is a matter of great pleasure that the Central Vigilance Commission is publishing a booklet on Preventive Vigilance initiatives of various Central Government Organizations, Public Sector Undertakings, Public Sector Banks, and Public Sector Insurance Companies. The lessons learnt and insights gained by these organizations will be available to all, for learning and emulation.

I am sure this endeavour will go a long way in helping to redefine and improve systems and procedures leading to focused and better vigilance administration.

My congratulations to the CVC team, for their great efforts in bringing out this booklet.

(Otem Dai)
Secretary,

Central Vigilance Commission

New Delhi
12th October, 2021





Preventive Vigilance Initiatives





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Preventive Vigilance Initiatives





BANKING, FINANCIAL SERVICES & INSURANCE SECTOR (BFSI)





Agriculture Insurance Company of India Limited

End-to-End Automation for Underwriting and Claim Management: SEWACORE

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

SEWACORE, Agriculture Insurance Company's primary end-to-end policy management application contains a rules engine for validation and processing including underwriting, claims, etc., and also has the capability to integrate with various channel partners and external stakeholders to exchange data. The fully developed SEWACORE for Underwriting & Claim Management is being used since June 2020 throughout India.

The following are key initiative measures:

- **Underwriting:** End-to-End automation of Proposal/declaration to policy generation process from all channels
- **Claims Management:** All the claims i.e. Localised and Area approaches are captured, calculated, processed, and tracked. The entire process is system-driven with minimal human intervention.
- **Grievance Redressal:** Online facility of lodging Grievances is implemented. Integration with IRDAI's IGMS already developed will allow seamless flow of grievance data between AIC and IRDAI's systems.
- **Mobile Applications:** Mobile applications enable farmers, channel partners, and Field Investigators to interact with AIC and its systems providing services like buying a policy, placing a request for renewal, status tracking, document uploads/downloads, product information, claim registration, the status of policy and claims logging service request and grievances, etc.

Integrations and Seamless data flow between modules enable the flow of underwriting data to Financial Management System as also integration with other stakeholders through API-based backbone.



2. BACKGROUND

Prior to this process, the underwriting and claim payments were done to Banks/Intermediaries who had procured the business (in the absence of farmer's data with the insurer) and they in turn, credited the amount to the accounts of farmers causing delay and dissatisfaction among farmers, leading to grievances and court cases. Direct credit of claims to the account of farmers has brought transparency. This has avoided delays and given satisfaction to farmers.

Now, the claim process is a transparent way of avoiding errors & omissions, and commissions.

3. IMPLEMENTATION

The SEWACORE has been developed by an Implementation vendor suitable to our needs using in-house expertise available with the company. Post-implementation of the application, the Company has imparted required training to its various users, and skills are updated from time to time.

4. IMPACT AND BENEFITS

Central Business Processing Unit (CBPU) at HO for underwriting has optimized the business process thereby reducing the time and efforts of various resources across AIC offices.

- Claims automation has significantly reduced fraud risk and turn-around time. The entire approval process has been automated to bring transparency.
- The portals and mobile apps provided various services on the fingertips in a transparent manner to the farmers, channel partners, and field investigators.
- This process dispenses with the requirement of seeking the utilization certificate from Banks/Intermediaries, thus reducing the fraud risk.

The risk of Erroneous payments/duplicate payments is minimised, and the unclaimed amount of policyholders can reduce significantly.

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Bank of Baroda

Training on Preventive Vigilance

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Focused training on Preventive Vigilance (PV) has a greater significance in mitigating various threats. Prevention is always better than cure and training is the best available tool in Preventive Vigilance. An effective training program on PV not only explains the relevant laws and regulations but also covers the Bank's policies and procedures used to mitigate risk and other mal-practices

2. BACKGROUND

The bank should always thrive for a quality business that is packed by extant policies and guidelines. Compromising fundamentals and processes result in loss of quality business and reputation of the organization and it also makes employees susceptible to disciplinary actions.

In this connection, below is an outline of the new training structure:

- A. Measures/ Initiatives taken by Training Establishments.
- B. Background – Problems / Vigilance Risk addressed.
- C. Implementation of Initiatives.
- D. Impact and Benefits.
- E. Potential for Replicability.

A. Measures/ Initiatives:

Training to Customer-Facing Personnel: They are the Bank's first line of defense. Therefore, along with a general course on PV, some additional training on specific unit procedures related to the General Banking covering recent developments were imparted to the participants.

Training to Non-Customer-Facing Personnel: The PV training has been designed for officials working in Administration, Finance, Human Resource, Currency Chest, Trade Finance, Loan Processing, Treasury Management, Faculty Members, etc. wherein specialized sessions for these individuals on Preventive Vigilance was provided during their regular training.



Training to Senior Management: Specialized trainings for the organization's leadership were provided on the importance of PV & related matters, including regulatory requirements, penalties for non-compliance, personal liability, and the organization's unique risks so that the Senior Management can adequately provide for Preventive Vigilance oversight, approve respective policies or provide sufficient resources.

Induction Training: The existing system of 7 Days Induction training has been replaced by 52 Weeks Induction Program as suggested by CVC and approved by the Board, which is very important as it integrates employees with the Bank as it is the right time to nurture integrity & ethics.

Mid-Career Training: Considering that Senior executives are the mentors for younger generations, training them is very much important for the financial institution. Accordingly, it has been decided to impart Mid-Career Training to executives with sessions on Preventive Vigilance which plays a key role in moulding Future Leaders.

Measures/ Initiatives Taken:

- Rolling out “Preventive Vigilance Quiz” – By first week of every month.
- Two case studies on PV have been placed on Bank's website and more Case Studies will be placed on Bank's website / Learning Portal.
- Published PV Handbook cum Workbook through Bank's learning portal- Baroda Gurukul.
- Mandatory PV Certification Course is part of courses available on Banks e-Learning platform Baroda Gurukul.
- Updated e-Book on PV is being published every year.
- Separate trainings will be scheduled in coordination with the newly created Ethics Department of Bank.
- Simulation type courses are under construction to be rolled out soon.

B. Problems/ Vigilance Risk – Addressed:

By implementing the new training model, Bank envisages to achieve the following:

- Bring a greater degree of awareness amongst the employees about vigilance so as to create a corruption-free ambience.
- Sensitize employees on Accountability.
- Integrate ethics & integrity among employees.

3. IMPLEMENTATION

To implement the above initiatives, the following processes have been undertaken:

- Establishing the training calendar that identifies the topics and frequency of course.
- Identifying the target audience by functional area as well as by the level of employee/management.



- Identifying the issues that must be communicated and decide how best to disseminate the message.
- Trainings are conducted by experienced persons from the relevant fields.
- Presentation on Case Studies on Preventive Vigilance during the session.
- Exclusive Preventive Vigilance trainings are being conducted by training establishments for Customer-Facing & Non-Customer Facing Employees & Senior Management.
- Tests are being conducted to evaluate the participant's understanding to the extent possible.

4. **IMPACT AND BENEFITS:**

- It benefits the organization & Employees at all the three stages of Vigilance.
- Preventive vigilance - Reducing the occurrence of lapse.
- Detective vigilance - Identifying and verifying the occurrence of lapse.
- Punitive vigilance - Deterring the occurrence of lapse.
- Participants learn systems & processes thoroughly which reduces Vigilance Risk.
- Employees are enabled to identify lacunae and measures to plug them.

5. **POTENTIAL FOR REPLICABILITY**

The Central Vigilance Department of Bank has published 'Preventive Vigilance Manual' and training establishments have rolled out Quiz, Hand book, Certification Course, exclusive training on preventive vigilance, a special session during various trainings, case studies using live incidences, simulation learning, etc. These can be replicated in various other departments/organizations and can be modified as per the requirements.

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'Centralised' Credit Guarantee Scheme for Micro and Small Enterprises Portal

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

The Credit Guarantee Scheme for Micro and Small Enterprises (CGS) was launched by the Government of India to make available collateral-free credit to the micro and small enterprise sector and a Trust named Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) was established. Banks are seeking guarantee cover from trust for credit facilities extended to Micro and Small Enterprises.

The suggested initiative comprised streamlining the process of guarantee coverage, NPA marking, and lodgement of claims across the Bank to the Trust in online mode. It was initiated through Quarterly Structured Meeting and subsequently implemented in FY 2020-21 in a phased manner. Now, the functionality is fully operational for all the branches and controlling offices of the Bank.

2. BACKGROUND

Earlier, branches sanctioning credit facilities to Micro and Small Enterprises were submitting the details for guarantee coverage to their respective zonal office which in turn was updating it on the CGTMSE website. Similarly, the process of NPA marking and lodgment of claim with CGTMSE was not streamlined due to which the Bank could not take benefit of claim in covered accounts.

With the launch of an in-house portal, obtaining coverage after payment of due fees to the Trust, subsequent NPA marking and lodgment of claim processes are handled by dedicated cell at Head Office leaving no room for loss to the Bank. This initiative has addressed the following problems:

- 100% coverage of all eligible credit facilities.
- Accurate payment of Guarantee fees to the Trust.
- Avoiding loss due to delay in NPA marking and lodgment of the claim.
- Monitoring of appropriation of claims received from the Trust.



3. IMPLEMENTATION

Bank's IT department developed an in-house portal which is accessed by all the branches, Zonal Offices and CGTMSE Cell at Head Office. In the 1st Phase, 2 modules namely (i) History of Borrower of earlier coverage (ii) Guarantee cover of new accounts, were implemented in Jan 2020. Subsequently, in the 2nd Phase, 3 modules (i) NPA marking (ii) Lodgment of claim, and (iii) NPA upgradation were captured. A Standard Operating Procedure for all these five modules was released specifying the role of branch and controlling office. The synergy between CBS for newly opened accounts and subsequent migration of data in the portal was ensured for 100% coverage.

4. IMPACT AND BENEFITS

This system has ensured the focused implementation of Govt. guidelines, sanction terms with minimum efforts. Since all the process is online and handled by dedicated cell, operational cost is reduced in terms of avoiding duplication of work by branch and respective zonal office for CGTMSE coverage. Moreover, post NPA claim lodgment and other processes are handled by specialized cells, resultantly the burden on manpower at branches/zones is reduced.

With 100% coverage of credit facilities, probable loss due to delay in the lodgement of claims in NPA accounts is reduced. In long run, it will be beneficial for the Bank to extend more credit to Micro & Small Enterprises.

5. POTENTIAL FOR REPLICABILITY

The avenue of guarantee cover in credit facilities to Micro & Small Enterprises is available to all the commercial banks. This initiative will be beneficial to all PSBs for getting 100% coverage to credit facilities sanctioned and thereby boosting credit flow to MSEs with reduced risk.

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Generation of 'Alert' during withdrawal from NPA Linked Accounts

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

There are instances where the funds are lying in the SB/CD/FDR account of the borrower and the linked account is in NPA or SMA, but due to lack of information and the volume of transactions, it is difficult to monitor the balances in the linked account in a real-time basis.

Generally, a report is generated by CBS on a periodical basis containing the data of balances available in SB/CD/FDR accounts of Borrowers. On the basis of this report, Bank's Set off the outstanding in the NPA accounts with the balances in SB/CD/FDR accounts after following the necessary procedure for using Right to Set Off.

2. BACKGROUND

Keeping track on the basis of reports available is difficult for Branch Officials during a busy routine, especially in heavy footfall branches, due to which Branches allowing the customers to withdraw funds from their SB/CD/FDR accounts, and as a result, our accounts remain in NPA category without recovery.

3. IMPLEMENTATION

To plug in these gaps, we have suggested that:

- Whenever a transaction is being done in SB/CD/FDR accounts where credit balance is lying and the linked loan account is NPA or SMA, the system needs to provide a POP-UP message or reminder to desk officers in the Branch. Such POP-UP messages will alert staff members on Counters/Desk while doing transactions in such accounts and they can initiate immediate dialogue/ interaction with the customer for recovery in a respective overdue account. By way of POP-UP message, we can do the Real-time monitoring of the transactions in SB/CD/FDR accounts where the credit balance is lying and the linked loan account is NPA or SMA.
- A POP-UP message should not allow the cashier/operating staff to make payment without knowledge of the In-Charge of the Branch. This means that any payment/transfer entry from such accounts is to be authorized by the Branch Head.



- System Generated letter (similar in the line with “Letter of Thanks” for account opening in CBS) addressed to customers may be made available to branches through CBS, whenever accounts turn NPA/SMA and linked accounts have some balance which can be transferred to the NPA account.

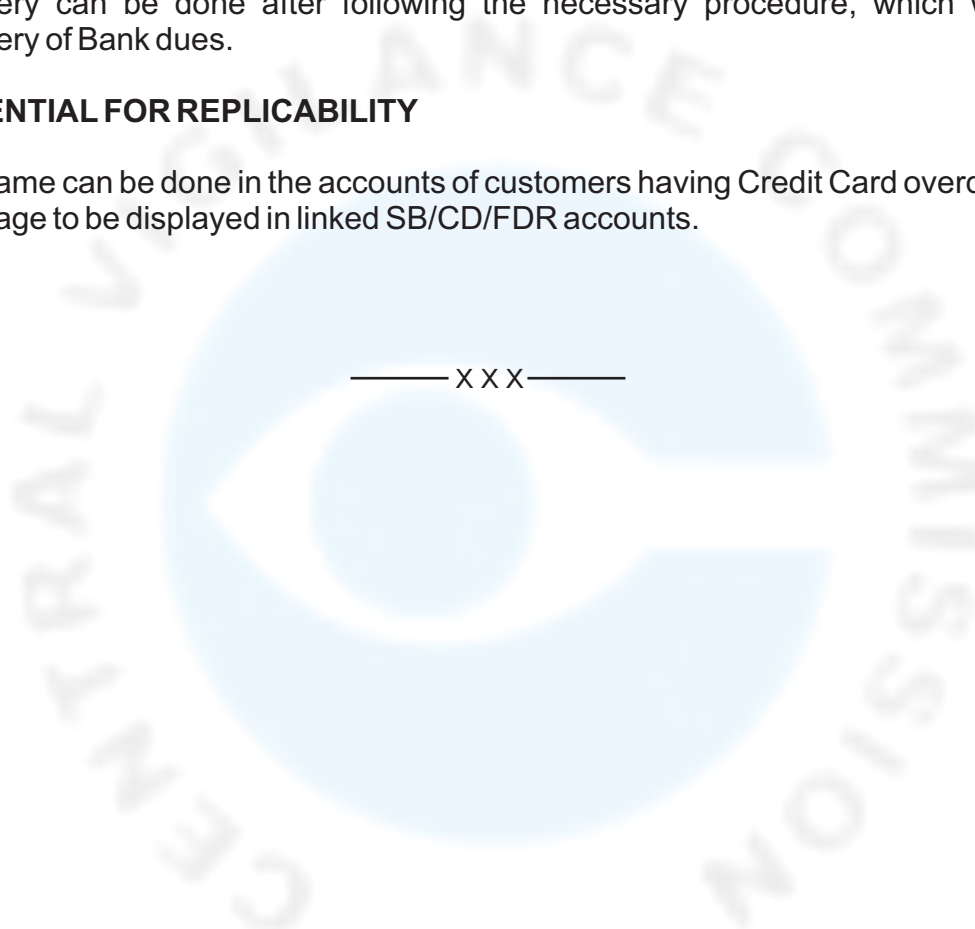
4. **IMPACT AND BENEFITS**

It will enable the Desk officers/Staff to monitor SMA and NPA category accounts and recovery can be done after following the necessary procedure, which will result in recovery of Bank dues.

5. **POTENTIAL FOR REPLICABILITY**

The same can be done in the accounts of customers having Credit Card overdue, POP UP message to be displayed in linked SB/CD/FDR accounts.

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Indian Bank

Automated Accounting of Cash Loaded in ATMs and Bunch Note Acceptors

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

(i) Automated accounting of cash loaded in ATMs & Bunch Note Acceptors (BNAs) / (Cash Deposit Machines); (ii) Accounting the cash withdrawal transactions in ATMs & BNAs in the respective mapped Branch General Ledger (BGL) Heads so as to reflect machine cash balance on a real-time basis in the BGL, and (iii) Ensuring better cash management.

This has been introduced from July 2019 across all the ATMs and BNAs.

Each ATM/BNA will be allotted separate BGL (ATMID-specific) in CBS. There will be four new BGL Heads for each branch for each ATM/BNA (CASH-IN-ATM-BNA, ATM-BNA-CASH-LOAD-FIT, ATM-BNA-CASH-SHORTAGE, and SR11-BNA DEPOSIT COMPLAINTS SETTLED)

- Unique Reference Number (URN) generated in CBS (while debiting ATM-CASH-LOAD-FIT) is to be entered in ATM/BNA during cash loading.
- Any cash transaction done in the ATM / BNA (withdrawal or deposit) by customers (including other bank customers) will have the offset in the CASH IN ATM/BNA BGL on a real-time basis.
- The entire cash balance in the ATM / BNA will become branch cash and reflect in CASH IN ATM/BNA BGL and in the branch Balance Sheet.
- Excess / Short cash accounting will also be automated through the integration of ATM Switch and CBS to ensure finer control on the ATM physical cash balance and BGL balance.
- FIT will be reversed automatically on loading cash in ATM/BNA and concluding the admin functions.
- Branches have to submit the report of ATM/BNA EOD details every day in the web portal after each EOD, cash loading and unloading irrespective of cash loading/unloading requirements.

2. BACKGROUND

Before introduction of this procedure, the cash loaded in ATMs and BNAs was being reimbursed to branches by Corporate Office (CO) ATM Service Centre (ATMSC) through



a manual procedure. Branches had to load cash in ATM/BNA debiting 'Funds-in-Transit' (FIT) Account. For cash loaded in ATM and cash dispensed by BNA to customers, branches had to submit a claim through Portal, and ATM/SC shall settle the claim after scrutiny. The FIT entry will be reversed thereafter. In this process, there were instances where physical and system balances don't tally due to various reasons including negligence/misappropriation. The actual lapse will be located only on subsequent physical inspections which involves time lag. This has been replaced by the newly introduced online accounting system.

There is a possibility for any unscrupulous staff to load lesser cash in ATM/BNA out of the higher amount of cash taken from the branch to the debit of 'FIT' Account and such instances tend to surface only after a time lag.

3. IMPLEMENTATION

Detailed guidelines for Cash withdrawal from Branch for loading in ATM/BNA, Cash Loading in ATM/BNA, removal of Cash from ATM/BNA (in case of branch exigencies, surrender of cash due to ATM shifting or closure), receiving cash in CBS after unloading from ATM/BNA, daily EOD at ATM/BNA (without cash loading/unloading), excess or shortage of Cash in ATM/BNA, updating EOD / Cash loading / Unloading details in Web portal and branch register, the process to be followed in case of time out, the procedure for outsourced ATMs & ATMs managed by RRBs, handling of deposit failure complaints in BNAs, accounting in CBS for customer transactions, etc., have been issued.

4. IMPACT AND BENEFITS

- ATM/BNA cash loading activity monitoring is made more transparent and easy for feeder branches and Administrative Offices. Facilitates optimum cash loading in ATM/BNA, leading to more efficient cash management.
- The excess cash in ATM/BNA will be maintained centrally at ATM Service Centre on the one hand to handle customer cash withdrawal failure complaints. On the other hand, shortage of cash in machines will be maintained at the branch level for adjustments and monitoring. There will be effective control over ATM/BNA cash reconciliation.
- From the perspective of fraudulent activities like embezzlement of cash, etc. (out of the cash meant for loading in ATM/BNA), such acts can be identified then and there consequent upon the new accounting system, the physical balance in ATM/BNA will reflect in the respective BGL Head in CBS which, in turn, will reflect in the Balance Sheet of the branch. Also, the system of manual reversal of entries in 'Funds-in-Transit' Account is removed.

5. POTENTIAL FOR REPLICABILITY

The initiative has complete utility for replication by the other players in the banking domain.





Checking of Revenue Leakage in MSME 'Jewel Loan' (JL) Portfolio by Integration of Loan Accounts with FINACLE Database

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

CIF ID wise Calculation of Interest in JL MSME portfolio.

As per the JL MSME scheme guidelines up to Rs. 2.00 Lacs Rate of Interest (ROI) is 7.65% and above Rs. 2.00 Lacs to Rs. 5.00 Lacs ROI will be 8.90%. During the course of preventive vigilance activity, a random check has been made by the vigilance department officials and found that the system is not calculating the higher interest rate if a person takes multiple loans each less than Rs. 2.00 Lacs and the aggregate amount is exceeding Rs. 2.00 Lacs. Because of sanctioning of multiple loans and as CIF ID wise identification is not being done by FINACLE, the bank is losing 1.25% (8.90% – 7.65%) ROI p.a. Accordingly, revenue leakage was identified in 30693 accounts. Suggested to ITD to integrate the JL MSME loan accounts with CIF ID in FINACLE database thereby revenue leakage was arrested.

Revenue leakage in MSME Jewel Loan Portfolio was detected by Vigilance Department and brought to the notice of MD & CEO on 04.02.2021. Further, interest correction has been carried out in all the existing MSME jewel Loan accounts and customization was deployed in the CBS platform for branch use on 08.07.2021.

Systemic Improvement implemented on large scale- PAN India Basis.

2. BACKGROUND

Existing System replaced with a new initiative: Suggested by Vigilance Department i.e. hitherto CIF ID-based calculation of interest is not being done in the JL MSME portfolio in Finacle CBS system. After implementation of this systemic improvement suggestion, now the interest rate is being calculated based on the CIF ID.

Problems/Vigilance risk that was addressed: Interest rate has been modified with a higher slab in eligible existing borrower accounts, thereby arresting revenue leakage.



3. IMPLEMENTATION

Validations have been deployed with CIF ID based approach in CBS system to arrest future income leakage in MSME jewel loan portfolio with the in-house developed programme.

- During the opening of MSME Jewel loan, a pop up alert will be shown with the existing active JLSME account details for the corresponding customer ID.
- Maximum Loan per customer ID is fixed at Rs. 5.00 Lacs.
- For single customer ID for a loan up to Rs. 2.00 Lacs, lower interest slab is charged and for the loan amount is above Rs. 2.00 Lacs interest rate code of higher interest slab is populated.
- Validation is built in the system to restrict scheme change from any scheme to JL-MSME.

4. IMPACT AND BENEFITS

- Arrested Revenue Leakage
- Ensured 100% Compliance level for the scheme norms.
- An amount of Rs. 2.59 Crores as revenue leakage was recovered during FY 2020-2021 which resulted in the increase of profit of the Bank and also future income leakage was arrested.

5. POTENTIAL FOR REPLICABILITY

This CIF ID-based interest calculation can be utilised where interest subvention/concessional interest rate is applicable like AGRI KCC/ Jewel Loans.

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Life Insurance Corporation of India

Online Portal for Effective Surprise Vigilance Checks

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

An Online Portal for Surprise Vigilance Check (SVC) was launched to have an effective control & monitoring of open SVC reports and to reduce the time lag in the closure of SVC reports. Now, all the SVC reports are published, complied with, and closed through the portal only.

2. BACKGROUND

Surprise Vigilance Check (SVC) is an important Preventive / Surveillance Vigilance tool in the hands of the management, to identify frauds / irregularities, at the early stage and also to identify fraud-prone areas to plug the systemic gaps, if any. In other words, SVC report acts as a barometer of the robustness or otherwise of systems and procedures within the Organization. In our Organization, every year, we conduct SVCs of targeted nos. of offices through our Vigilance set-up located at all the eight Zonal Offices.

3. IMPLEMENTATION

Online Portal for Surprise Vigilance Check (SVC) was launched on 28.07.2020. It has been developed in collaboration with our in-house IT/SD Department, Central Office. The Vigilance Department at Central Office & Zonal Vigilance Officers were involved in designing and developing the Portal.

4. IMPACT AND BENEFITS

The Portal is a tool for improving the efficacy of SVC in its entire gamut including the conduct of SVC, compliance, feedback for improvements in Systems/Procedures. Apart from helping in speedy publication and closure of the Reports by cutting down the time-lag in furnishing compliance, the Portal also facilitates valuable feedback to the Controlling Offices to act promptly and effectively in further fine tuning of systems and procedures, to make the work-place environment in the Corporation more secure for all concerned.

5. POTENTIAL FOR REPLICABILITY

The Online Portal for Surprise Vigilance Check (SVC) is an effective tool to improve overall efficacy of Preventive Vigilance and can be suitably modified by user department at any Organization.



National Insurance Co. Limited

Portal for Claim Authentication in Motor Insurance

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

An Initiative was taken for two step authentication in the following modules:

- Approval and Settlement of Claim.
- Premium Refund.
- User login (Tie up portals modules are 3rd party based).
- Also, mandatorily two separate users to settle and approve the amount in two different stages and 3rd party claim within the policy period in Tie Up portals will automatically route to the next higher authority for approval.

2. BACKGROUND

Multiple instances of fictitious payments from claims / refunds and tie-up portals were detected.

3. IMPLEMENTATION

Implemented in multiple phases from Jan 2021 to July 2021.

4. IMPACT AND BENEFITS

Dual Authentication reduced the exposure of Password theft and Shoulder Surfing. Escalation of 3rd party Claim for approval to higher authority has restricted the multiple fictitious claims in a single policy.

5. POTENTIAL FOR REPLICABILITY

As Employees will be more Vigilant with these IT initiatives, this can be implemented in General Insurance Companies to curb fraudulent transactions to a great extent.

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Punjab National Bank

Portal for Preventive Vigilance Monitoring Committee (PVMC) Portal

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

To strengthen the vigilance administration and bring about enhanced awareness amongst staff members for a meticulous 'Preventive Vigilance' endeavours, the Vigilance Department has introduced a Portal for monitoring PV activities in operative units across the domain from distance. All the Administrative Offices, such as controlling offices, Zonal Office, and Corporate Office will have an effective oversight over the preventive vigilance issues on a real-time basis with a corporate memory facilitating an efficient look back exercise for systemic improvements.

The Portal has become fully operational in Sept., 2020 for the entire domain material to the complexities of risks in operations of the bank, with the amalgamation of eOBC and eUNI w.e.f. 01.04.2020.

- The purpose of PVMC Portal is to involve all the officials of the bank to come out with their contribution to enlighten and embolden the Preventive Vigilance measures for promoting Probity, Integrity, and Efficiency in operations. The portal has enhanced Preventive Vigilance Oversight to all the branches/ operating units, thereby, promoting the culture of Participative Preventive Vigilance.
- The utility of grading of operating unit on "Key Risk Indicators" (KRI) has enabled prioritization of issues/branches for more strategic and prompt supervisory oversight. The online portal has also created a corporate memory to view risk pockets/points where repetitive weaknesses are observed.
- The development of PVMC portal is the measure adopted for running / monitoring the Preventive Vigilance activities through technology in a digital mode. The work-flow for utilizing the portal is to be followed by all the users. The portal has been got developed by the Vigilance Department through in house capacity of ITD, IAD & HR Department of the bank.
- The PVMC Portal for the quarter ended June, 2021 achieved a coverage of 93.10% of total staff, 93.71% of the total branches and 98.45% of total business in PNB.

2. BACKGROUND

The PVC Portal replaced the existing manual system whereby PV related visits to the branches were conducted by the Vigilance Officers and the visit reports were manually processed and supervised together with the action points taken to the logical end. With the introduction of the portal, the work related to Preventive Vigilance Meetings in the offices is being monitored entirely through the online record on a real-time basis by controlling offices (Circle Heads) & Zonal Functionaries (Zonal Managers) with simultaneous oversight of the Vigilance Department.

The salient features of this portal are that it will archive the information fed into it which will also create corporate memory.

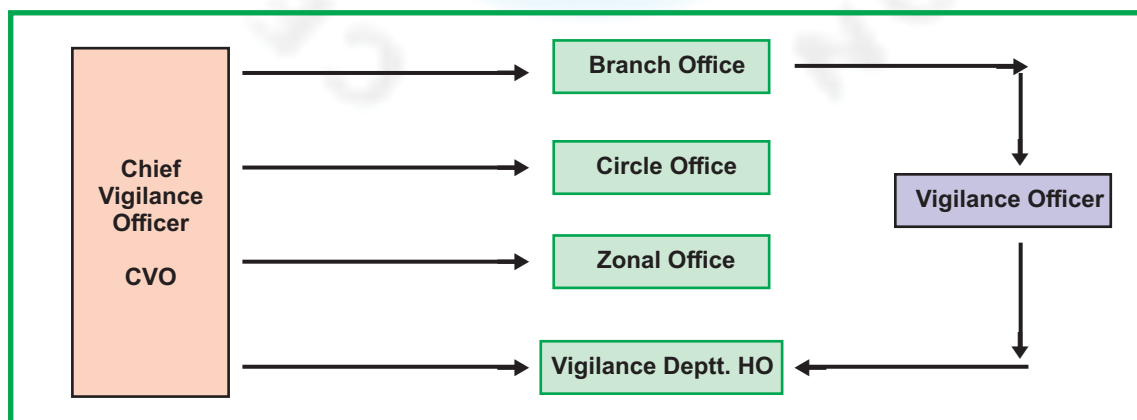
Problems / Vigilance Risk that was addressed.

All the branches could not be monitored in a given time frame through physical visits. This has now been addressed in the present PVMC Portal and the preventive vigilance risks are being addressed on a real-time basis, thereby reducing the number of threats and instances of complaints in the system.

3. IMPLEMENTATION

The portal has been conceived by an in-house core team working in the Vigilance Department.

The Portal is designed and developed by the in-house IT resources through a Team of officials from the Vigilance department, Human Resources department, and Inspection & Audit department.





4. **IMPACT AND BENEFITS**

After the introduction of this portal, there is a drastic reduction in the involvement of manpower in analyzing the data / information which has simultaneously pulled down the time and cost viz. travelling expenses, processing of reports, and taking it to logical end. The positive impact, the portal has cast on the working, is that it has increased the effectiveness and efficiency.

Further, the portal is helping in building a Corporate Memory which will ultimately facilitate in extracting / mining the meaningful information, from the pool of data archived over the period, on a mouse-click.

The entire routine of physical visits has been re-engineered and migrated to online platform. Now, physical visits are being resorted only after reviewing the Key risks parameters; and status and scrutiny of responses by the operating unit to specific questionnaires uploaded by the Vigilance department taking into consideration the intrinsic risk as per the complexity of business at a particular unit.

The tracking and monitoring have become easier for the concerned users under the present system reducing the delays and hardships to the stakeholders and the initiatives offer the capacity of monitoring the status on a real-time basis and need-based interventions on merits. The data / information stored in such portal may be utilized by the Sr. Officers during their visit to the Branches / Verticals / Circle Offices / Controlling Offices / Administrative Offices.

5. **POTENTIAL FOR REPLICABILITY**

The initiative has complete utility for replication by other players in the domain of BFSI.

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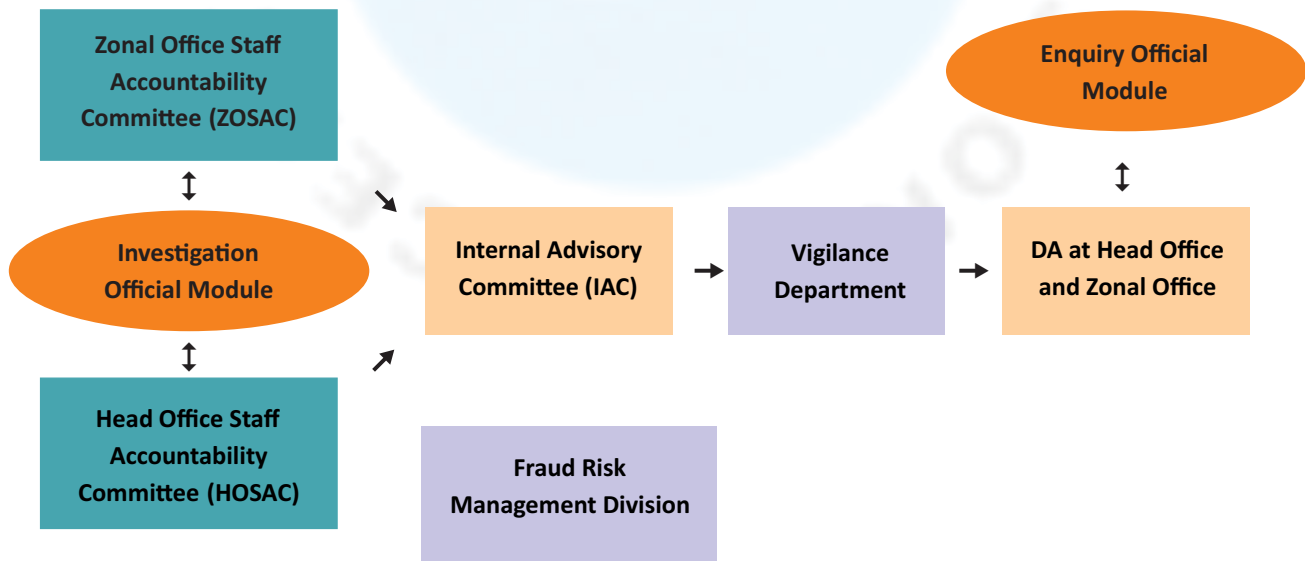
Punjab National Bank

Portal for Tracking & Monitoring of Staff Accountability Cases: TMSAC Portal.

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

TMSAC has been introduced to put the entire process of staff accountability examination on the digital platform starting from the trigger stage of investigation into an account / event till imposition of final orders upon the charge-sheeted officer / employee in the disciplinary action case. The programme has been designed and developed by the Vigilance department for running the web portal '**Tracking and Monitoring of Staff Accountability Cases**' (TMSAC) where all the activities will get recorded by all the concerned officials in the process. The officials engaged in the process can view the status of action taken at the other end instantly, within their role-capacity, i.e. while complying with the principle of 'need to know' premise in the disciplinary action process. Simultaneously, the senior functionaries, having the responsibility of exercising effective oversight at administrative offices, can also monitor the status and stage of the entire process on a real-time basis.

Process-Flow of the portal:



- TMSAC portal is the measure adopted for running / monitoring the movement of investigation / disciplinary action process through technology platform. This portal



is developed by the Officials of Vigilance Department through the in-house capacity of ITD, IAD & HR department.

- **TMSAC** Portal was launched during the Vigilance Awareness Week 2020 celebrations by the Hon'ble CVC Sh. Suresh N. Patel. The modules envisaged have been completely implemented in 2021 with the completion of amalgamation of two banks namely eOBC & eUNI w.e.f. 01.04.2020.

This portal has been introduced across the domain of the bank on a Pan-India basis.

2. BACKGROUND

- The TMSAC Portal is supporting the existing system where all the concerned offices are maintaining the records at their level. This provides a unified management information system for all of them to extract the status of the cases / references instantly and real-time monitoring of the case with the benefits as narrated above.

The portal archives the information fed into it and thus, offers benefits of corporate memory. This is the most salient feature of this portal.

- Earlier knowing the status of any investigation and / or staff accountability case was manual and a time taking process, with challenges of accuracy as well. Now, the status could be obtained on a real-time basis with the accuracy of stages and information. This has become a reality with the introduction of TMSAC Portal.

3. IMPLEMENTATION

- This portal is designed and developed by the IT Team of the bank utilizing the internal resources thus eliminating the expenditures for the bank.

4. IMPACT AND BENEFITS:

- After the introduction of this portal, there is a drastic reduction in the involvement of manpower in analyzing the data / information which has simultaneously pulled down the time and cost viz. travelling expenses, processing of report and taking it to the logical end. The positive impact, the portal has cast on the working, is that it has increased the effectiveness and efficiency.

Further, the Portal is helping in building a Corporate Memory which ultimately facilitates the management in extracting / mining the meaningful information, from the pool of data archived over the period, on a mouse-click.



Image of TMSAC Portal Login Page

- The offline/manual practices existed so far have been re-engineered and migrated to online platform.
- The tracking and monitoring has become easier for the concerned users under the present system reducing the delays and hardships to the stake-holders
- The initiatives offer the capacity of monitoring the status on a real-time basis and need-based interventions by the superiors on merits.
- The Portal has been developed in-house by the bank's IT Division and it is being maintained by the user Division/s and office/s without incurring any expenditure to the bank.

5. POTENTIAL FOR REPLICABILITY

The Portal is giving an option to strengthen the monitoring system, as such, the Divisions which need to monitor a large number of offices from a single point / desk, be it in the business or control functions, may think of building such technology-based Portal in future.

The initiative has complete utility for replication by other players in the domain of BFSI.

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Use of Artificial Intelligence and Machine Learning for Operational Risk Management

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

As an initiative towards Preventive Vigilance, Bank has developed and implemented Artificial Intelligence /Machine Learning (AI/ML) based model for Operational Risk Management and Credit Risk Management in branches. Risky cluster of branches is identified based on business risk parameters using ML algorithm.

Major Algorithm variables are:

- RC pending in Car loans.
- High value credit in staff accounts.
- Large no. of loan accounts opened in single day.
- Subsidy credited to other than linked loan A/c.
- Quick mortality.
- Transactions in inoperative account.
- High value transactions in newly opened SB accounts.
- SB / CA closed within 3 months.

Following output models have been ensembled for identification and prevention of risk:

- **Charges Model:** To identify aberrations in the expenditure at various overheads.
- **Intelligent Sampling of Vouchers Model (ISMOVVR):** To identify suspicious vouchers for Intelligent Sampling of re-examination (4% Vouchers are selected under this model on a sample basis).
- **IT – Infringement Model:** To identify Outlier behavior in respect of enquiries done in Core Banking by staff in the accounts of customers.
- **Suspicious CSPs Model:** This is Natural Language Processing (NLP) based model for identifying suspicious Customer Service Points.

Based on the above model, branches are being auto classified based on risk parameters under four risk categories as under:

- (i) Very High,
- (ii) High,
- (iii) Medium, &
- (iv) Low.

The Vigilance Department of the Bank undertakes suo-moto investigations of the High Risk and Medium Risk branches and suitable measures are being initiated to ensure that



the systems and procedures are being meticulously followed and sample checks documents of selected transactions. Wherever, lapses are observed on the part of the operating staff, suitable disciplinary action will be initiated. Vigilance seminars are conducted for the staff at the branch.

The identification of the branches is autogenerated based on risk parameters and triggers have been given to cover Very High Risk and High-Risk branches under Suo Moto Investigation.

Bank has always remained innovative and has a belief that the best preventive measure is the awareness of staff for which:

- (a) Bank arranges ongoing employee training of staff on AML CFT policies.
- (b) Core values of the Bank are cultivated amongst staff by Ethics & Business Conduct vertical on a regular basis to uphold their highest standards of integrity and conduct.
- (c) Interactive Knowledge Sharing sessions are conducted for staff at various levels.

2. BACKGROUND

Preventive Vigilance sets up procedures and systems to restrain the acts of wrongdoing and misconduct in the various areas of the functioning. Preventive Vigilance in the Bank is aimed at eliminating/ reducing the occurrence of a lapse. Bank has continuously strengthened its practices, procedures, control, and review mechanism to prevent and sanitize against both internal and external breaches.

3. IMPLEMENTATION

The AI/ML models are developed in-house. The Analytics Department of the Bank is specialized in these areas.

4. IMPACT AND BENEFITS

These initiatives address Vigilance risk at the initial stage itself and uphold the confidence of customers in the bank. Moreover, being preventive vigilance, the contingent manpower cost, financial loss cost, operational cost is substantially decreased resulting in cemented confidence of the customers in the bank.

Thus, Bank is committed to preventing the happening of any untoward incidents with adverse financial implications for itself and for its customers.

5. POTENTIAL FOR REPLICABILITY

With the advent of computerization and customers being offered services over different platforms/ channels by the Banks, our Bank is continuously strengthening its operational practices, procedures, controls, and review mechanism to sanitize both internal and external breaches, as Preventive Vigilance is always superior to Punitive Vigilance.

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Strengthening of Security in Digital Transaction Platform: Multifactor Authentication and Other Measures

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

(a) Internet Banking (INB)

These transactions form a major part of digital transactions. To further strengthen security, the following measures have been initiated: -

- (i) OTP Based Login for Retail INB: - While logging in to the INB, after entering the login ID and password, an OTP is generated and sent on the Registered Mobile Number (RMN) of the customer as a second factor authentication. This OTP needs to be entered into the internet banking website for successful logging into the internet banking portal.
- (ii) Transaction OTP: - Mandatory OTP for all financial transactions (Retail / Corporate / Merchant).
- (iii) Captcha implementation on Corporate INB Saral Login.
- (iv) Captcha implementation on Direct Merchant Login interface.
- (v) Integration of Retail, Corporate, and Merchant Transactions with the Proactive Risk Manager application to raise alerts in case of anomalous transactions.

(b) Mobile Banking Applications

- (i) Secure OTP app: -SIM binding-based registration was implemented in SBI Secure OTP app for Android and iOS users wherein the presence of SIM with Registered Mobile Number (RMN) should be available in mobile device for registration of SBI secure OTP app.
- (ii) Yono Lite app: - SIM binding in Yono lite application is implemented to ensure that customer RMN (Registered Mobile Number) is used for Mobile Banking registration purposes.
 - UPI Per day Transactions limit in Yono Lite has been reduced to Rs. 5,000/-.
 - Change related to INB Forced password change in Yono Lite app for password strengthening.



(c) BHIM SBI Pay app

- Restricting the per-transaction amount of Rs.2000 for collect request, intent, and shared QR for non-verified merchants and P2P transactions.
- Device Binding SMS on iOS app during registration made non-editable to prevent editing/forwarding of SMS by fraudster through social engineering.
- Customer onboarding for BHIM SBI Pay iOS app restricted to iPhone 6s and above and iOS version 13.4 and above.
- Cooling period of Rs.5000 for 24 hrs will be applicable on doing registration by BHIM SBI Pay user post change of device or mobile number.
- Following customer education, SMS are sent to customers during the cooling period.
- UPI PIN is used for authorization of payment. Money will always be deducted if you use UPI PIN.
- Never share UPI PIN, CVV & OTP with anyone. UPI PIN will always be used only on the app's UPI PIN page.
- Hiding of collect request remarks section in BHIM SBI Pay during collect request approval to restrict fraud through social engineering. After a successful transaction, remarks can be viewed in transaction history.

(d) ATM

- TLS 1.2 channel encryption.
- TLS1.2 implementation with various Hosts -Finacle, FIGS, SBI CARD, PCMS, DCMS.
- TLS1.2 implementation of various interchanges- Mastercard, VISA, NFS, etc.
- TLS 1.2 for securing communication between ATM endpoints and ATM switch.

2. BACKGROUND

SBI has been constantly enhancing and strengthening the security of all alternate channels and digital payment systems to enable an improved customer experience and reduced security vulnerabilities.

In the recent past, it was observed that the customers are disputing their transactions. To strengthen security measures and encourage confidence among customers security measures are adopted.

3. IMPLEMENTATION

As these measures are implemented, frauds are slated to go down significantly.

4. IMPACT AND BENEFITS

- Enhanced protection instills confidence among customers.
- Digital transactions have increased significantly.
- Reduced customer complaints.
- Customer convenience and seamless transactions.

5. POTENTIAL FOR REPLICABILITY

This technology will be utilized to enhance digital transactions and make them error-free.

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Online Market Place for Agriculture Segment Customers: YONO KRISHI

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

YONO KRISHI digital platform has been launched with a vision for offering simplified banking services, finance/credit needs, advisory/market intelligence services, and market linkages through an online market place for our agriculture segment customers.

In the existing system, the borrowers need to visit the branch for physical submission for review. The review of 75 lakh Kisan Credit Card (KCC) accounts every year requires huge manpower for processing, sanctioning, disbursement, and subsequent recovery of insurance and other accounting entries besides the handling of documents. This may result in a delay in service and the inability to meet the customer expectations in fulfilling the credit needs.

To provide digitised, simplified, and seamless process of KCC review, YONO-KRISHI platform has been introduced to review KCC. The proposed process aims at creating a simplified, shorter, convenient, and digital application, processing and sanctioning process for KCC review.

2. BACKGROUND

Only those customers who have cleared all previous dues should be eligible to apply. The customer is required to be KYC compliant and his Aadhar details should be available in CBS. The customer should have internet banking credentials and has to register on YONO (only for self-assist cases). IRAC status of any of the borrower's loan account should not be RG-3 and above. Maximum Permissible Limit (MPL) date (i.e. Due Date) should not be within 6 months. Customers should be resident Indian. There should be a KCC application available for review. There should be no pending KCC review application through YONO.

Customer logs in to the YONO mobile application and enters YONO Krishi. He/she then clicks on 'Khata' and then clicks on 'KCC Review'. If the customer fulfills the Pre-requisites, he/she is allowed to apply for KCC review. Customer is asked to validate personal details (fetched from CBS); data fields include name, account no., educational qualifications, and category; if the customer confirms the displayed personal details, he/she is taken to the



next screen, else he is asked to visit the branch.

The customer is asked to validate the land area under cultivation and cropping pattern. If there is no change in the land area & cropping pattern, the customer confirms and proceeds to the next screen, subsequently customer gets the display of eligible KCC limit (previous year's Maximum Drawal Limit (MDL) x 10% increment) and the customer provides consent to apply through OTP; subsequently, the customer gets reference number of the application with the confirmation that application has been submitted successfully.

The application then moves to the branch where the maker and checker review the application and the Branch conducts a pre-sanction survey of the application received.

If there is a change in the land area & cropping pattern, observed during the pre-sanction survey (PSS), the application will not be sanctioned and the Customer will be informed accordingly through email / SMS.

Once the branch processes the application and the limit is sanctioned, the customer will be sent a text message containing limit details and the date of the next review. In case the limit is not sanctioned, the customer will be informed through text message and asked to visit the branch for more details. Additionally, the customer will be able to see the status at any time through the 'Check status' functionality.

3. **IMPLEMENTATION**

It was developed in-house.

4. **IMPACT AND BENEFITS**

- Reduced manpower for processing, sanctioning, disbursement, etc.
- Enhanced customer expectation in delivery credit in time.
- Fraud-free and corruption-free delivery.
- Simplified the process.

5. **POTENTIAL FOR REPLICABILITY**

This technology will help in other segments as well, for renewal and sanction of loans.

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The New India Assurance Co. Limited

Automation of Bank Reconciliation System

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

The company has started using robotics for the reconciliation of business transactions. As it is system-driven, it is reliable, and reconciliation is completed within a short time frame. A small percentage of entries that the system leaves unreconciled due to various reasons is being handled manually.

2. BACKGROUND

Up to this period, reconciliation is done manually which is not completed on many occasions within the prescribed time limit giving rise to various risks to the organization. With the use of robotics, the task can be completed timely & effortlessly.

3. IMPLEMENTATION

It was implemented as a pilot project with the vendor M/s TCS Limited.

4. IMPACT AND BENEFITS

Reconciliation, which is time-consuming, repetitive in nature, and needs human efforts, can be completed quickly within the stipulated time.

As an outcome, detection of Irregularity / Fraud, if any, can be done quickly so that corrective action can be taken timely.

5. POTENTIAL FOR REPLICABILITY

As of now, it is running as a pilot project in two regional offices of NIACL. The process will be ramped up Pan India basis once successful completion of the pilot run & removing the glitches if any.

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UCO Bank

Alert System to Check Unusual Credit Transactions in Staff Accounts: Escalation Matrix

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

'Alert Management System', through the use of an escalation matrix, has been introduced in the Bank for dealing with 'unusual credit transactions'. The proposed system is an in-house systemic change which is at the stage of development. Modifications of the proposed system and finer refinements have been delayed by the up-gradation of our bank's software. The Alert Management System is expected to be fully functional by October 2021.

2. BACKGROUND

Cash deposits prevent tracing of the source of funds and are resorted to for precisely this purpose. During routine and special investigations, it was observed that there are frequent transactions which could be viewed under the lens of 'unusual credit transactions' i.e. cash and transfer/ clearing transactions in accounts of officers/ executives.

To promote transparency as well as trace patterns of unethical dealings with customers, Bank has introduced an Alert Management System for disposal / closure of alerts generated for cash/ inward transfers reflected in accounts of employees.

3. IMPLEMENTATION

The 'Alert Management System' has already been introduced in the Human Resource Management System of the bank. The alert generated is accessible to the concerned employee in whose account the transaction is reflected. The alerts are generated on the following:

- Daily cash deposit
 - Monthly cumulative cash deposit
 - Total daily credit (transfer and cash) excluding salary and other allowances
 - Monthly total credit (transfer and cash)
- The alert generated has corresponding fields which have to be filled by the employee in HRMS and includes the amount, effective month, effective year, status and alert date. It is then forwarded to the Review Authority and the Final Authority for closure.

**ESCALATION MATRIX:**

EMPLOYEE	REVIEW AUTHORITY FOR CLOSURE OF ALERT	FINAL AUTHORITY FOR CLOSURE OF ALERT
Sub staff/ clerical cadre	BH	Concerned ZO
All officers, working at branches, up to scale IV (excluding BH)	BH	Concerned ZO
BH up to scale IV	Concerned ZO	Concerned Field Inspectorate
Officers above scale IV posted at branches (except FCC)	Concerned ZO	Concerned Field Inspectorate
Officers posted at ZO/HO/ RTC/ LDM/ CSC/ FI/ RSETI etc. (other than Zonal Heads and Departmental Heads)	Zonal Head/ Departmental Head	Audit & Inspection Department, HO
Zonal Head and Departmental Head of RTC/ LDM/ CSC/ FI/ RSETI/ BH (at FCC branches)	Concerned Field Inspectorate	Audit & Inspection Department, HO
Departmental Heads at Head Office and GMs other than FI in charge	Audit & Inspection Department, HO	Vigilance Department
GM, Audit & Inspection Department, Head Office	Vigilance Department	Vigilance Department

Indicative threshold limits are as given below:

- Inter-branch transaction in staff account Rs. 50,000/- and above
- Cash deposit in staff account i.e. aggregate cash deposit at all branches in staff accounts Rs. 50,000/- and above
- Credit entries in staff accounts i.e. aggregate amount of credit entries Rs. 50,000/- and above (not including salary and proceeds of TDR)

4. IMPACT AND BENEFITS

Cash deposits are expected to reduce drastically and only transfer transactions to be resorted to. This will help in maintaining an audit trail for all transactions.

When the Alert Management System is read with the detailed expansion of Annual Property Returns and the mandatory declaration of assets/ liabilities, it is going to be a deterrent to an employee to deposit cash in account not just in our Bank but in the entire banking system.

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UCO Bank

Fraud Prevention through Increased Awareness: ALERT UCOite

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

The initiative 'Alert UCOite' has been launched for moving beyond punitive and preventive vigilance towards participative vigilance. Instances of fraud prevention are encouraged to be shared by officers working at ground zero. This is in effect asking every employee to be a Vigilance Officer by encouraging reporting of 'near misses' at field/ branch level for wider dissemination. 'Alert UCOite' has been introduced in the form of a sustained drive since April 2021.

2. BACKGROUND

On past occasions, it was observed that fraud was attempted simultaneously at various branches, either perpetrated by a single person or through a common pattern. Bank was adversely affected with both financial and reputational losses due to such incidents. The fact that information of 'near misses' and 'hits' of the fraud was not shared with urgency across all branches, allowed the fraud to occur in branch after branch. Information sharing as key to fraud detection and prevention gave birth to Alert UCOite.

3. IMPLEMENTATION

A 'call ' was made to all employees through a joint appeal by CVO and MD & CEO laying the onus of the Bank's pride on each employee's shoulder. A sustained drive was then formally launched named 'Alert UCOite' where all Zones/ branches were intimated as to the importance of reporting near-misses in the effort at preventing potential frauds from being perpetuated in the future.

This initiative has been widely publicized with running scrolls in CBS and flash messages. Events are shared, then uploaded for access by all employees. The incidents will be published in the Quarterly Magazine UCO Vigil serving as a crucial exercise in preventive vigilance and encouraging a steady flow of information sharing. Employees participating in the initiative will also be felicitated during Vigilance Awareness Week.

4. IMPACT AND BENEFITS

- Faster dissemination of information on fraud-related modus-operandi.
- Networking to minimize losses at an organizational level.
- Shift expected in viewing Vigilance as less of a policing Department and more as an integral part of the bank.
- Slow but steady creation of a sense of belonging and stakeholdership of the organization.

5. POTENTIAL FOR REPLICABILITY

The initiative has complete utility for replication by the other players in the banking domain.



Union Bank of India

System Based Identification of Shell Companies to Prevent Diversion / Money Laundering

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Vigilance Department, CO is creating awareness for ensuring compliance through various tools such as Preventive Vigilance Visits (PVV), Offsite surveillance, Zonal Vigilance Committee meetings (ZVC), etc.

ZVC meetings are held every quarter wherein Field General Manager as Chairman of the committee assesses/ reviews the performance of the Regions under their jurisdiction on selected Preventive Vigilance parameters. All Regional Heads, Zonal/ Regional Vigilance officers, and Zonal Audit Heads are compulsory members of the meeting. CVO attends the meeting as a special invitee.

To further strengthen the compliance level by field functionaries and in order to make the performance of a Zone measurable, Vigilance department, CO has devised a tool namely **Vigilance Perception Index (VPI)** to measure the performance of a Region and Zone as a whole in a more objective manner from June, 2021 quarter.

2. BACKGROUND

Under VPI, the performance of a Region/Zone is assessed on the basis of eight different compliance related parameters, all of which are very important for the healthy growth of the organization.

VPI is calculated by each FGMO based on the performance of the Regions in the selected parameters and is submitted during ZVC meeting. Higher VPI indicates lesser deviation and more compliance in the parameters selected

3. IMPLEMENTATION

Following eight parameters each having ten marks are considered for arriving at Vigilance Perception Index (VPI).

These parameters are dynamic parameters based on compliance level, the same can be added/deleted with advance intimation to field.





Preventive Vigilance Initiatives

Sr	Parameters	Sr	Parameters
1	CMRD Visits to the Branches with Spurt in Advances as per extant guidelines	5	Surprise Cash Verification conducted at Branches by RO for the Quarter
2	Staff Accountability in NPA accounts of Rs.1.00 Crore and above as of	6	Know Your Employees - OMC alerts for Cash/transfer transactions pertaining to Staff accounts
3	Preventive Vigilance Committee (PVC) Meetings	7	Scrutiny of control returns M-27 (Reports of only first two months of the quarter under review are considered for arriving score)
4	Preventive Vigilance Awareness Visit (PVAV) Reports of Vigilance Officers and Compliances	8	Bank Mitra Points (BMP) visit by Branches and scrutiny of reports of Branches by Regional Offices for the Quarter

4. IMPACT AND BENEFITS

It is observed that the compliance level of the Regions has been regularly checked through VPI & improvement in certain parameters viz. CMRD Visits, Surprise Cash verifications, Scrutiny of M-27 reports, Bank Mitra Point verifications, etc. have been emphasized for better monitoring, control & supervision of the field.

5. POTENTIAL FOR REPLICABILITY

The same can be used in other organization/PSUs for effective monitoring of the various stakeholders under defined parameters.

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Preventive Vigilance Initiatives

TRANSPORT & INFRASTRUCTURE MANAGEMENT SYSTEM





Bharat Petroleum Corporation Limited

Vehicle Tracking System for LPG Transport

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

BPCL LPG has implemented a Vehicle tracking system (VTS) for all its packed and Bulk LPG vehicles engaged under a contract for movement of bulk LPG and packed cylinders. It is a cloud-based, consignment management solution called Visual Cargo-Vehicle Tracking System (VTS), which works with GPS hardware on a real-time basis and provides the complete visibility of the LPG Trucks movements with their location coordinates. The VTS System integrates the vehicle real-time location data received via GPS with the BPCL ERP/SAP systems.

Mobile application for the Transporter, Distributor & Plant Officer is provided to monitor real-time vehicle movements along with details of product movement trips, source & destination. Various customized reports such as vehicle reporting & delay, tracking & non-tracking, faulty VTS, Battery status, route finalization, and RTKM verification are also available.

Implementation of Vehicle Tracking System (VTS) has enabled businesses and transporters alike for a real-time monitoring of LPG Truck movements. This system triggers timely notifications to all the stakeholders like abnormal halting of the trucks at a distributor location for more than the expected period, detection of night driving, deviation from pre-defined routes, unauthorized stopping en route, unauthorized removal of the hardware devices. Thus, the Vehicle Tracking System (VTS) helps as a deterrent to indulgence into any malpractices and indiscipline by the vehicle crew like product pilferage during in transit and ensuring timely reporting of vehicles at bottling plants & at LPG distributor's godown.



2. BACKGROUND

Logistics and product security are very significant operations in LPG Business impacting revenues. Monitoring vehicle movements and preventing enroute malpractices by tank lorry crew was a requirement. The business and the Transport contractors required the following information on a real-time basis for ensuring better monitoring discipline in the logistics fleet.

- Truck route deviation is beyond 50 meters from the planned route
- Stoppage is beyond a stipulated time.
- Simultaneous occurrence of both (a) and (b) above
- Trip time is exceeding the standard trip time which is given by BPCL
- Trucks are waiting at the bottling plant or loading location /Distributor Godown for more than 4 hours.

3. IMPLEMENTATION

The successful vendor M/s Trimble Mobility Solutions India Pvt Ltd. on one hand had placed orders for VTS devices with the suppliers due to high lead time and at the same time started with backend system readiness / portal developments, procurement of various licenses and subscriptions, Google API's which were required for starting VTS services in Packed LPG trucks.

Once developments were complete and devices have been procured, necessary installations in all Packed LPG Trucks have been done by the vendor's field staff. As of date, all Packed LPG Trucks (6200 LPG Trucks) are installed with VTS devices.

4. IMPACT AND BENEFIT

To the LPG Distributor Network and transporters

- The VTS system automatically informs the distributors' information of the vehicle till it reaches and then leaves the godown. The GPS data, geocoded locations, and Google Maps enabled traffic data are combined to derive the Expected Time of Arrival (ETA) for the Packed LPG Trucks at the distributor godown. Following are some of the scenarios when the distributor should be informed of the status automatically are :
 - When the vehicle is nearing the godown.



- When the vehicle reached the godown.
- When the vehicle is halting at the godown for more than the stipulated time.
- When the vehicle leaves the godown.

Similarly, it automatically informs the transporters of various status information of the vehicle. Following are some of the scenarios when the transporter should be informed of the status automatically:

- When the vehicle reports to the plant for loading.
- When the vehicle enters the loading bay for loading.
- When the vehicle leaves the loading bay after loading.
- When the vehicle leaves the plant for the godown.
- When the vehicle is nearing the godown.
- When the vehicle reached the godown.
- When the vehicle is halting at the godown for more than the stipulated time.
- When the vehicle leaves the godown.

For the Business

- No product dry outs at the Bottling Plants by efficient tracking of Bulk LPG Tank trucks leading to no loss of bottling hours due to product availability
- Check on product pilferage during in-transit product movement from Bottling Plant to distributor's Godown
- Correction in distance data used for transportation payment as per actual distances travelled by vehicles
- Higher turnaround of LPG trucks due to less enroute stoppage leads to a simultaneous increase in transporter earnings & higher vehicle at bottling plants.
- Safe product movement as movements are monitored as per oil Industry Transport Discipline Guidelines with the VTS systems

5. POTENTIAL FOR REPLICABILITY

It can be replicated in the sectors where tracking of product is required for on time delivery no product pilferage and the product moves in the batches.

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IndianOil

Indian Oil Corporation Limited

Centralised Vehicle Tracking & Management System.

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Centralized Vehicle tracking & Management System (CVTMS) with New Geo RTD (Return Trip Distance) System was introduced at 118 POL locations in August 2020 and completed in December 2020.

2. BACKGROUND:

The safety and security of petroleum products during movement through Tank Trucks (TTs) has been a challenge for the industry for the past many decades. Malpractices in form of theft & adulteration by unscrupulous elements have been a problem for the industry. Industry Transport Discipline Guidelines (ITDG) and Marketing Discipline Guidelines (MDG) were earlier introduced as punitive deterrence towards the same.

Vehicle tracking and management system is an effective tool for preventive deterrence for the same. The various systems which were earlier introduced were not having a common platform on a pan-India basis and their Server capabilities were inadequate to generate effective reports at different levels like Location, State Office, Head Office etc. Field locations, as well as SO/HO, were struggling to maintain those systems and get effective results. Hence it was planned to introduce a centralized vehicle tracking and management system with the latest technology which will have a common software platform pan India. Also, it was planned to bring the Geo RTD system on the same platform.

3. IMPLEMENTATION:

After due deliberations at many levels, scheme and specifications of the system were finalized and M/s Trimble was roped in for implementing CVTMS and Geo RTD system. All TTs for delivered supplies of POL products are fixed with an intelligent VMU device with an alarm system. The TTs are tracked for their routes, speed & halt deviations. In addition, the safety aspect is also being taken care of with the help of additional features like harsh braking/ harsh acceleration, night driving, etc. to monitor the journey.



The data is continuously being uploaded on a centralised server which gives real-time alarms to the TT crew for over speed, route, halts, deviations, etc. preventing the possible deviation and malpractice.

Exception reports are generated as per pre-defined formats and emailed to the transporter and location coordinator. Letters for actionable deviations are also generated automatically, as the system has a sturdy interface with SAP. Fortnightly reports are also provided to locations through emails for better monitoring. All Transporters / Customers / IOCL users have mobile applications as well as web access to monitor the respective information of the TTs.

GEO RTDs are prepared based on the shortest possible all-weather motorable route concept. The system generates 2-3 routes and workflow is initiated. The whole system is online, and the data is retrievable at any point in time.

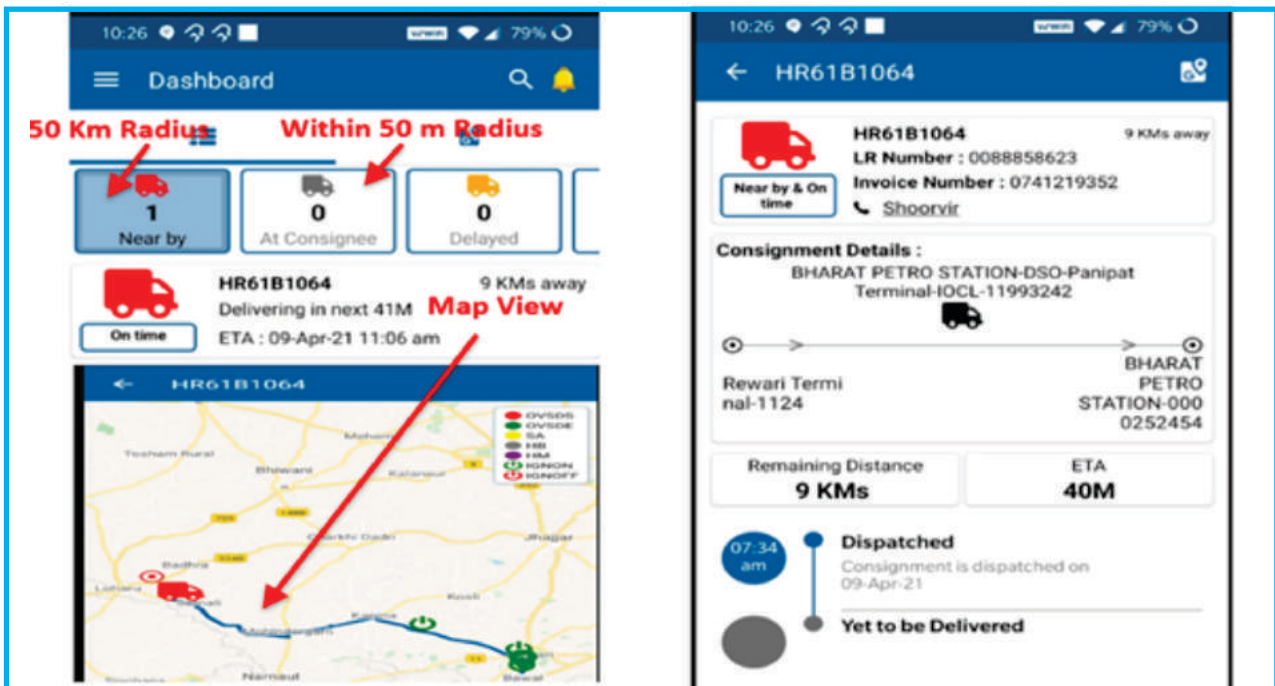
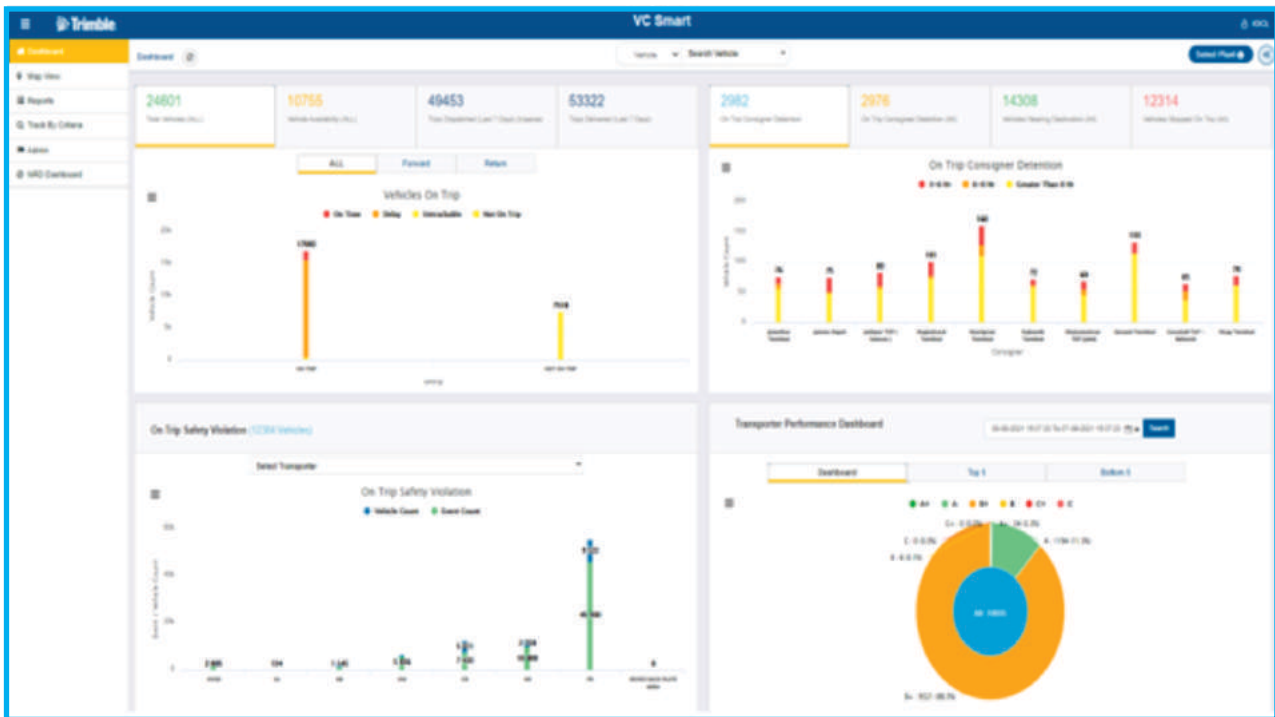
4. IMPACT AND BENEFITS:

Effective monitoring of TT movements has increased discipline amongst the TT crew and inculcated safe driving habits in them. Transporters have also gained through the system, as now they can monitor and control their large fleets through a single click on the web as well as on mobile application. This has increased the turnaround time of TTs and thus the RTKMs. Also, control over speed, harsh breaking, etc. has resulted in better management of the TT journey. The officers at locations, getting handy information of deviations from pre-defined routes, can monitor and control the fleet in efficient and effective manner. It has become easier to act on the erring TTs and transporters, as the records are readily available and are system generated. Thus, the CVTMS system has proved itself as an effective tool of preventive deterrence to the malpractices in POL TTs'.

A Sturdy Geo RTD System in place has reduced the efforts of field officers and other officers in line of approval. The system-generated routes are cross verified by the field officers through the web only. Auto-updating of these Geo RTDs directly into SAP has eliminated possible errors and saved time in record updating in SAP.

5. **POTENTIAL FOR REPLICABILITY:**

It is replicable in all other functions as well across organizations. Accordingly, all other departments are already in the process of implementation and getting their RTDs verified through the Geo RTD system.







CONTRACT MANAGEMENT





GAIL (INDIA) Limited

Online Generation of Quarterly Progress Reports for Contracts/Works

1. BRIEF DESCRIPTION OF THE MEASURE/INITIATIVE

QPR system has been automated to fetch all contract/ Works related details directly from the Contract Module of SAP system. EICs are required to only update the physical progress in the system and the remaining details of the contract – Purchase Order No., estimated cost, Awarded cost, Vendor code are automatically captured from the Procurement module of the SAP system.

2. BACKGROUND

As per the guidelines of CVC, the Quarterly Progress Report of all the contracts/works is to be reported to CVC in the prescribed format on a quarterly basis. For capturing the data from all the locations pertaining to the contracts/ works of their respective area, an Intranet-based e-QPR System was operational. Engineer In-Charges of all sites were authorized to enter the data and a consolidated e-QPR report was generated by Corporate Vigilance and forwarded to CTE. It was observed that the system needed improvement to address the following issues

- Entry of contract/work orders was being made manually by the user and there was no check in the system to verify the entry of all the purchase orders/ work orders.
- As all the data was being entered manually by the user, there were chances of errors while entering the data.
- Sometimes data entered in the different annexures of the system was not as per the defined classification of Annexures by CVC.

Accordingly, a system improvement was suggested to enable provisions for automatically capturing the data about all the contracts/ work orders directly from the SAP Procurement module including Purchase Order No., Order value, estimated value, Vendor name, EIC name, etc. Further, logic was built into the system for automatic fetching of data as per the classification of Annexures given by CVC.



3. IMPLEMENTATION

The modifications have been completed by the in-house IT team of GAIL and the system has been made live.

4. IMPACT AND BENEFITS

This automation has provided multi-fold benefits :

- While auto fetching, logic has been defined in the system which enables the fetching of contracts/ purchase orders in the respective Annexures.
- There were instances, wherein some of the contracts were not getting entered. With the automation, contracts are directly fetched from the SAP module of the procurement system ensuring all the contracts are captured.
- Chances of errors while doing manual entry are minimized/zero.

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Hindustan Petroleum Corporation Limited

Real-Time Online Access for Verification of Bitumen Invoices

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

This system provides access to PWD Officials to carry out online verification of Bitumen invoices billed to road contractors of their respective divisions.

2. BACKGROUND

The requisition for the purchase of bitumen is required to be placed to the Corporation through the Executive Engineer (EE) of the Division concerned. The EE then issues a letter to HPCL comprising of details like the name of the work, the contractor, and agreement number of the work for supply of the required quantity of bitumen. The contractor procures the bitumen by paying its cost and HPCL then issues an invoice that contains details of the requisition placed by the EE.

The contractor is required to attach the copies of the invoices for the purchase of Bitumen with the running/ final bill of works in proof of procurement of the required quantity/grade of materials to PWD. HPCL used to send manual copies of the invoices to PWD for verification.

Now, the whole process is digitized wherein PWD is provided access to these invoices to verify them online.

3. IMPLEMENTATION

An in-house module has been developed for online verification of Bitumen Invoices and access has been given to 300+ Govt. Organizations to use the same.



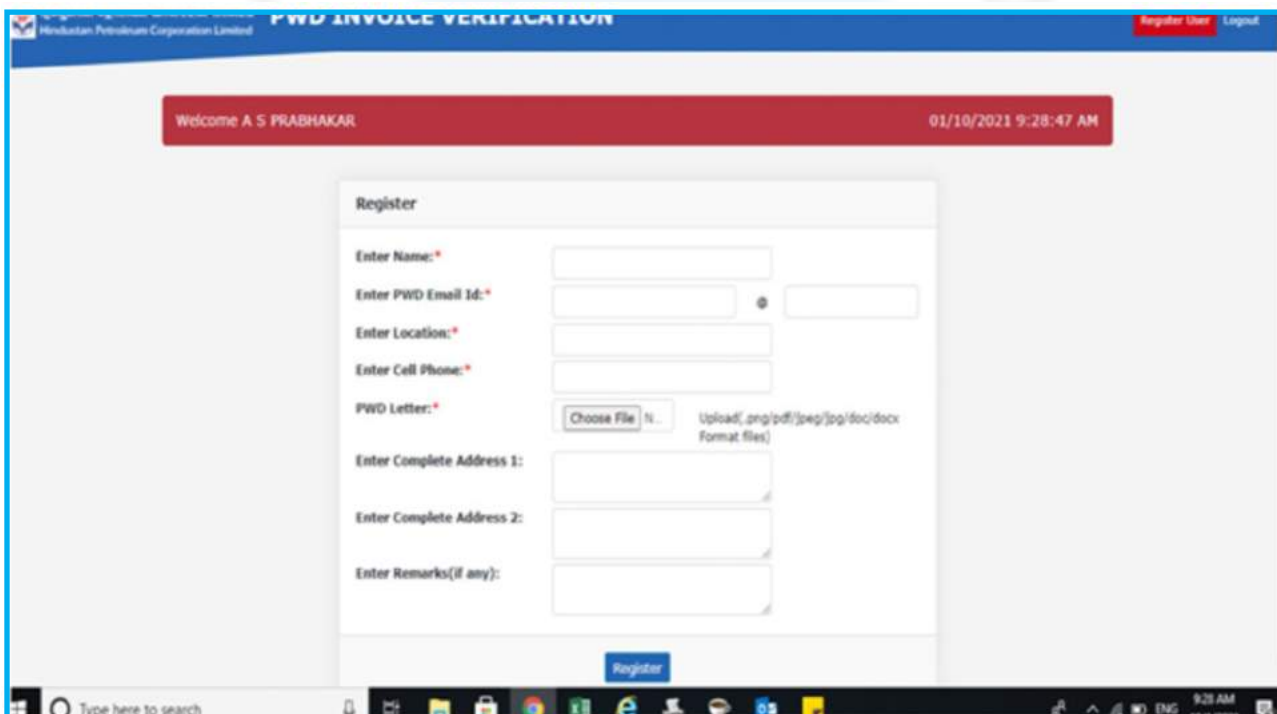
4. IMPACT AND BENEFITS

Following are the key benefits of the application:

- Real-time online access for verification of Bitumen invoices;
- The process eliminates the possibility of submitting multiple copies of the same invoices in support of the purchase of bitumen for different works; and
- Time-efficient process.

5. POTENTIAL FOR REPLICABILITY

This can be replicated for all other products supplies at various organizations wherein tracking and confirmation of end-user is desired.



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Standardization of Format of Concrete Mix Proportion for Improving Quality of Work

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

NMDC is constructing a steel plant (NISP) of capacity 3MTPA. There is a scope of 9 lakh cu.mt concrete work to complete all the civil works. One Contractor handles various civil contracts / works and the **CONCRETE MIX PROPORTION** is not the same for all the works. These contractors are procuring the READY-MADE CONCRETE MIX from another contractor who is having a **batching plant**. Since the concrete mix opted by the contractors differ from one another and due to many orders at the same time supplier may be confused and not able to provide the concrete Mix as per the order.

The Batching Plant slip does not contain any details while issuing the Concrete Mix to the contractors. Hence, there is a chance of not following the actual/approved Mix proportion suggested by the In charges of the concerned site.

Also, it is observed that contractors are performing the concrete work at their convenient time including night times. Hence, the availability of either MECON/NMDC officers/Vigilance Officer at the site is not possible many times for Supervision of the works during the concreting of the Package/work.

To minimize the above lapses, circulars were issued as a part of System improvement.

- What exactly is this adopted measure / initiative:

An SMS as well as “standard Format” incorporating some compulsory details are forwarded before starting the work.

All the Contractors have to send an SMS to the concerned MECON/NMDC officers as well as Vigilance officer at least 2 hours before starting the concrete work.

The batching plant SLIP must contain all the necessary details of **Mix type, Package No./Name of the Work, Reference of approved Mix Design Report, Date and time of preparation of concrete, Identification number of transit mixer carrying the concrete** while issuing the concrete.



2. BACKGROUND

The existing system which was replaced by this initiative, had the following challenges:

- The material received from the batching plant was used in the concrete works without due verification.
- Lack of supervision due to concreting of works done even at night times also.
- Chance of quality lapses due to lack of verification/supervision.

Problems/Vigilance Risk that was addressed:

- Eliminating the possibility of not using the CONCRETE MIX PROPORTION as specified in the contract.
- Due to a lack of clarity on the quality of material received, it became difficult for the site engineer to access the quality of the concrete mix. Hence, the quality of the construction may differ from the actual prescribed quality, and
- Due to odd timings of the concrete work, problems aroused in monitoring & supervision.

3. IMPLEMENTATION

The above system has been developed in-house, using the internal resources only and no additional cost is involved in implementing the above system. It was initiated in the mid of the year 2019 and has been implemented from the beginning of the year 2020.

It is introduced on a large scale in the steel plant of NMDC.

4. IMPACT AND BENEFITS

- Impact on other functions:

Effective supervision may lead to a better quality of Construction.

- How and to what extent the prevailing business processes have been re-engineered as a result of the technology:

An SMS system has come into practice and is being implemented through



the concerned officers. All the concerned details are being incorporated in the batching plant slip as per the circular issued.

- How the vigilance risk has been reduced:

The number of vigilance queries have come down due to improvement in monitoring and supervision on civil works.

- Estimated benefits envisaged in long run for the organization:

The Quality is improved very much. The repair cost will be reduced in the future for any quality-related lapses in civil work.

Work can be completed within the prescribed time, without any lapses.

5. POTENTIAL FOR REPLICABILITY

This system can be implemented in other projects/constructions also where a huge number of civil works are executed.

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NTPC Limited

Contractors' Labour Information and Management System: (CLIMS)

1. BRIEF DESCRIPTION OF THE MEASURE/INITIATIVE

NTPC deploys thousands of contractual workers for its various projects. To streamline the system of payment to contractors and ensuring that all statutory requirements are met, an IT based system called "Contractors' Labour Information and Management System' (CLIMS) has been implemented. It aims to streamline the processes relating to the deployment of contractual labour like proper keeping of records in a digitalized format and ensuring that the wages and other benefits of labourers deployed at NTPC Plants are disbursed correctly and in time. The CLIMS application also has inbuilt features like bio-metric attendance, medical fitness, safety training/ clearances, ESI registration, and other regulatory checks.

2. BACKGROUND:

NTPC traditionally deploys thousands of contractual workers in power-plants in Operations and Maintenance (O&M) as well as construction works. Most of the activities targeted towards payment and welfare of contractors' workers largely relied on manual records maintained by contractors. There was a lot of paper-work and physical records which had to be scrutinised carefully before the release of payments. Other Statutory compliances were also monitored manually. A need was felt to automate these processes to bring in transparency, accuracy and ensuring that workers were paid their dues in time.

3. IMPLEMENTATION

CLIMS is designed to automate several time-consuming processes in a contract involving labour force, including wage sheet processing for contractor's labour and statutory reporting and archival. The application covers the management of information of contractors and their work contracts including the contractor's labour force; their work timings, wages, welfare, safety, and health concerns. While the contractor retains ownership of labour data and enjoys full control over labour attendance, work timing, wages etc., the system provides real-time information window to concerned NTPC officers like Engineer-in-charge, HR and safety department, etc. for ensuring compliance of labour laws and labour welfare.

As all the data is stored in servers, CLIMS provides on-click generation of statutory reports and faster HR clearance for contractor's payment. It has brought transparency in terms of wage payment and has ensured payment of proper wages and social security to the workers. PF & ESIC deductions are also automatically calculated in wage sheets improving accuracy and efficiency.

**4. IMPACT AND BENEFITS**

	Manual System	CLIMS
1	Manual and Multiple Entry of Data related to contract workers in various formats.	One-time data entry. Same data utilised in all forms and reports.
2	Lack of worker related data and insufficient information.	Creating digital data repository of workers data such as their skill level, trainings received, designation, PF/ESIC numbers, etc.
3	Tedious processes of clearances. Many times clearances were avoided due to urgency.	Digitalization of EIC, Medical, Safety and HR clearance processes and thereby reducing paper consumption and making this process faster and effective.
4	The tedious process of gate-pass checking and Access Control Paper Gate Passes can be forged.	Authentication of workers using biometric machines (face recognition or finger print) to enhance security and control access to plant.
5	Problems of proxy attendance and unauthorised entry automatically.	No possibility of proxy attendance and unauthorised entry due to biometric authentication.
6	Manual attendance on registers, difficulty in collating and reporting.	Availability of real-time workers' attendance data.
7	No trace of workmen on the job at any given time.	Live dashboard displays number of contractors' workmen deployed in each work area at any given time.
8	Manual Wage Sheet Preparation.	Auto-generation of Wage Sheets & Pay Roll, ensuring wage payment to workers on the last day of the month.
9	No proper validation of payments to workmen.	Payments to workers are through banks and comparing bank account statements of workers with system generated wage sheets.
10	Manual preparation of MIS reports (After collecting data from various sources).	Automated, Real-Time Reports and Contextual dashboards for stakeholders Customized Analytical / Statistical Reports and Charts for Management and CLIMS users.
11	Long delays in the processing of Contractors' Bills and HR clearance processes.	Faster HR clearance and legal compliances through the availability of authentic data online.
12	Manual preparation of statutory reports.	Digitalization and automatic generation of statutory compliance reports.



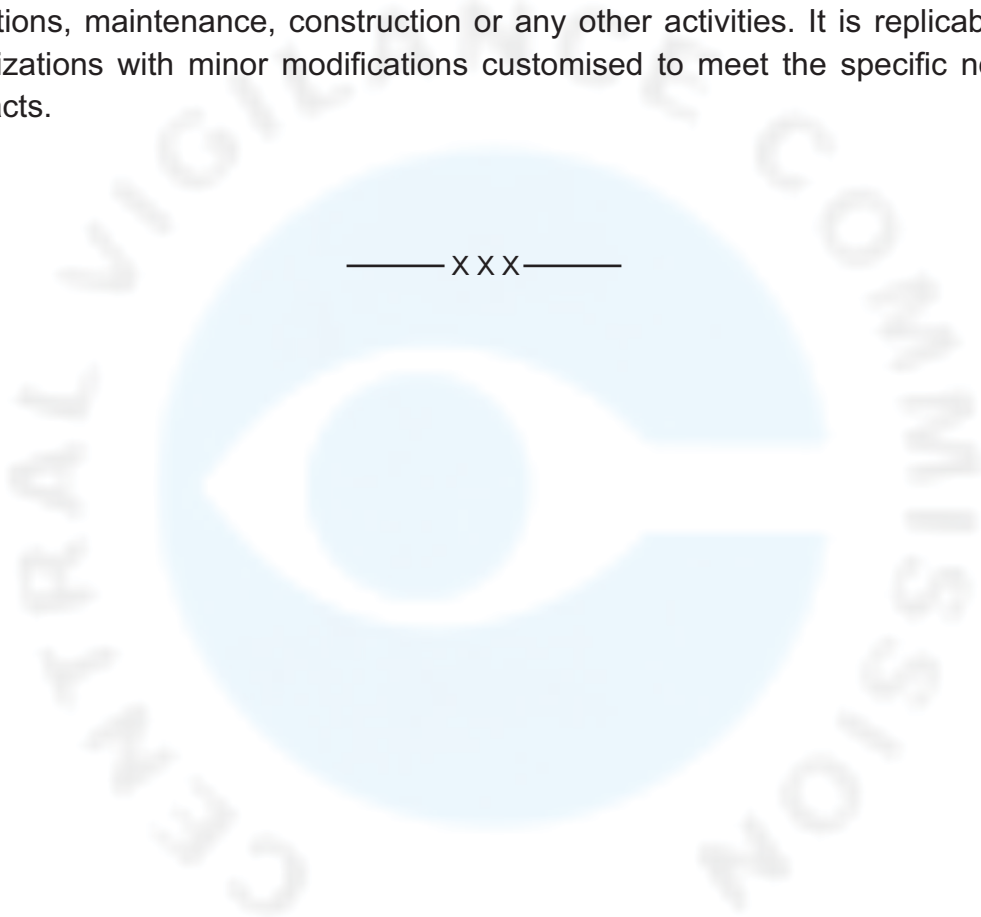
CLIMS was awarded as Innovative Best Practice in Digital Transformation in the 'Service Excellence' category by the CII (Confederation of Indian Industries) in the year 2020.

CLIMS won the award of appreciation from CSI (Computer Society of India) in the year 2021.

5. POTENTIAL FOR REPLICABILITY

This application can be used by any other organization which deploys labour force for its operations, maintenance, construction or any other activities. It is replicable for other organizations with minor modifications customised to meet the specific needs of the contracts.

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Empanelment of Independent Inspection Agencies for Verification of Vendor Credentials

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Introduction of independent verification and certification by the empaneled agencies of Vendor's credentials / documents submitted along with the bid against Bid-Evaluation / Bid Rejection Criteria in case of high value global & national tenders.

2. BACKGROUND

In the absence of a system of verification of documents, often complaints of corrupt / unethical practices were received that a particular bidder while submitting his bid against a tender has submitted fraudulent documents in support of Bid Evaluation / Bid Rejection criteria like experience certificates, etc. This point has also been highlighted by CVC. With the introduction of this initiative w.e.f. May, 2020, the problem of submitting fraudulent documents has been addressed.

3. IMPLEMENTATION

OIL has empaneled 9 Independent Inspection Agencies through Expression of Interest (EOI) for an initial period of 4 years, whose names would be mentioned in the Tenders. Bidders while submitting their bids have to choose one of these agencies at their own cost and get their documents in support of Bid Evaluation / Bid Rejection Criteria verified by the chosen agency before submitting their bid. Bids accompanying unverified documents shall be rejected.

Presently, the clause on Independent Verification of Documents is applicable for Tenders where the expected procurement value is Rs. 5 Crores or more.

4. IMPACT AND BENEFITS

The initiative was mainly directed to check the corrupt practices of submitting fraudulent documents on part of the bidders while submitting their bids to get contracts.



In the long run, this initiative is expected to help the organization in developing a vendors' base and ensure that procurement is done from genuine and credible vendors, which will benefit the organization in terms of quality products & services.

5. **POTENTIAL FOR REPLICABILITY**

This initiative has been successfully implemented throughout the organization in the case of high value tenders. In the long run, the limit of Rs. 5 Crores as well as the scope of certification / verification of documents can be reviewed.

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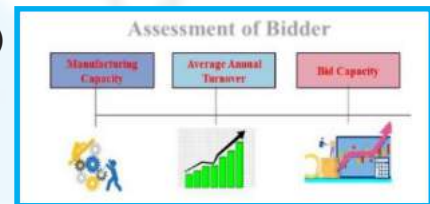
Objective Assessment of Capacity and Capability of Bidders

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

A measure of systems improvement facilitating the elimination of subjectivity in tender awards through the incorporation of event-based eligibility/disqualification clauses in Bid documents and dispensation of post-bid performance evaluation of existing contractors in ongoing projects.

As part of tender evaluation, assessment of capacity and capability of bidder to perform the contract was earlier carried out as per the following pre-defined eligibility criteria:-

- MAAT (Minimum Average Annual Turnover)
- Manufacturing Capacity
- Balance Bid Capacity



Further, performance review of existing contractors in ongoing projects was also being done earlier through a standing committee.

In order to make the performance review of any agency more objective, transparent, and fair, POWERGRID vigilance emphasized that any performance assessment mechanism involving on-going contracts with bearing on fresh tenders at the post-bid stage ought to be avoided as far as possible.

Bid documents were accordingly standardized by POWERGRID with approval of the Board of Directors based on Vigilance suggestion to incorporate a filtering mechanism to exclude bids from non-performers/ poor performers/ saturated performers based on objective eligibility parameters. Towards this end, the following critical negative events have now been incorporated as parameters for deciding the eligibility/ineligibility of a bidder, and these form part of the Bid document:

- Termination of contract due to Contractor's default and encashment of CPG due to non-performance;
- Repeated failure of major types of equipment while on service;
- Substantial portion of works (more than 50% of the contract) is sub-contracted, under the existing Contract;
- Firm has been referred to NCLT under Insolvency and Bankruptcy Code.

Ineligibility Parameters/ Events

- ❖ Contract Termination & CPG encashment
- ❖ Repetitive Failure of eqpts
- ❖ Subcontract of Major Works
- ❖ Referred to NCLT



2. BACKGROUND

- Earlier the assessment of capacity and capability of bidders was done on the pre-defined eligibility criteria of MAAT (Minimum Average Annual Turnover), Manufacturing Capacity, and Balance Bid Capacity. The Balance Bid Capacity was earlier defined as follows:
- Balance Bid Capacity = $3T - B$, where
T= Maximum value of works executed in any one financial year during the last 5 financial years taking into account the completed as well as the works in progress.
B= Value of existing commitments and ongoing similar works yet to be completed
 - Declaration to be given by Bidder in his bid.
 - Bidder's balanced bid capacity was checked during the first stage evaluation (before price bid opening) considering his declaration as well as other packages under award and zone of consideration.

In addition to the above, a performance review of existing contractors in ongoing projects was also being done by a standing committee based on inputs from the site and various other departments.

Subsequently, Vigilance advised that appropriate measures for systemic improvement in this regard may be put in place to avoid post-bid subjectivity in evaluation of bidders and to bring in transparency by introducing pre-defined events.

3. IMPLEMENTATION

Amendment to the existing procedure of assessment was notified on 17.01.2020 duly approved by the Board of Directors POWERGRID. It is now fully implemented across the Company and is applicable to all tenders.

4. IMPACT AND BENEFITS

Bid-exclusion process is now devoid of subjectivity and administrative discretion. The same is based on event-based parameters that are clearly spelt out in Bid documents. It is also a measure to arrest the setbacks/ delays, if any, in ongoing contracts more efficiently and to decide eligibility/ ineligibility of bidders for an award of new contracts before the opening of Financial Bids.

5. POTENTIAL FOR REPLICABILITY

The new guidelines for the assessment of capacity and capability introduced in POWERGRID can be suitably implemented in tendering in the award of works by the majority of organizations.

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Bharat Heavy Electricals Limited

Online System for Issuing Performance/Experience Certificates: Siddhi

1. BRIEF DESCRIPTION OF THE MEASURE / INITIATIVE

Online system for issuing Performance/ Experience Certificates in respect of Contracts (Purchases/ Works) awarded by Units/ Regions/ Divisions (**Siddhi**) was introduced at large scale in BHEL in February, 2021

2. BACKGROUND

An e-mail was received from a State Govt. office to a BHEL official working in one of the Units requesting to confirm as to whether the enclosed experience certificates of 2 sub-contracting vendors were issued by him. In turn, BHEL official confirmed that these experience certificates were issued by him and were genuine. Subsequently, while examining a complaint, Vigilance Department verified with the BHEL official, whether the certificates were issued by him. BHEL official informed that for one vendor, the content of the certificate was different from the certificate issued by him, and for the other vendor, it was stated that he had not issued the certificate at all. Though, the official had earlier confirmed to the State Govt Office that he had issued the certificates, however later, upon Vigilance query, he had changed his statement. He, subsequently, informed the State Govt. office that he did not issue the experience certificates of these two vendors. Further, the "Guidelines for the issue of Performance / Experience Certificates in respect of contracts (Purchases / Works) awarded by Units / Regions" issued by Corporate Office of BHEL, were not followed in letter & spirit.

3. IMPLEMENTATION

- An online system has been developed for issuing Performance/ Experience certificates to Suppliers/ Contractors.
- Suppliers/ Contractors are to submit their requests through the online portal available at <https://siddhi.bhel.in>.
- Individual Performance/ Experience certificates can be issued for each executed PO/WO.
- The default Administrator of the system is available at the respective DTG department of the Unit/ Region / Division.

- The Administrator shall identify and provide access rights to authorized users i.e. Initiators, Finance, Issuing Authorities, etc.
- While certifying the executed/ supplied value, the 'Gross Value' of the bills passed (excluding deductions on account of tax, LD, etc.) on the date of issuance of certificate may be considered by the Finance department.
- The Issuing Authorities shall not be below the rank of DGM as per the extant guidelines.

4. IMPACT AND BENEFITS

- The issued certificates having unique identification can be sent electronically to the organization seeking the certificate and to the concerned Supplier/ Contractor.
- Embedded URL and QR code can be clicked/ scanned for verification purposes.
- Viewing rights shall be available for respective Internal Audit/ Vigilance Functions.
- Centralized repository of all issued certificates shall be maintained by CDT.
- Till 08.09.2021, 417 experience certificates have been issued through the online system.

5. POTENTIAL FOR REPLICABILITY

The online system is applicable for issuing experience certificates to Suppliers/ Contractors by all concerned / functional areas of the Company.





Sample Certificate

Supplier Performance/Experience Certificate

Ref : 20AA1
Date : 01-Feb-21

To

ABC Pvt. Ltd.

3A, Rohini, Delhi

This is to certify that M/s **Siddharth Pvt. Ltd.** having its Registered Office at **New Delhi** has supplied / executed following items/ works:

SNo	PO / WO details		Description of items/ Materials supplied	Scope	Period of Work execution / Supply	Executed / Supply Value	Performance (Satisfactory/unsatisfactory)	Remarks, if any
	PO No/Date	Value (Rs Lakh)						
1	XXXXXX Dated 01-Feb-21	9800	Castings & Forgings	Supplies	12 months	7500	SATISFACTORY	NA

Additional Information:

Performance of the supplier has been satisfactory while supplying the castings.

The supplier has in fact helped in reworks.

Supplier Performance Rating (SPR) is 92.

This is to certify that M/s **Siddharth Pvt. Ltd.** is a **Registered Supplier** with **BHEL-Corporate Office**

This Certificate is issued at the request of M/s **Siddharth Pvt. Ltd.**, vide ref **20AA1** dated **01-Feb-21** for the purpose of **To quote in tender ref XXXX dated 01.01.2020**

This Certificate is being issued for the above mentioned contract only, and is without prejudice to any other contract executed/ being executed by the Supplier/ Contractor, anywhere else in BHEL.

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Indian Railways

Indian Railways Works Contract Management System: IR-WCMS

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Indian Railways are one of the largest Rail networks in the world with highly distributed assets. Around 25,000 Projects in addition to day-to-day maintenance works are in progress at any point of time on Indian Railways. These involve about one lakh of contracts to be handled as each Project involves multiple Contracts. Manual system of monitoring such a large number of Contracts is a stupendous task leaving scope for possible Intentional/ unintentional irregularities. Also, it suffers from lack of availability of information, the possibility of human error, missing timelines, etc.

All Contracts involve multiple stake-holders including working agencies, Government and PSUs, etc. It also involves a lot of paper work and physical file movement, which is a time taking process. At times, monitoring of important items such as the validity of date of completion, validity & adequacy of Bank Guarantee, reply to contractor's queries and correspondences get overlooked resulting in disputes and litigation. With the use of this Application, such issues will be addressed fairly and related problems will be avoided.

2. BACKGROUND

In Indian Railways, the 360 Degree e-enablement of Project Management has started at a fast pace. As of now, initiation, sanction, and monitoring of Projects are being done on IRPSM (Indian Railways Projects Sanctions & Management). Similarly, procurement of goods & services is being done on IREPS (Indian Railways E-Procurement System) and payments for the same are being done on IPAS (Integrated Payroll and Accounting System). All the above e-Applications are Enterprise-Wide e-enabled systems that have transformed Railways' working towards greater transparency. With the use of IR-WCMS, management of contracts after its award will prove to be a game-changer to ensure transparency and fairness.



With the objective to monitor and regulate the works properly after awarding of contracts during execution and its finalization, it is envisaged to bring contract management also on IT platform so as to have effective control on contracts and be in sync with the Hon'ble PM's Digital India Initiative. IR-WCMS covers all the activities involved in contract management after the issue of Letter of Acceptance (LoA) from IREPS. For every contract, roles can be dynamically assigned as per provisions in the Schedule of Powers. Log and trail for each activity are maintained by the system for keeping track of changes ensuring accountability at every stage.

3 IMPLEMENTATION

Works Contract Management System- IR-WCMS has been developed by a dedicated team of CRIS guided by NR and Railway Board. The Application is in line with the guidelines available in various relevant codes & manuals. It incorporates actual working practices in vogue over various Zonal Railways duly modified to suit IT environment. In place of conventional files and folders, IR-WCMS Application uses web-enabled IT platform and relational database technology. All the contract related data, processes, calculations, etc. with pre-checked logics have been in-built to minimize errors and expedite the process with the following features:

- (i) Dashboards for all stake-holders and users which provide status as well as alerts and notifications for pending items.
- (ii) IRPSM (existing), IREPS (existing), IR-WCMS (new) & IPAS (existing) Applications have been integrated on the basis of a Unique Work ID (UWID) generated for each sanctioned project at the time of sanction.
- (iii) Application adheres to the guidelines available in Railway's GCC, Model SOP, Engineering Code, Finance Code, etc.
- (iv) Digital signature has been used for authorization/authentication purposes by all the concerned officials.



4. IMPACT AND BENEFITS

IR-WCMS covers the following post-LOA (Letter of Acceptance) features which will eliminate manual interface having large positive implications on contract management in the following areas:

- PG (Performance Guarantee) and SD (Security Deposit) management
- Agreement generation and signing using digital signature
- E-MB and Billing (On Account & Final)
- Variation in a running Contract
- Non- Schedule Item (New item) approval
- Extension of Date of Completion(DoC)
- Release of Performance Guarantee (PG) & Security Deposit (SD)
- Zonal Contract Management
- Service Contract Management
- Correspondences of all types including as per GCC

A large number of cases of irregularities in the management of work-contracts leading to Vigilance angle are detected every year. The introduction of IT application like IR-WCMS for administering the management of work-contracts will help in the reduction of such cases to a great extent. A paradigm shift is expected to occur in the management of work-contracts wherein many common irregularities leading to malpractices will become redundant and vigilance cases arising out of such irregularities will be avoided.

Further, IR-WCMS will enhance transparency and efficiency in the public domain and ensure accountability of stakeholders which will facilitate the following benefits:

- Free access, through an online portal, to all stakeholders.
- Use of digital signature ensures secure transactions and eliminates forgery.
- Availability of all details of the contract in the public domain.
- Availability of digitally signed contract agreements in digital format at all times from anywhere with all terms and conditions.
- Recording of measurements using digital signature, fixing responsibility, and ensuring non-repudiation.
- Automatic Bills preparation from e-MB with transparency and efficiency.



- Check on billed quantity with respect to Agreement/ Variation quantity.
- Saving of significant amount of paper and help the Environment.
- Bills cannot be passed if DoC (Date of Completion) of work has expired.
- Avoiding duplication in payment i.e., once a bill is paid, then only the next bill is possible to be processed.
- Availability of all the documents with IPAS account related to Work's Contract to cross-check before bill payment.
- Trail of the changes with user details is maintained in IR-WCMS for ensuring accountability at every level.
- Portability of automatic data from IREPS and IPAS without human intervention avoiding chances of manipulation at any stage.

5 POTENTIAL FOR REPLICABILITY

IR-WCMS will regulate project completion, save time and cost over-run, improve efficiency and most importantly bring transparency in contract management. The chances of committing mistakes will reduce as several checks and alerts are an integral part of the application. It will help to build an organizational image in public domain. Contract management is common in most of the organizations and such type of secured software application would be useful for all. A similar system for basic framework and methodology may be adopted in other organizations as well keeping in view their own rules, regulations, code, and provisions, etc.

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INVENTORY MANAGEMENT





Bharat Dynamics Limited

Online Gate Pass System for Material Entry

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Online Material Entry Gate Pass System was introduced and implemented across units of the Company with effect from Dec-2020 which captures details like Purchase Order No., receipt of no. of items against PO, vehicle no., driver details, in-time, out-time, etc.

2. BACKGROUND

As per the earlier system, materials were to be brought inside the company premises with an Inter-departmental written/typed note addressed to Central Industrial Security Force (CISF) indicating Order no., Vehicle details, etc. CISF records the details of Delivery Challan (DC), Vehicle in & out time, checks the materials as per DC, and permits the vehicle to deliver the materials inside company premises.

During scrutiny of a civil work in one of the units of the company, it was observed by the vigilance wing that as per the records of the Cement Register maintained by the Contractor & Civil Engineering Department, 3120 Cement Bags were stated to be received at Workstation / Site vide 14 Delivery Challans and 3132 Cement Bags were stated to be consumed during the execution of the said Civil work. However, as per the records available with CISF, only 1120 cement bags were brought inside vide 10 Delivery Challans with entries in the CISF register. The Contractor has forged CISF entries of the Delivery challans and made a fraudulent claim.

From the above instance, it was noticed that checking/keeping track of the multiple delivery challans against purchase orders manually was leaving a scope for manipulation and forgery of documents causing loss to the organization.

In another case for the supply of Provisions for Canteen, it was observed that the vehicle carrying provisions was inside the company premises for more than 6 hours. From this



instance, it is noticed that there was no tracking mechanism on the movements of outside vehicles inside the company premises, which is dealing with sensitive items.

In order to overcome the shortcomings of the manual system mentioned above, an online material entry system was developed and implemented which captures details like Purchase Order No., receipt of no. of items against PO, vehicle no., driver details, in-time, out-time, etc. The online system is accessible to the user department/indenter and CISF and reduced the instances of manual intervention, easy retrieval of data, tracking of vehicle movement, and minimization of the scope of manipulating the documents.

3. IMPLEMENTATION

The online entry gate pass system was designed and developed by an in-house IT team with inputs from Corporate Commercial and CISF.

4. IMPACT AND BENEFIT

Following are the key benefits of the implementation:

- The online entry gate pass system brought in transparency and accountability in the system while dealing with incoming materials/ provisions to the premises as manual intervention is reduced. Thereby, the scope for corrupt manipulations is reduced.
- The system also facilitates check on the movement of the vehicle inside the company which otherwise had a potential threat, as BDL is a defence organization.
- With the implementation of online entry pass system, the quality of the entry system is improved which will be beneficial in the long run.

5. POTENTIAL FOR REPLICABILITY

The online entry gate pass system has got the potential for replication by other organizations as this system is developed to address issues of material/ provisions entry into company premises which is a routine but important aspect, daily.

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Garden Reach Ship Builders & Engineers Limited

Developing a Transaction Code for Slow Moving Items

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Garden Reach Shipbuilders and Engineers Ltd has taken initiative for effective monitoring of slow moving items in its inventory. It was noted that a huge inventory lies with GRSE and a considerable amount of manpower, space, and money is spent on its upkeep.

With a view to streamline procurement and reduce inventory, data on Slow Moving Items for the period 01.04.17 to 25.08.21 is under collection and examination. This has been taken up on a large scale basis covering all stores of GRSE.

2. Background

There is presently no system for defining and monitoring of slow moving items in GRSE. The criteria for determining the Slow Moving Item is yet to be ascertained. However, Non Moving Items have been defined as those which are lying with stores for more than four years.

It has been observed in the past that some materials get procured under urgency and later it is found that the same material has been lying in stores for months thereby defeating the purpose of urgency. Ship Ropes are damaged after lying in stores for a long time and not getting detected.

3. IMPLEMENTATION

Presently, the data is under collection and examination. On seeing the outcome of the examination SAP Team shall be advised to develop a suitable Transaction Code for the same so that all non-moving/ slow-moving items can be detected. Criteria for detecting the slow-moving items shall be decided in consultation with the management.



4. IMPACT AND BENEFITS

This method of detection shall have direct control on inventory, indenting, and purchase and will have the following advantages:

- Reducing inventory and used space at the various stores of GRSE.
- Reduction in damages and wastage of materials lying at stores for a long time.
- The risk of passing off unused materials as scrap will be minimised.
- Excess material lying at GRSE detected through this method shall be notified to other shipyards for optimal use of surplus stock.
- Such items shall be removed from the list of Stock Items.

5. POTENTIAL AND REPLICABILITY

Once implemented in GRSE the same can be implemented in other Defense sector PSUs.

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Hindustan Aeronautics Limited

Issuance of IT Consumables through Online Portal

1. BRIEF DESCRIPTION OF THE MEASURE/INITIATIVE

- HAL Bangalore has taken this initiative to avoid discrepancies in the issuance of Printer Cartridges, and for online verification of in-stock IT consumables. This measure was taken by introducing an online link in the divisional portal for the users to request Printer Cartridges and make stock items available in the online tab and procurement of cartridges to be made annually based on the request received from the user through online mode.
- The system improvement measure was undertaken in the quarter ending June, 2021 and has been completed.
- The initiative has already been introduced and is being used by all departments of RWR&DC Division.

2. BACKGROUND

- During a surprise Check of IT consumables as part of preventive vigilance tasks, discrepancies in stock items were noticed which had basically happened due to improper accounting and manual entries at different pages for the same item while issuing printer cartridges.
- Few items were procured long back but not utilized and also no expiry date was mentioned for HP cartridges.
- The Problems/ Vigilance risk encountered were:
 - Discrepancy of items issued and items in stock was observed.
 - Improper accounting of stock Items.
 - Discrepancies in Manual entries of items issued.
 - Improper Record Maintenance.



3. IMPLEMENTATION

Implementation of the Initiative was done with in-house facility with the help of IT Department. IT department has developed the portal to cover process flow from requisition of IT consumables till its approval online by the concerned authority. In addition, a register is maintained to take the acknowledgment from the recipient with the tracking number linking to the portal transaction.

The printer cartridges are procured once a year only unless there are some specific reasons. The quantities are derived based on forecasting, method considering previous year consumption, planned addition/ phasing out of specific models of printers, and minimum stock criteria. The implementation of the system made it easy for the Divisional IT Department to derive the annual requirement based on an analysis of the consumption pattern. Hence, wastage/expiry of cartridges can be avoided due to excess procurement.

4. IMPACT AND BENEFITS

- User department can request the IT consumables online.
- The pending stock items can be seen by all users before requesting the item.
- Easier way of processing the request and online approval.
- A track on items in stock can be verified.
- Vigilance risk was addressed as the system ensures issuance items in transparent online mode and accountability to verify the stock to initiate further procurement action.

5. POTENTIAL FOR REPLICABILITY

The system implemented in the Division can be adopted in other Divisions /Organizations for better traceability and accountability of IT consumables.

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Bharat Heavy Electricals Limited

Application for Enabling Utilisation of Surplus Material: Sadupayog

1. BRIEF DESCRIPTION OF THE MEASURE / INITIATIVE

Sadupayog, an online system developed in-house in BHEL for utilization of surplus & scrap materials was launched in June, 2021.

2. BACKGROUND

Material cost is a major determinant of the profitability of a manufacturing organization. Of late, due to various reasons, the material cost in BHEL has been showing a rising trend, which has led to a consequent negative impact on the profitability of our operations.

Many initiatives both at the company level as well as at unit levels have been taken up to contain material costs within acceptable limits. Efficient and timely utilization of surplus or scrap material is one such initiative.

With a view to bringing the process of identification and utilization of surplus & scrap materials on a digital platform, Corporate Digital Transformation (CDT) has developed an in-house online system '**Sadupayog**' with the active contribution of departments like Project Engineering Management (PEM), Power Sector sites and Units.

The system enables identification of surplus material available at BHEL units/ project sites that can be diverted for utilization wherever required. Thus, preventing unnecessary ordering of the same material. In brief, the system features are:

i. Categorization of materials

Standardized hierarchical category, sub-category & line items of each material class, and their resultant description are generic so that it can be understood by all concerned users.



ii. Material Directory

Based upon the categorization, the Material Directory of the surplus material lying at project sites/ units is created based on data inputs from respective project sites/ units.

iii. Diversion Process

The material identified as surplus can be diverted from source to destination as under:

- a. User can check the availability of the material at various sites/ units. The material can be searched site-wise as well as category-wise. Images and location coordinates of the material are enabled for complete identification.
- b. User request for diversion, once raised, sends an alert email message to the concerned project sites/ units for further action.
- c. User site forms a team after the diversion request is raised. The team is responsible for quality inspection, transportation, and receipt of materials
- d. After Quality Inspection of material by the user transportation is enabled by the system with the generation of gate passes and LR details.
- e. The receiving site/ unit confirms the receipt of the material in the system to complete the cycle of diversion.

iv. Dashboard for Management

Detailed dashboard with a number of reports is available.

3. IMPLEMENTATION

The system has been implemented centrally across the BHEL.

4. IMPACT & BENEFITS

- Availability, transparency, and integrity of the data are major benefits that can be derived from Sadupayog.
- The financial gain of the utilization of materials can be factored into the company's operational results.

5. POTENTIAL FOR REPLICABILITY

System can be used for all types of materials at any location and is therefore replicable by other verticals.

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HUMAN RESOURCE MANAGEMENT





Delhi Metro Rail Corporation Limited

Streamlining of the Departmental Examination System

1. BRIEF DESCRIPTION OF THE MEASURE/INITIATIVE

Departmental examination for promotion of the non-executive to the executive category is very sensitive and it is prone to unending complaints and grievances. There are allegations of favours to a selected lot, leakage of question papers, wrong evaluation of answer sheets, and misuse of the provision of obtaining 'qualifying marks' in the interview. All these anomalies were targeted to be removed through a well thought of 'System improvement' after perusing the entire examination process and analysing the trend of complaints.

2. BACKGROUND

The initiative was taken as a challenge when many complaints were received regarding leakage of question papers in the last few departmental examinations. It had been alleged that 100% of answers of one of the candidates were matching with the official model answer keys including the answers of wrong questions.

The detailed scrutiny of the cases indicated that there was some substance in the allegations. Although it couldn't be proved conclusively, yet the allegations of malpractices were not totally unfounded. Therefore, it was felt necessary to remove the anomalies to cleanse the system.

3. IMPLEMENTATION

On the basis of investigation, the following changes were suggested for implementation in the forthcoming examinations:

- i. **Computer Based Test (CBT):** DMRC switched over to the online process of examination through 'Computer Based Test' to reduce the human interface. The idea was to eliminate the ill-effects of the offline process.
- ii. **Grievance Management System:** The candidates were given an opportunity to vent-out their grievances through the 'Grievance Management' system in which their queries regarding question papers were resolved. All the grievances were replied online so that all candidates can see the response of the administration.



- iii. **Leakage of Question Paper:** The problem of selective 'leakage of question paper' to some selected candidates was tackled by resorting to the preparation of multiple question papers so that anyone can be offered on the day of examination in a random manner. It was also decided to prepare a Question Bank containing 2500 questions of each subject so that the questions can be selected by computer randomly. This eliminated the monopoly of the few officers entrusted with the preparation of the question papers.
- iv. **Rotation of officials:** The HR officials, responsible for conducting the examination, are proposed to be rotated.
- v. **Qualifying marks in the interview:** The criteria of prescribing 60% 'qualifying marks' in the interview was found to be the root cause of many complaints. It was alleged that the undesirable candidates were eliminated from the process just by awarding them less than the qualifying marks and they get out of the race in spite of getting very high marks in the written test.

Now, the practice of taking interviews has been done away with.

4. **IMPACT AND BENEFITS**

The above measures have created a positive impact on the prospective candidates to restore their faith in the system. As most of the possible anomalies have been addressed through the system improvements, the forthcoming departmental examinations will be conducted in a fair and transparent environment.

5. **POTENTIAL FOR REPLICABILITY**

These measures can be implemented in all the departmental examinations by DMRC as well as other departments and organizations.

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Goa Shipyard Limited

Improvement in Recruitment Exam Process

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Vigilance executives carried out a periodic Inspection on Recruitment /Selection procedure followed in GSL for the various posts notified vide GSL advertisement. The inspection was initiated in October 2020 and it got completed in January 2021. Based on the findings, the suggested systemic improvement was implemented by way of the Director's Circular to apply on all types of written tests for recruitment.

2. BACKGROUND

During the verification of the procedure, it was observed that the questions selected for the written test viz-a-viz the Question bank prepared by the Recruitment committee is not adequate.

Also, sample checks were carried out on both types of applications (i.e. found eligible & not found eligible) and it was observed that most of the applicants have submitted experience certificate without contact details of the employer on the letterhead. In such cases, verifying such certificates over the telephone is not possible. Further, it was observed that the maximum idle time /gap period allowed for the said posts is not clearly mentioned in the advertisement.

3. IMPLEMENTATION

The following Systemic improvement was suggested for implementation and accordingly, suitable directives have been issued by Director (CPP&BD) for compliance by all concerned.

- a) The common question bank needs to be increased to a minimum of five times the number of final questions to be selected for the written test.
- b) Experience certificate to be submitted by the candidates should be on the proper letter head of the organization with contact details. A declaration should be



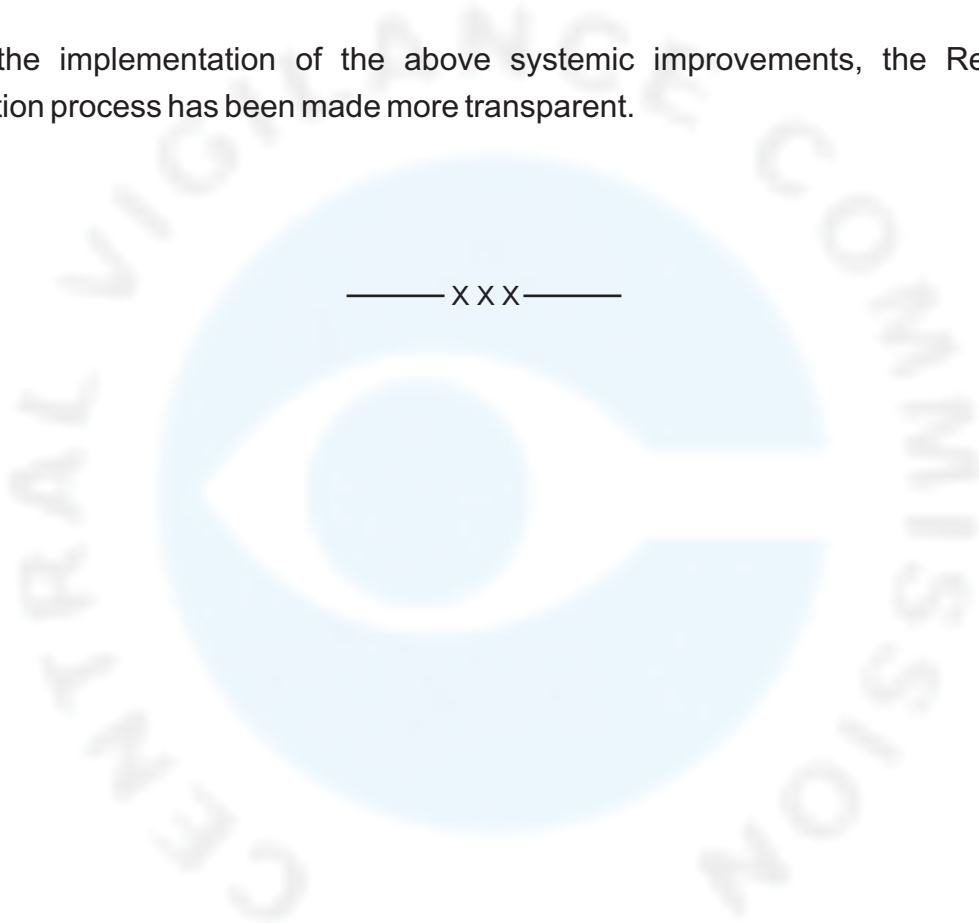
obtained from the candidates that their candidatures are subject to verification about the genuineness of the experience certificate at the discretion of the management.

- c) For skilled / specialized jobs, the Advertisement may specify the maximum idle time/ gap period permitted for applying for the said post.

4. **IMPACT AND BENEFITS**

With the implementation of the above systemic improvements, the Recruitment / Selection process has been made more transparent.

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Hindustan Aeronautics Limited

Performance Assessment through Activity Based Evaluation System

1. BRIEF DESCRIPTION OF THE MEASURE/INITIATIVE

HAL Bangalore has developed an activity-based evaluation system for assessing the performance of the workers. Parameters have been formulated for the categorization of Non-performers/Low performers in respect of In-direct workmen for different Job descriptions/Areas. This is used for decision making about the incentive payments for the workmen (Non-Executive Cadre employees) and to have a uniform procedure /practice in payment of incentive. The initiative was driven through observations made during a preventive vigilance action plan task and recommendations were taken up as systemic improvement measures.

2. BACKGROUND

As per the Company policy in vogue, Non-Performers/Low Performers in the Indirect Labour category will not be eligible for Incentive payment. For this purpose, the performance has to be evaluated by the concerned HODs.

There were no quantifying parameters laid down to assess the performance of indirect workmen as there is no record maintained for regular indiscipline and non-performance, etc.

It was noted that Attendance was only considered and the actual work done by the indirect workmen was not taken into consideration/assessed for payment of incentives.

3. IMPLEMENTATION

Activity-based evaluation system for assessing the performance of indirect workmen was implemented.

Quantifying parameters of the work done by them was defined for different Job descriptions/Areas in order to decide about the eligibility of incentive payments.



HODs to evaluate the performance based on the activity performed by them and forward a Report categorizing them as Non-performers/Low performers to decide about the incentive payment.

Also, an online system has been introduced for evaluation of the performance and submission of the Monthly Report.

4. IMPACT AND BENEFITS

- Efficient monitoring of performance and payment of incentive was put in place.
- Incentive payment is being paid on the basis of actual quantifiable work done by them. Accountability of the work carried out by the indirect workmen was ensured.
- Considering the above impacts & benefits, the vigilance risk was addressed to the extent of ensuring transparency in incentive payment based on the actual work and assessment parameters and discretionary authority has reduced.

5. POTENTIAL FOR REPLICABILITY

Applicable on case to case basis wherever engagement of indirect non-executive cadre employees is made and incentive payment is applicable for them.

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Mazagaon Dock Shipbuilders Limited

Certification System for Invoices of Medical Claims by Employees

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

- The medical claims of Employees for treatment in empanelled/non-empanelled Hospitals are reimbursed.
- The adopted measure deals with:
 - (i) The certification of invoices pertaining to Medical Bills of the Employees since their receipt till the payment.
 - (ii) Seeking expert opinion prior to issuing credit notes pertaining to grey areas viz. Cosmetic treatment including dental, treatment of Naturopathy genre, etc., to avoid excess/undue payment.

2. BACKGROUND

The existing system of certification of Non-Empanelled Hospital claims had following features:

- Receipt of bills from the Executive concerned in Medical Dept., Entry in Medical Dept. Register, forwarding the bills to Central Bill Receipt Section for entry into SAP system.
- Returning of bills by Central Bill Receipt Section to Medical dept. with SAP Invoice No mentioned on the bills.
- Medical dept. forwards the original bill along with supporting documents to HR Dept. for making invoice entries in SAP & creation of Annexure for Insurance Reimbursement.
- Annexure for Insurance Reimbursement is forwarded to Medical Dept. along with the original file. The file is forwarded to Medical Officer concerned for scrutiny.
- Medical Officer certifies the invoices and forwards the original bills along with supporting documents and Doctor's certificate to the Payroll Section for release of payment.
- In respect of Empanelled Hospitals, the only difference is that instead of receipt of the bill at Medical Dept., the hospitalization bills are acknowledged at central bill



receipt section and thereafter it is being received in Medical Department for further process as indicated above.

Problems/Vigilance Risks:

- In one of the cases, an Executive was hospitalized in an empanelled hospital without issuing a mandatory Admission Request Note (ARN).
- Expert opinion was not sought regarding Cosmetic Surgery treatment before issuing a credit note for hospitalization.
- Medical history/records of the dependents were not available with the office.
- The invoice entries were carried out by the Staff and generation of Annexure for Insurance Reimbursement was not authenticated by HR Executive before forwarding it to Medical Dept.
- Entry of supplementary invoices in SAP which were reflected in the main bill, resulting in certification of extra payment than the claimed amount.
- The basic check point of verification of claim amount versus certified amount was not carried out by Staff as well as the Executive.
- Staff responsible for entering the bill details in SAP was posted in HR Dept. rather than in Medical Dept. leading to delay in process of the claims and subsequent miscommunication between the departments.
- No cross-checks by Section Heads of Finance, HR & CMO on the bills certified by their subordinates certifying the bills.
- The lack of Standard Operating Procedure and critical checkpoints resulted in extra payment and the payment against the treatments not covered by the existing rules.

3. IMPLEMENTATION

In addition to the recovery of the extra payments made, the following improvements have been implemented.

- (a) A Standard Operating Procedure with necessary check points regarding certification of Medical Bills of the Empanelled as well as Non- Empanelled hospitals has been promulgated.
- (b) The responsibility and accountability at each stage have been defined for processing the claims.



- (c) The staff doing entries for medical bills in SAP has been shifted from HR to Medical Dept. thereby saving time for processing of the claims and clarification of doubts during the preparation of Annexure for Insurance Reimbursement.
- (d) Credit Notes are being issued only after receipt of the Admission Request Note (ARN) duly signed/stamped by the Panel Hospital authorities.
- (e) The Medical Officers are seeking expert opinion pertaining to the grey areas/specialized fields.
- (f) The list of the items which are non-payable in accordance with MDL Medical Attendant Rules is updated.
- (g) The Employees have been asked to maintain the record of Hospitalization, Consultation, Diagnostic Tests Reports & Medical History pertaining to themselves and their dependents and for sharing the same with the Medical authority of MDL as and when requested.

4. IMPACT AND BENEFITS

Implementing a Standard Operating Procedure for processing the medical claims against hospitalization has eliminated procedural lapses and communication gaps between HR and Medical Dept. Clearly defined accountability and responsibility in certifying the claims, has increased the accuracy and efficiency in claims processing.

5. POTENTIAL FOR REPLICABILITY

The initiative in defining Standard Operating Procedure for processing Reimbursement of Hospitalization bills of employees can be adopted by other organizations where such reimbursement schemes are implemented.

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Digitisation System of Issue of Food Coupons for Contractual Labourers

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Reward Point Management System software (RPMS) has been internally developed and implemented in NMDC, which aims to the digitalization of the food coupon issue/redeem system in labour deployment contracts.

Objectives:

1. To issue/redeem the currency value of food coupons in digital format.
2. To avoid manipulations in the manual issue/exchange process of coupons.
3. To simplify the coupon issue and redeem process and enhancing transparency.

Based on recommendations of the Vigilance department, Information Technology department of NMDC has developed in-house software.

Initially, RPMS has been implemented on a trial basis in limited sections. After the successful trial run, the same has been fully implemented and is running successfully from 01.02.2020 onwards.

2. BACKGROUND

Presently, as per the NMDC policy, the food coupons (per day Rs.100/-) are issued to the contract labours against their monthly attendance in the manpower supply contracts. They are also provided the facility for exchange of coupons against the purchase of food items either in Project Cooperative Stores or availing canteen services within time limits fixed by the Corporation.

Previously, based on the User department's request, the IR department used to issue the manually printed food coupon books to all the user departments. Afterwards, based on the attendance, the Engineer In-charges of the contracts issued the coupons by putting the seal & sign. All these details are provided to the labour in a card form along with a QR code. These coupons are being exchanged/redeemed for the purchase of food items in NMDC Cooperative Stores located in the Projects in a time-bound manner.



Problems/Vigilance risks that have been addressed:

- An instance has been noticed earlier that the coupon books were stolen from the custody of Engineer In-charge and were mis-utilised. Thereafter, FIR has been lodged in the Police Station by the Management.
- Due to non-availability of provision w.r.t. verifying the genuineness of the coupon and improper authorization at Co-Operative Store, the above incident occurred. Further, the finance department also has no resource for substantiating the misused coupons.
- Now, after the introduction of the above RPMS, the chances of manipulations / malpractices are eliminated.

3. IMPLEMENTATION

MS Visual Studio Dot-Net as programming technology, and HQL server as database are used as resources for this initiative of RPMS. All the Incharges of the contract works were provided Training on RPMS.

The C&IT department of NMDC has internally developed the software in house with available resources.

4. IMPACT AND BENEFITS

- Impact on other functions (like manpower, reduction in operation costs, revenue, customer interaction, any other function):

The introduction of the RPMS has resulted in simplification of the food coupon issue system and also helped in optimization of the manpower and time involved in the entire process.

It facilitates the users for an easier and hassle-free coupon redemption system and every transaction has been recorded. Consequently, accountability & transparency of the system has been increased.

- How and to what extent the prevailing business processes have been re-engineered as a result of the technology/process/measure:

The monthly issued/remaining reward points and the consumed/remaining man-days of the contract can be monitored on a real-time basis and also ensured the effective utilization of the system.



- How the Vigilance risk has been reduced:

The introduction of the RPMS has eliminated the possibilities for manipulations in the coupon issue/redeem system and is instrumental in promoting transparency.

5. POTENTIAL FOR REPLICABILITY

At NMDC, RPMS is currently implemented at Bailadila Iron Ore Mine, Bachel Complex. The performance is being monitored and the same will be extended to all Units. The RPMS can be easily replicated to PSUs/Central Govt. Organizations where such food coupons are provided to the labours/employees at a large scale, thereby the spillage can be reduced and accountability can be enhanced.

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NTPC Limited

Online Quarter Allotment Management System: NIKETAN

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

NTPC has townships within the premises of its plants located in many parts of the country. The houses (Quarters) in the NTPC townships are allotted to the eligible employees. NIKETAN is an IT-enabled online quarter management system of NTPC. It has been developed with an intention of maximum transparency and convenience to the users. It is an integrated and centralized system that covers the management of more than 43000 quarters spread across 44 projects & 71 townships of NTPC. The system covers all aspects of quarter management including inventory management, occupancy status, administrative notifications inviting allotment requests from employees, occupation and vacation orders, and a completely transparent system of quarter allotment. The system also provides administrative dashboards and several analytical reports.

The system was conceptualized in Mar 2021 and has been developed in-house within a record time of three months. This required the momentous task of tapping such a huge inventory and covering all townships managed by NTPC. The system was inaugurated on 31st May 2021 and is operational since then. Till date, more than 32 locations have completed quarter allotment cycles through this system itself.

Key features of NIKETAN include real-time dashboards, online notifications, auto emails/intimations, online quarter allotment request submission and processing, automated seniority lists as per House Allotment Rules & several utility reports. All Heads of Human Resources (HOHR's) have access to the system and the system is interlinked with existing SAP, so it does not need any separate login.

The scale of operation is a Pan-NTPC i.e. all townships and quarters are covered in the system as on date.

2. BACKGROUND

The earlier Quarter Management systems were varying from location to location depending on the local management and several methods and processes were being used across various plants of NTPC. While few selected locations were using local IT-enabled systems, others were working manually using paper records. As such there was neither any universal system nor any common format. There was also no mechanism to get quick access to data and it was a big task to manually map and consolidate the data. Mode of issuing notification and receiving employee requests was also mostly manual.



A need was felt to have a centralized system which could enhance transparency, increase processing speed, standardize and automate procedures, ensure policy compliance, and maintain a centralized repository pan NTPC. NIKETAN – the centralized quarter management system was developed in-house by HR-tech Wing of NTPC using internal resources.

3. IMPLEMENTATION

It is an online web application developed on Oracle APEX platform and Oracle database. The system is integrated with the SAP system at the back end for auto-update of employee records and their movements and transfers.

Training on the module has been provided to all township administrators and HR users. Further, a query-based FAQ has been made a part of the system to address the user issues in a user interactive mode.

4. IMPACT AND BENEFITS

NIKETAN has greatly enhanced the transparency and policy compliance of all processes of the quarter management system (house allotment) in NTPC. The system has led to manpower optimization as earlier many employees were involved in inventory maintenance, mapping, and consolidation of allotment requests, occupancy records, and reports. It has also led to a reduction in expenditure on the maintenance of local IT systems. Internal customer satisfaction has greatly improved. Features of auto communication between HR, Township Maintenance, and employees have led to faster exchange of information leading to speeding up of quarter readiness post allocation or vacation. Regular processes like issuance of notification, employee requests, allocation information, vacation report, etc. have been completely automated.

As a major benefit, employees who have been transferred to a new location can also view and submit their requests for allotment of the quarter at the new location in advance.

Employees can now view the status of quarters in the townships, vacant quarters, and occupancy lists online. All occupancies whether within NTPC or outside NTPC like external agencies etc. are now recorded and maintained in the system. There is standardization of processes pan NTPC. As such vigilance risk has been reduced to a great extent.

5. POTENTIAL FOR REPLICABILITY

NIKETAN is a system that is easily replicable and can be used for organizations which have townships/ departmental colonies where house allotment is done as per defined policy. This will help in making systems transparent, increasing user satisfaction and grievance redressal.

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Indian Railways

Human Resource Management System: HRMS

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Ministry of Railways is the largest employer in India with more than 13 lakh employees on the roll and around 15 lakh pensioners. Catering to the administrative needs and ensuring timely grant of privileges of these personnel is a humongous task and till recently was being processed through physical means necessitating large scale use of paper and maintenance of physical records in addition to frequent delays and inadvertent human errors. However, keeping up with the spirit of Digital India and to ensure complete transparency and time-bound accountability, **Human Resource Management System (HRMS)** has been introduced as a revolutionary project ushering in an era of digitization of all the HR related services to the employees and pensioners.

2. BACKGROUND

The HRMS project rests on the twin principles of ensuring transparency and ease of access and processing to the employee as well as administration. In a nutshell, the HRMS project aims to internalize all the existing digital platforms like NIVARAN, IPAS, AIMS, etc. and completely digitize all the Human Resource and Administrative aspects in Indian Railways like availing Privilege Pass/PTO, PF Loan applications, maintenance of Service and Leave Records, disciplinary Cases, promotions and transfers, final settlement on retirement, etc.

3. IMPLEMENTATION

HRMS is intended to be achieved through 22 inter-linked modules. Out of which, the following 8 modules have already been launched successfully and are in use for the last one year:

- **Employee Master and e-Service Record:** HR data of more than 12 lakh employees have been captured in HRMS.
- **E-passes and PTOs:** Up to August, 2021, more than 17.5 lakh e-Passes have been issued. Use of e-passes in place of physical passes will bring transparency as well as convenience for employees.
- **Settlement module:** More than 8500 settlement cases of retiring employees have been processed through HRMS electronically.
- **PF loans:** PF Applications can be submitted online without the need to visit office. The amount is credited directly into their bank accounts. Nearly 1.73 lakh PF cases have been processed through HRMS.



- **Office orders:** Nearly 40 thousand office orders have been issued through HRMS. The office orders are sent to the concerned employees electronically by HRMS system.

4. IMPACT AND BENEFITS

Ensuring complete transparency and accountability as the touchstone of the project, each module associated with the grant of privileges to the employee like e-Pass/PTO, PF Loan, etc. requires the employee to apply for the same online through the HRMS webpage or Mobile Application using a unique HRMS ID. The online application is immediately submitted to the concerned dealing branch which is then required to be processed in a time-bound manner. During the complete process, the employee can view the progress of his application and is also apprised of the same through SMS alerts when any action is taken on his application. Further, HRMS has also been integrated with IRCTC web portal so that tickets can be booked online through e-Pass without visiting the PRS counter. These features make HRMS highly accessible to the employees at all times and are especially significant to the pensioners who were previously required to visit the Zonal Office to get their pass issued. Now, they can avail the relevant services from their residence itself.

In addition to ensuring transparency and accountability, providing state-of-the-art cyber security is an outstanding feature of the HRMS. A two-level authentication system of Password and OTP has been provided to log into the HRMS account. Further, in order to submit sensitive applications or documents like PF Loan application or Pension Booklet, the system requires an additional OTP to be entered. On the administrative side, processing of such documents necessarily requires the use of a digital signature device and associated password to prevent unauthorized access and to ensure accountability.

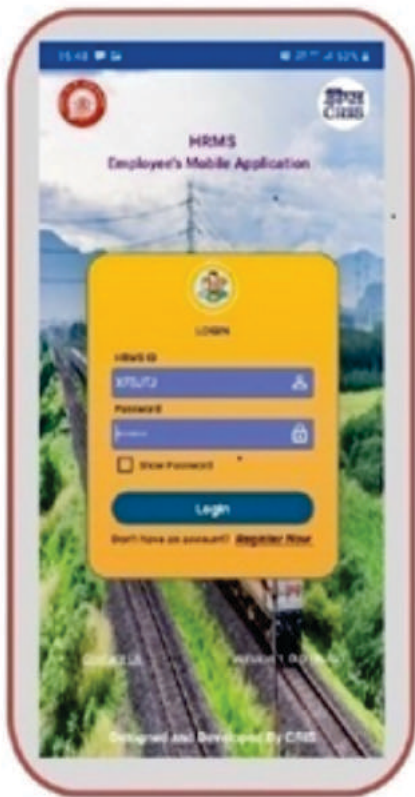
Benefits:-HRMS system is highly beneficial to the administration as the applications regarding routine matters are far easier and faster to process in digital mode than in physical mode as most of the entries are pre-filled from the Service records of employees and pensioners which were completely digitized in a record time by Railway administration braving the COVID-19 related restrictions. The entitlements of the employees and their present status are also integrated into the system and are updated automatically. The administrative branches are therefore not required to undertake all such verifications repeatedly and can swiftly process the employees' applications digitally. Further, the respective pass, PF withdrawal order, etc. are also issued digitally. This, on the one hand, has tremendously increased the efficiency of disposal of such applications and on the other hand, has reduced the Carbon footprint of Indian Railways by drastically reducing the number of pages required to process these applications. As a matter of fact, till August, 2021 more than 17 lakh Passes have been issued and around 1.75 lakh PF Advance cases have been processed through HRMS thus saving at least 40 lakh sheets of paper.

Education and training:- Considering the significance of HRMS project, Railway Board ensured that extensive training programs are organized across all the field units to acquaint the employees as well as administrative sections with the working modalities of

the system. The relevant training videos for each module have also been uploaded on internet for easy access. Further, HRMS help desks were set up in all the Divisions to provide assistance to employees in availing benefits through HRMS and learning the use of various modules. Pamphlets in English and regional languages were also distributed elucidating the procedure to use the HRMS facilities. It is due to these efforts that acceptance and use of HRMS modules have increased manifold since its launch.

5. POTENTIAL FOR REPLICABILITY

HRMS is a quantum shift in the administrative functioning of India's largest employer i.e. Indian Railways and is aimed at ushering an era of complete digitization and transformation in methods of HR Management to significantly improve staff satisfaction and at the same time enable the administration to swiftly and smoothly process the cases while enabling complete transparency and ease of access. Human Resource Management System (HRMS) is the backbone of any organization and may be suitably designed to suit organizational requirements.



 उत्तर रेलवे दिल्ली मंडल	<h3>HRMS Helpdesk (DLI-DIV.)</h3>
	Human Resource Management System
	वेबसाइट पर लॉग इन करें https://hrms.indianrail.gov.in/HRMS/
 <small>Facilities Management</small>	प्रदत्त सुविधाएं Facilities Provided
	एचआरएमएस के माध्यम से पास अथवा पी टी ओ जारी करना व वेबसाइट से आरक्षण करना E- Pass/PTO
	कर्मचारी स्वयं सेवा (इएसएस) मॉड्यूल के माध्यम से जानकारी में संशोधन ESS (Employee Self Service)
	सेटलमेंट बुकलेट भरना Filling up of Settlement Booklet
	पीएफ अथवा अग्रिम ऋण, हेतु आवेदन Apply for PF Advance & Loan
	कर्मचारी द्वारा स्वयं HRMS हेतु कम्प्यूटर उपयोग For HRMS employees can use available terminals
	E-counseling through Telephone or AnyDesk remote control app
	for any other queries employee may contact on Landline # 011-23365296 Whatsapp # 9717637650



IMPROVING INTERFACE WITH STAKE-HOLDERS (CUSTOMERS & VENDORS)





Bharat Earth Movers Limited

Vendor Payment Tracking System

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

BEML used to send payment details to vendors through mail to provide the information of payment made to the vendor w.r.t their bills. Usually, mail is sent to the vendor only after the release of payment. But before payment, no information is sent to the vendors about the status of their bills.

2. BACKGROUND

In the 'Vigilance Vendor Meet' several vendors complained that they are not able to get the information about the status of the bill for the material/services supplied/rendered .To overcome the issue faced by the vendors Vigilance has given a proposal to develop a system where any vendor can track the status of the bill online. As per the Vigilance recommendation, BEML IT team has developed Vendor Bill/Payment Tracking System. Through this system, BEML has provided a facility to the vendor to track the status of their bill i.e. Bill processed, Payment Released, Rejected, etc., by using their BEML e-tender login.

3. IMPLEMENTATION

As per the recommendation of Vigilance, BEML IT department has developed the Vendor Payment Tracking system. The same has been reviewed by Vigilance & Vendor Payment Tracking system is working effectively on BEML SRM (Supplier Relations Management) Portal. The salient features of the system are as below:

- The present system has been interlinked with SAP and SRM which gives real-time status without any interference of updating data by any executive.
- Vendor needs to log in with their User ID to the SRM Portal.
 - After clicking on 'Vendor Payment Tracking' menu, vendor needs to enter the Purchase Order number. By clicking on execute, it shows the current status of all the Invoices against the Purchase Order.
 - Invoice Number field is optional. Entering any particular Invoice number along with the Purchase Order number shows the current status of that particular Invoice. Invoices pertaining to the user id only can be seen.



4. IMPACT AND BENEFITS

- Real-time status update by the system.
- No separate registration is required, with e-tendering. The vendor can view the status.
- No intervention of executives is required for providing the information which leads to reduce the need for manpower.
- Increased transparency in bill processing.
- Vendors need not follow up with BEML regarding the status of their submitted bills.
- Since deduction details are provided, vendors are able to understand the reason for deduction and this enables them to take corrective action for future bills.

5. POTENTIAL FOR REPLICABILITY

- The system can be used in any organization where ERP is implemented for accounting, material, etc.
- Very useful for every organization as it makes it easier to track the bill status with real-time scenario. This will also reduce the requirement of manpower work and manual interventions.

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Bharat Electronics Limited

Enhanced Security and Encryption through Virtual Private Network using Secure Sockets Layer Protocol

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Bharat Electronics Ltd (BEL) has used state of the Art technology for secure hosting of its e mail services by using Secure Sockets Layer Virtual Private Network (SSL VPN). It is a Virtual Private Network (VPN) created using the Secure Sockets Layer (SSL) protocol to create a secure and encrypted connection over a less-secure network such as the Internet.

BEL is hosting email services that are accessed by its employees across all BEL Units, BEL CO, RO's, Sales offices, Overseas Offices, etc.

Apart from BEL offices, email applications are accessed by BEL users from outside BEL campus like from their house, cyber cafe or from customer premises, etc.

The usage of the internet apart from the offices has increased due to work from home in the pandemic. The secured data is being transmitted and received through the internet. In order to secure the data, SSL-VPN project was taken up during 2020-21 and it is operational since 01.01.2021.

Scale of operation- This system is being operational in all the nine BEL units, Regional Offices, and Overseas offices.

2. BACKGROUND

Due to continuously evolving cyber warfare programs developed and launched by various APT(Advanced Persistent Threat) groups across the Globe, 100% protection of Internet exposed IT Infrastructure is always under threat. Because of this very reason, MOD has advised having an air gap policy to secure critical IT infrastructure from Cyber Attacks.

Complaints were received regarding receipt of false/spam emails to deposit a certain amount as a security fee for interview /other charges through the BEL senior officials email ID's. This resulted in defaming the image of BEL.

As part of preventive vigilance, the initiative of implementation of SSL VPN with Two-factor authentication was taken up to strengthen the security of email access and to protect user credentials.



The e-mail applications accessed from outside BEL premises was always prone to a range of attacks such as:

- Key-Logging
- Brute Force & Dictionary
- Sniffing
- Interception
- Stored Browser Passwords
- Cross Site Scripting
- Man-in-the-Middle

By any one of these attack methods, the hacker will be able to steal the user password and can access the e-mail application.

3. IMPLEMENTATION

BEL implemented SSL VPN & Two-factor authentication solution to access BEL webmail (<https://mail.bel.co.in>) from outside BEL premises.

SSL VPN:

An SSL VPN is a type of virtual private network (VPN) that uses the Secure Sockets Layer (SSL) protocol -- or, more often, its successor, the Transport Layer Security (TLS) protocol -- in standard web browsers to provide secure, remote-access VPN capability. SSL VPN enables devices with an internet connection to establish a secure remote-access VPN connection with a web browser.

SSL VPNs enable users to access restricted network resources remotely via a secure and authenticated pathway by encrypting all network traffic and making it look as if the user is on the local network, regardless of geographic location.

The primary reason to use an SSL VPN product is to prevent unauthorized parties from eavesdropping on network communications including transmitted secure data and extracting or modifying sensitive data. SSL VPN systems offer secure and flexible options for enterprise employees, tele-commuters, and contractors to remotely connect to private enterprise networks.

Two-factor authentication

Software-based two-factor/multi-factor authentication solutions provide the next generation One-Time Passwords/PINs (OTPs) for secure access to computers, networks, and the Internet. This solution comprises of a system using device-less OTPs that provide users with a simple, more secure way to access information leveraging their existing passwords.



It delivers unparalleled flexibility through a range of solutions to address diverse and evolving authentication needs. Zero footprint aspect provides device-less, One-Time Password/PIN generation without any additional client-side hardware or software, and without any dependency on a cell phone like SMS text-based solutions. It also allows the creation of a layered approach to current authentication processes: stand alone, or used in conjunction with other factors.

The two-factor and multi-factor authentication solution has enabled the organization to comply with authentication mandates imposed by HIPAA, CJIS, FedRAMP, FERC, PCI, SOX, FFIEC, BASEL, and GDPR, among others.

4. IMPACT AND BENEFITS

- Browser-based secure remote access of BEL webmail (mail.bel.co.in)
- Secure mobile access for individual native and Web applications for supporting secure access from managed smart phones and tablets.
- High-performance 2048-bit SSL encryption.
- The device is integrated with a two-factor authentication scheme (onetime software-based token & existing LDAP password).
- This solution will avoid compromise of email user credentials from outside the BEL premises.
- Enhances endpoint security, by enabling device-based identification. Only registered devices will be able to use the active sync feature in mobile devices.
- It supports cross-platform range of operating systems and browsers.
- 5394 officers across BEL are registered and using this facility. No spam mails reported till date.

5. POTENTIAL FOR REPLICABILITY

This technology can be deployed across all other industries and service sectors which has potential risk in data handling with respect to cyber security attacks.

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Vendor Invoice Management System.

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Transparency alone can only be a starting point for addressing corruption. Therefore, to leverage technology, a Bill Tracking System and for making an online submission of bills by the contractors, a PERT chart was devised, based on other organizations implementations was devised by the Vigilance Department. It was forwarded to management on 28.12.2018 for implementation to improve transparency in the payment system, reduce manpower, and in turn reducing unnecessary delays.

2. BACKGROUND

CSL- was not having an online Payment Tracking system for Vendors.

3. IMPLEMENTATION

At first, a Payment Tracking System was introduced in CSL- for vendors in March, 2019. An improvised version of the same including suggestions from the Vigilance Department called the "Vendor Invoice Management" System was launched on 13.08.2020 which facilitates the vendors to upload their invoices and track the payment status online. It allows the supplier to log into the application by entering his CSL registered vendor code and an OTP that will be triggered to his registered mobile number. On logging in, the vendor can upload his invoice along with necessary supporting documents and CSL Order details against which the item was supplied. An invoice tracking number is generated against the entry which the Vendor can use to track the status of his invoice. The vendor can also re-upload the invoices if found incomplete and granted permission to do so and necessary intimations via email and SMS are also received in real-time by the vendor at the different stages of the invoice processing.

4. IMPACT AND BENEFITS

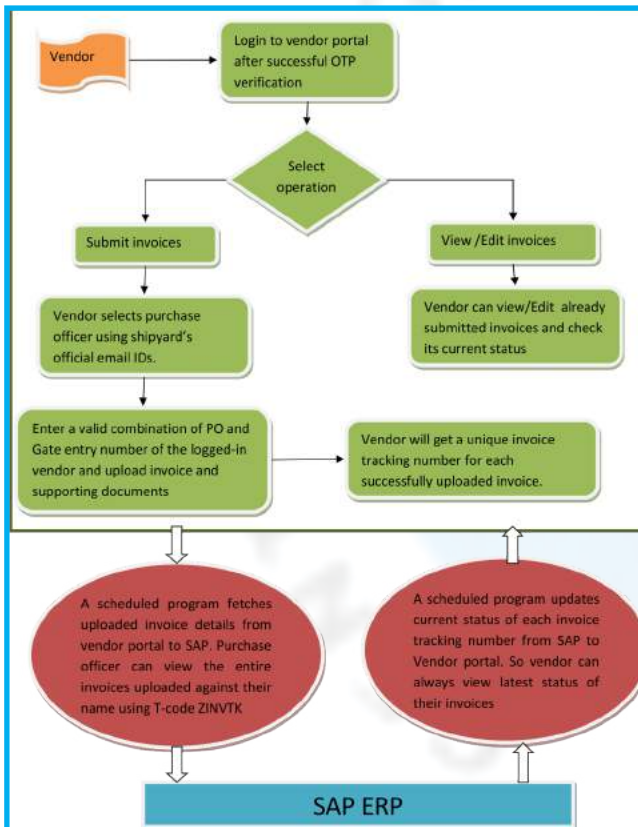
- Streamlining and automating the billing processes in CSL, reducing interactions between officers and vendors, and brought down opportunities for the development of corrupt networks.

- Increasing the transparency of transactions with public officials, making them auditable to deter corrupt behavior.
- Timely payment and real-time follow-up of their bills by the vendors.

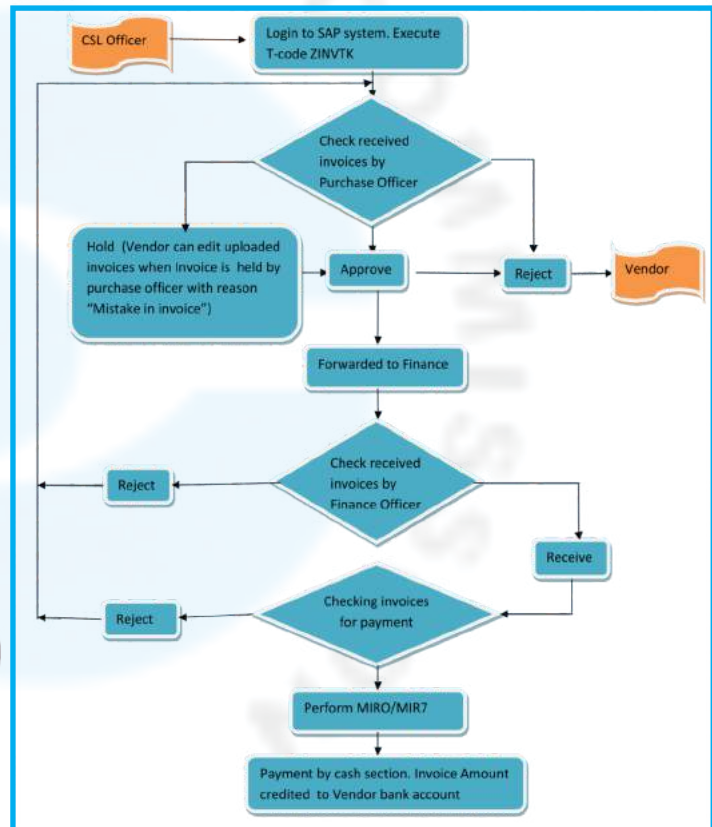
5. POTENTIAL FOR REPLICABILITY

The system is expected to highly optimize invoice management and fasten the invoice processing. The System can be adopted in all organizations and it helps to bring transparency, real-time monitoring and reduce human intervention and unnecessary delays.

Vendor Invoice Management Portal



SAP ERP



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Engineers India Limited

Online Rate Card Module through Media Publication Portal

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Rate Card module of Media Publication Portal (MPP) is an online portal for allocating Rate Card jobs to empanelled advertising agencies. The Portal was made operational on 08.12.2020. It has been implemented in Corporate Office of Engineers India Limited

2. BACKGROUND

Earlier requests from various departments for undertaking these activities were received through e-mails. The requests are now received through the portal. Routine communication/branding activities are undertaken as per rates fixed in the Rate Card with empanelled Advertising Agencies and the same is available to all the users/employee. Previously, allocation of jobs to agencies was done locally and maintained in excel format and monitoring of allocation of jobs was a difficult task. After implementation of this portal, work distribution among the various empanelled agencies rationalized.

3. IMPLEMENTATION

The portal has been developed by the IT Department (In-house) of the organization (i.e. Engineers India Limited).

4. IMPACT AND BENEFITS

The Rate Card module of MPP not only helps users to monitor the status of their present request but also enables them to refer to past requests made through the portal. It also enables the Administrator to check the quantum of jobs allocated to the advertising agencies within a date range. The same has brought transparency in the developed system.

Being a web-based system, the portal enables monitoring, allocation, and record-keeping of jobs in a convenient manner (Online). The same has led to a reduction in man-hour efforts and the possibility of human error. Further, MPP ensures near-equal allocation of value and magnitude of work(s) to all empanelled agencies at any time.

5. POTENTIAL FOR REPLICABILITY

This has the potential for implementation/replication in other organizations as well.

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Hindustan Petroleum Corporation Limited

HP Buddy: Mobile Application for Complete Indent Tracking for Dealers

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

This system is developed to provide all the information regarding various interaction points of retail outlet dealers with HPCL loading location at a single place i.e. a mobile application “HP Buddy”.

2. BACKGROUND

Previously, the retail outlet dealers used to contact the supply location for various details regarding their indent, tank truck loading status, and other information related to the supply of product. This manual information collection and dissemination is used to create various miscommunications and in turn cause dissatisfaction and grievance among the stakeholders. Thus, in order to bring transparency in the process and to make all the relevant information regarding the supply of products available to the customer, “HP Buddy” mobile application was developed.

3. IMPLEMENTATION

“HP Buddy” provides a gamut of information to the retail outlet dealership viz. Complete Indent Tracking from placement to dispatch, Account dashboard, Live Tracking of tank trucks from dispatch location to retail outlet, Complaint Management, Sales & Stock analysis, Retail outlet tank ullage through Automation system, other information from Retail Outlet Automation System, etc. The system also provides the retail outlet dealers various transactional facilities such as Indent placement /modification and cancellation, Shortage booking, Online delivery confirmation, etc.

This system had brought a significant amount of accountability, traceability, and transparency in the entire process of supplying products to retail outlets and the customers are now able to monitor their business from anywhere without any hassle. This has also helped reduce grievances and chances of deviation from the process.



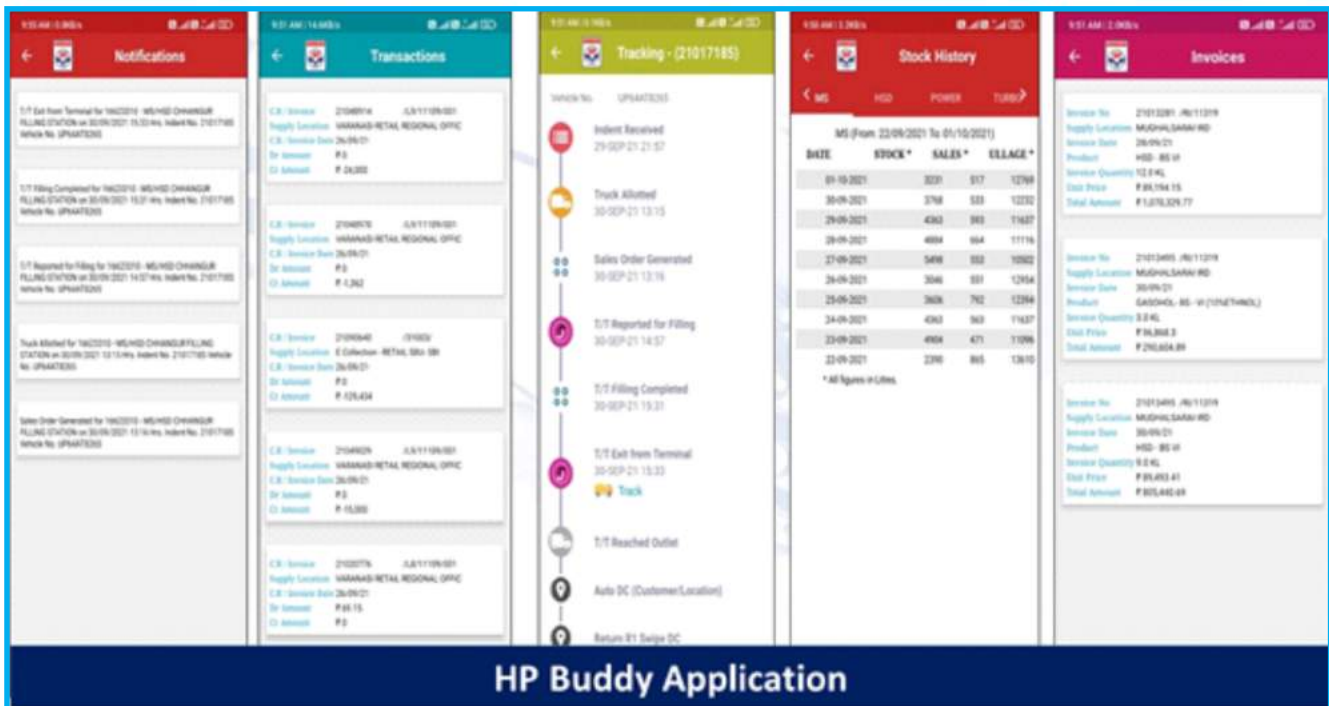
4. IMPACT AND BENEFITS

Following are the key benefits of the application:

- Availability of all information at a single place.
- Increased transparency.
- Enhanced customer experience.

5. POTENTIAL FOR REPLICABILITY

It can be replicated in all organizations dealing with a network of Dealers/Suppliers and complex supply chain management systems.



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Online System for Reconstitution of Retail Outlet Dealers

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE:

Reconstitution of Retail Outlets & SKO agencies is a complex business process which requires a complex procedure to be followed and is also prone to legal complexities. Initially in 2019, an online reconstitution module was developed for existing RO dealers. Subsequently, in February' 2020 the online module was also enabled for SKO-LDO Dealers and LOI holders as well for reconstitution of their Dealerships/ LOIs.

Further, the process improvement/facilitation was introduced during the lockdown period looking into the difficulty faced in the field offices and dealers regarding physical meetings wherein Video Conferencing (VC) as an alternative method of conducting reconstitution meetings was introduced and guidelines issued. The initiative is a pan-India initiative covering a network of 32480 Retail Outlets & 3871 SKO Agencies. Possibilities to replicate it for LPG distributors and other channel partners of Indian Oil including petrochemicals are being explored.

2. BACKGROUND:

Earlier, the reconstitution application and processing were being done in manual mode. There were instances of lapses in the monitoring of the pendency of reconstitution proposals. Manual registers were maintained for records and issuing docket numbers, etc. for requests/ applications for reconstitution. Meetings were held with all the proprietor/ partner(s) including legal heirs of deceased proprietor / partner(s) if any, and with incoming proprietor / partner(s) by the Divisional Retail Sales Head (DRSH) as an integral part of the reconstitution process for authenticating the submission of the proposal by the signatories / legal heir(s) of the signatories of the Dealership Agreement.



3. PROBLEMS/ VIGILANCE RISKS ADDRESSED

As reconstitution proposals can now only be submitted online and docket nos. of such proposals get created with date & time through the system, monitoring of pendency of proposals is being done now through the portal itself. The portal has also been enabled to send periodic alerts regarding pendency of action so that the monitoring is more effective, and reminders are received by concerned officers for pending action at their end. Dealers can also check the status of their cases.

While, RO/SKO-LDO Dealers can now apply for reconstitution through an online process available under e-Ledger, LOI holders of RO/SKO-LDO dealerships can login to the web portal <https://spandan.indianoil.co.in/mdho/> and apply for reconstitution of their LOI. Both Dealers & LOI holders are now required to submit reconstitution proposals only on the online portal including uploading all relevant documents. Based on the online proposal submitted by the dealer/ LOI holder, the concerned Divisional Office generates e-proposal through Retail Dashboard (RDB), and approval is given by competent authority as per guidelines and the same can be processed through RDB by the Field Officer/ Divisional Office/ State Office.

Implementation of the guidelines regarding conducting virtual meetings not only aided in continuing with the reconstitution process by maintaining Covid protocols but also helped in conducting meetings of such existing proprietor/ partner(s) who are ailing and are not able to travel to Divisional Offices for attending the physical meetings. This has considerably increased the ease of doing business with our channel partners.

4. IMPACT & BENEFITS

Following are the key benefits of the implementation:

- Increased transparency being completely an online system.
- Simplified process leading to efficiency and cut down on red tape.
- Ease of doing business for the channel partners as most part of the application is menu-driven.
- Avoiding delay/ holding up of reconstitution process due to pandemic lockdowns.
- Better monitoring with the generation of alerts to concerned officers and approving authorities.



- Reduction in manual efforts.
- Reduction in health risks for all the participants due to provision of meeting through Virtual Mode (Video Conferencing).
- Faceless process leading to enhanced probity in the system.

5. POTENTIAL OF REPLICABILITY

Can be replicated in other similar areas across organizations.

The screenshot displays the 'Channel Partner's Portal' interface. At the top, there is a navigation bar with 'Home' and 'Account Information' links. The main heading is 'INSTRUCTIONS FOR RECONSTITUTION OF COMMISSIONED DEALERSHIP'. The text below provides detailed instructions, including requirements for application processing fees (Rs.25,000/-), the need for documentary confirmation and legal compliance, and the requirement for the local guardian to sign if a family member is a minor. A blue 'I Agree' button is visible at the bottom of the instruction text. The footer of the portal includes the text 'Connect with IndianOil' and social media icons for Facebook, YouTube, Twitter, and LinkedIn.



Channel Partner's Portal

[Home](#)

Customer Attendant e-Proposal Reports Annual Return Inspection Reports Safety ATR Work Permit Important

84Q Retail Outlet Maintenance

दवाई भी कड़ाई भी

कोविड-19 का टीका लगवाने के लिए
www.cowin.gov.in या Aarogya Setu
पर रजिस्टर करें

Wear Your Mask Properly

Wash Your Hands Regularly

Maintain Social Distancing

MS Sales History

Previous Year MS Sale Current Year MS Sale

Month	Previous Year MS Sale (In LK)	Current Year MS Sale (In LK)
APR 2021	5	28
MAY 2021	20	10
JUN 2021	37	30
JUL 2021	35	35
AUG 2021	33	30
SEP 2021	40	-

Month	MS Sale (In LK)
APR 2021	65
APR 2021	105

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NTPC Limited

Portal for Vendor Payment and Tracking of Clearances

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Payment to contractors and vendors is an area where there is a lot of scope for improvement using IT-enabled tools. Timely payment to vendors in a transparent manner with real-time monitoring of the payment status can go a long way in ensuring transparency and reducing discretion and the scope of corruption. NTPC has taken up a digital initiative for the online submission of digitally signed invoices by its vendors and associates. This initiative is a part of Project PRADIP (PRoActive and Digital Initiative to become Paperless) and is termed as Vendor Payment Portal. The first Phase of this Vendor payment Portal was launched on 15.10.2019 with the view that the vendors can see their payment status against Purchase Order. It was fully launched on 22.01.2020 with the complete digitalization of the payment process starting from submission of the invoice by vendors to crediting of payment in their bank accounts.

2. BACKGROUND

Earlier vendors used to submit their bills to the Engineer in Charge (EIC) of the project in physical form and EIC examined them for completeness of documents before forwarding it to Human Resources (HR) for checking statutory compliances and then the bills were forwarded to finance for processing of payment. Vendors were unaware of the status of their bill payment and they would have to move from table to table to know it. The need was felt to digitize the payment process so as to make it more transparent and keeping the vendors apprised about their bill status. Reduction in time for processing of bills was also a key objective.

3. IMPLEMENTATION

NTPC Vendor payment portal is an in-house developed portal by NTPC PRADIP team. With PRADIP and its Vendor Payment Portal, Vendors can now submit their invoices online to NTPC from anywhere across the globe. As soon as the digitized invoice is uploaded, it kicks starts the real-time payment status tracking. The details of payment made etc. can be seen from the web portal. In addition, a mobile app can also be downloaded from where the vendor can track the status of bill processing as well as the details of the payment made. This is available free of cost to all vendors who have to log in using their vendor id.



Once uploaded, the invoice is routed to the concern EIC directly. An email is also sent at every stage (Acceptance/ Rejection/ Clarification) at the registered email id of vendors so that the vendor can upload the required pending documents for payments. Once payment is done, a system-generated email goes to the vendor with a complete breakup of payments details. This has ensured both faceless & paperless modes of processing of vendor payments starting from receipt of invoice to crediting payment to their bank account. Video/Pdf Help manual/tutorial for submitting the invoice online has also been provided on the portal. A Toll-Free Number 1800-180-5970 with a dedicated Helpdesk team to help the associates in submitting their invoices and other issues related to invoice submission has also been provided.

4. **IMPACT AND BENEFITS**

This digital initiative has benefited all the stakeholders:

- NTPC employees – receiving digitally submitted invoices promptly.
- Vendors & Associates- Vendors and Associates of NTPC are benefitted from this with timely submission of invoice without any time delay directly to EIC on click of a button.

This has turned into a great boon & help to vendors during the Covid-19 pandemic as they have raised bills online without the need for physical movement of both Invoices and supporting documents resulting in timely payments.

Transparency & Accountability has been one of the biggest advantages brought by the Vendor Payment Portal. The exact status of the processing of file is available at any point of time to all required employees, which made file tracing a lot simpler and easier. The files can be received within seconds which previously used to take several days. Simplification and standardization of processes and elimination of delay points and reduction in paperwork have been other advantages. Real-time Tracking of Invoices resulting in Elimination of Delay is the defining feature of the Vendor Payment Portal.

The real-time payment status of invoices is monitored at various levels through dashboards. Several Internal MIS & dashboards are also available for Payment Lead Time analysis and real-time monitoring of Payments at different stages. A separate MSME Dashboard for real-time monitoring of MSME Vendor / Associate related payments has also been created and made available.

5. **POTENTIAL FOR REPLICABILITY**

Launched across all NTPC projects. It is easily replicable in similar organizations where there are many vendors/ contractors for various works and payment is processed based on their invoices.

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Oil and Natural Gas Corporation Limited

Vendor Invoice Management System

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

SAP VIM (Vendor Invoice Management), an end-to-end scan-to-post invoicing automation system is being implemented in ONGC. Its main feature is OCR, which reads and captures data from the vendor invoices automatically and submits them for further processing in our system to the desired location/concerned user in ONGC. The system is expected to highly optimize the invoices management at ONGC and fasten their processing in the future.

Salient features of VIMS

There are three input channels for invoices to ONGC's VIM system integrated with SAP:

- a. VIMS Portal (<https://vims.ongc.co.in/>) Vendors to continue to raise the invoices and supporting documents as per the existing process.
- b. EMAIL channel: A designated email ID ap_invoices@ongc.co.in is provided for sending the invoices and supporting documents.
- c. Submission in Physical form at IMS (Invoice Monitoring System) Desk for scanning: The existing IMS desks at all locations are equipped with scanners to scan the invoices and supporting documents.

The order of priority for the said input channels would be "VIM portal" > "Email" > "Scanner at IMS Desk". The vendor has to use only one input channel for uploading/submitted the particular invoice to avoid the rejection of duplicate invoices. Only one mail per invoice needs to be sent by the vendor and wait for Registration ID which will come to the vendor by return mail after ingestion.

Generation of a DP Number (Document Processing Number) and will be informed to the vendor for tracking purpose through registered E-mail ID against Vendor Code in ONGC.

As soon as an invoice is ingested, the VIM system reads the invoices through OCR and extracts the relevant data without any human intervention, such as vendor code, GSTIN, invoice date, invoice amount, tax details, PO number, etc.



Data validation by a designated person in ONGC, if it has been correctly read and stored by OCR system and then VIM process will start for payment. The validator also trains the system to read missing data and enable machine learning (ML) capability for future OCR.

ONGC has rolled out VIM System at Mumbai (including Uran, Panvel, and Nhava) on a pilot basis w.e.f. 09.04.2021, the system was rolled out at Hazira, Goa, and Delhi on 09.07.2021 and Chennai, Karaikkal, Rajahmundry & Kakinada on 09.08.2021. It is being eventually rolled out at all locations soon.

2. BACKGROUND

Before implementing SAP-OT-VIMS, ONGC developed a custom solution in SAP, called “Invoice Monitoring System” (IMS) and with time it has evolved to an acceptable level. However, there were the following shortcomings in the IMS system:

- The invoices were required in physical form and were moved back and forth between departments for verification/approval. There was no workflow involved.
- It was not possible to pinpoint with whom invoices were pending at any stage.
- Digitization of invoice and the supporting document was missing.

3. IMPLEMENTATION

The system is based on SAP–Open Text solution delivered as a new initiative under HANA implementation project with built-in work flow for complete digitization and paperless. Work flow gets determined based on a set of business rules applied sequentially, so that back and forth movement of invoices are minimised for processing. It is being implemented by SAP India and ONGC ICE Core team. Thousands of vendors and ONGC users have been trained using virtual meetings. Training videos have been recorded and made available to respective stake-holders at a common place for easy access. Lots of information dissemination have been done so that change management is smooth and acceptable to all stake-holders. Details available at: <https://www.ongcindia.com/wps/wcm/connect/en/media/topstories/implementation-vendor-invoice-management-ongc>

In addition to implementing VIMS as brought out above, segregation of responsibility for review of documents to enable timely payment to contractors/suppliers/service providers has also been implemented vide introducing Amendment in IMM Manual 2015 vide detailed circular dated 20.08.2021 to further streamline the payment process by defining the responsibility of different departments in reviewing payment related documents which shall complement VIMS in timely payments to vendors.

4. IMPACT AND BENEFITS

This implementation will pave the way for location agnostic processing of business operations.



This will further provide an opportunity for centralization and sharing of resources and will help ONGC to shift the resource pool to the Shared Service concept.

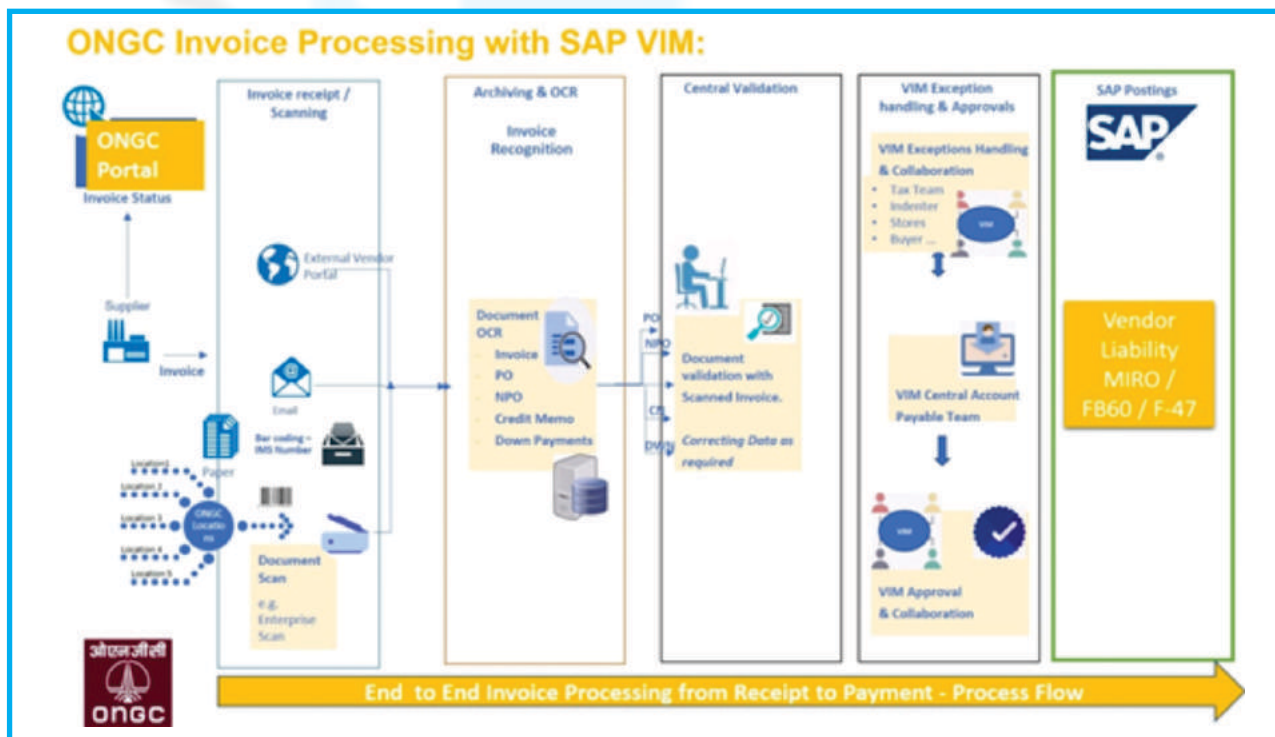
Challenge of Record keeping of accounting documents and supporting documents will get minimized with this digitization process due to the elimination of physical copies entirely and fetching old data after years together will be just a click away.

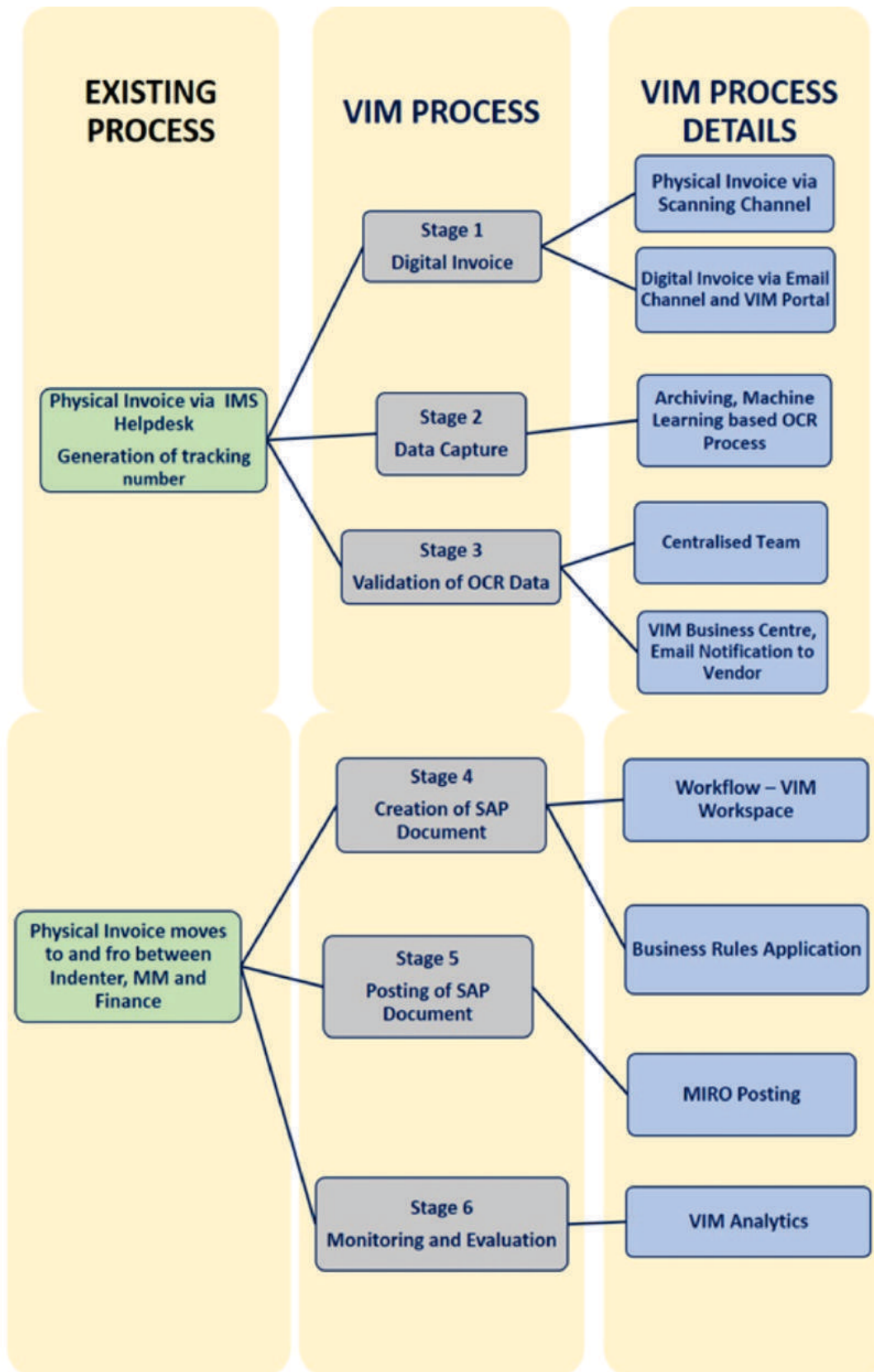
Software also connects all SAP metadata to invoice documents and audit trail and work process history is adequately maintained.

Introduction of Responsibility matrix defining the responsibility of different departments in reviewing payment related documents enhances role clarity, avoids overlapping & will help in arresting any delays leading to better efficiency in the payment process to contractors/suppliers/service providers & shall complement VIMS in timely payments to vendors.

5. POTENTIAL FOR REPLICABILITY

VIMS is delivered as a standard “add-on” for the existing SAP systems. The existing SAP system can easily adapt to SAP – VIMS.





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Rashtriya Ispat Nigam Limited

Online System for Retail Sale of RINL Products: e-Suvidha

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

An online platform has been provided in intranet to all officers (nearly 6000) to submit Annual Property Return (APR). All officers have to submit APR as of 31st Dec for the calendar year. The final testing of the online APR submission system was completed in Nov 2020 and the same is in operation from Dec 2020 with all reporting and analysis modules. All officers of RINL used this online platform to submit their APRs for the year 2020.

2. BACKGROUND

As per the **Conduct Discipline and Appeal** Rules (CDA rules) of RINL, all employees have to submit APRs every year. In that APR, the details of Immovable assets against the name of the employee and dependents are to be declared.

Hard copies of APRs (8 Pages) were submitted to the Vigilance department. Collection of formats and storing is time consuming and laborious job. These physical formats were being filed in APR file of respective employees and all the files are maintained in a record room. After receiving the APRs, the submission status was recorded manually before filing the same in respective files.

For processing vigilance clearance request, submission of APRs is mandatory. APR status used to be checked by verifying physical files manually before processing vigilance clearance of the employee. The verification process involves manual checking and preparation of a report based on the information available in the submitted papers. Interpretation of information was prone to error and delay in completing the process. The initiative taken to implement online submission of APRs and availability of software application for scrutiny and generation of reports has enabled the organization to overcome above stated difficulties.

3. IMPLEMENTATION

IT department of RINL developed an Online APR system where data is stored in existing Oracle database. The system is further integrated with the employee login system where



all officers were having access to their personal information and resources. This has been developed in-house with the help of IT & ERP department without relying on or adding any external hardware or software.

4. **IMPACT AND BENEFITS**

Following are the key benefits of the application:

- Since 1st Jan 2021 the daily status of submission was monitored on real-time basis. This data was made available to respective department heads to further follow up and to encourage timely submission of APRs. Due to the availability of real-time submission status of each employee and continuous follow-up, 99.8% submission of APRs has been achieved.
- Due to this online module, the APR status of the employee is now available on real-time basis for processing vigilance clearance quickly.
- Optimum utilization of time and manpower.
- Elimination of human error and mishandling/ loss of data.
- Checking process has become efficient and fast. The process of online scrutinizing is further improved and integrated by adding a report module where the vigilance officer submits his/her report in the system. This helps in maintaining the integrity of scrutinizing process.
- Different queries can be applied to generate exception reports to filter and flag reports which are to be taken up for scrutiny on priority.
- Reports submission to MoS: Now, the reports are generated through the system. Further, it has been taken up with HR and IT department to implement online submission of acquisition and disposal forms and statement of liabilities, other assets, etc.
- Presently, development of an online vigilance clearance system in ERP is in progress. With the completion of the online APR submission module, the status of APR submission, which is an input for vigilance clearance is available in the system. This input is being captured in ERP for processing online vigilance clearance.

5. **POTENTIAL FOR REPLICABILITY**

Based on the available hardware & software, the same application and process can be implemented in any organization.

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Online Bill Tracking System for Service Contracts

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Bills for service contracts are submitted by the contractor to the executing authority for the processing of payment. Between submissions of bills at the office of executing authority to final payment to the contractor, a number of steps are involved.

The objective of the project was to capture all the milestones in the life cycle of a bill from submission of bills at the office of Head of Department to payment to the vendor in a centralized computer system.

The study was undertaken in April-May 2019 and a report was submitted in November 2019 after elaborate discussion with various departments. A team was then deputed for the implementation of the recommendations of the report. In line with the recommendation, in-house team was assigned the job to develop an online system. After software development, testing, and imparting training to vendors as well as own employees, the Bill Tracking System went live on 10.12.2020. Implementation is done on large scale covering all departments of the Durgapur Steel Plant.

2. BACKGROUND

Before implementation of the project, most of the records like date of submission of the bill at the department office, date of forwarding the bills to EA, date of sending of bills to finance were kept in the hard copy / register. Any query of the vendor, in the event of a discrepancy, used to be communicated by using personal mail or over the phone.

After implementation of the project, all the milestone in the lifecycle of the bill has become completely online and status of the bills are available at the click of a button. Delay in payments, which is a concern for vigilance as well as administration, can be monitored and corrective action can be taken immediately. Chances of omission shall also be minimized by the processing agencies. Correspondences to vendors for the incompleteness of bills are also captured in the system.

Delay in payments may have a vigilance angle and hence all delays are potential complaints. By implementing this system, all such potential complaints can be avoided and due to the availability of online status chances of delay shall be greatly minimized and the bill tracking process will become person-independent.



3. IMPLEMENTATION

Customized development has been done at ERP- SAP platform for back-end processing and front-end i.e. vendor interface development has been carried out at SRM. The complete package has been developed in-house, 3-4 sessions of training (1 hour each) for DSP employees and 2 training sessions for vendors were carried out. Training has also been imparted in virtual mode (online) during the recent past.

4. IMPACT AND BENEFITS

- Vendor gets an instant tracking number without physically visiting to the office of the executing authority.
- Vendor is able to view the status of bills on SRM website (through the internet). There is no need for keeping the registration of bills in hard copy / register.
- In the event of non-acknowledgement of bills within 7 days by DSP, auto e-mail alert to the vendor to enable them for necessary action.
- Monitoring of bills along with lead time for processing the bill is available in the system. This will enable DSP to take necessary corrective action so that the delay does not translate into a complaint.
- System has become more transparent and chances of omission have practically become zero thereby reduction in risk from the vigilance perspective.

Activity	Before Implementation	After implementation
Unique ID for all service bills at the point of bill submission	Not available	Generated by the vendor themselves and tracking number is instantly available to vendor.
Bill submission at the office of Head of Department	Record kept in hard copy	Record available Online
Marking of bills to EA	Not available / available in hard copy	Record available Online
Communication to Vendors in case of discrepancy	Using individual mail / over phone	Record available line
Service Entry is raised for checked Bills	Online	Online
Bill is forwarded to Finance	Records kept in hard copy	Record available Online
Receipt of Bills by Finance	Online	Online
Payment voucher generation	Online	Online
Transfer of payment to Vendor	Online	Online

5. POTENTIAL FOR REPLICABILITY

This module can act as a prototype for tracking and monitoring any type of bill. This bill tracking module is running trouble-free since its implementation in December 2020.

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Bharat Heavy Electricals Limited

Online Supplier/Contractor Grievance Portal : Suvidha

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Suvidha - Supplier/ Contractor Grievance portal, introduced at a large scale in BHEL in October, 2020

2. BACKGROUND

BHEL Units/ Regions/ Divisions receive complaints from suppliers/ contractors on concerns related to tenders, delay in payments, material rejections, registration delays etc. Unresolved complaints reflect as grievances and are to be addressed in a timely manner.

Lately, many suppliers/ contractors have been raising disputes related to contractual/ non-contractual matters by directly approaching BHEL. Though efforts were being put in so as to resolve all such grievances, however, a specific portal was required to address and monitor such supplier concerns in an organized manner.

3. IMPLEMENTATION

An online centralized pan BHEL portal named 'Suvidha' has been developed wherein any registered/ unregistered supplier or contractor can lodge a dispute and it gets marked to the concerned BHEL Unit/ Region/ Division. The concerned Nodal Officer (MM Head) of the Unit/ Region/ Division can login and address the grievance online.

4. IMPACT AND BENEFITS

To facilitate Suppliers/ Contractors for:

- Lodging grievances online.
- Viewing status and keeping track of the grievance(s) lodged.

To facilitate Nodal Officer of the Unit for:

- Disposal of the grievance online by way of feeding in the comments/ uploading of supporting documents, if any.
- Monitoring of pending grievances at the Unit level.



- Copy of grievance also gets marked to Independent External Monitors (IEMs) in case the supplier/ contractor selects that the grievance pertains to a contract covered under Integrity Pact (IP).
- Dashboard for viewing past grievances, types of grievances, and their resolutions.
- Efficient & Speedy redressal of supplier/ contractor grievances.
- Access to Corporate Office for monitoring purposes.
- Till 08.09.2021, 94 numbers of grievances have been received through the System.

5. POTENTIAL FOR REPLICABILITY

The online system is applicable for addressing grievances of vendors in all the functional areas of the Company.



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Indian Railways

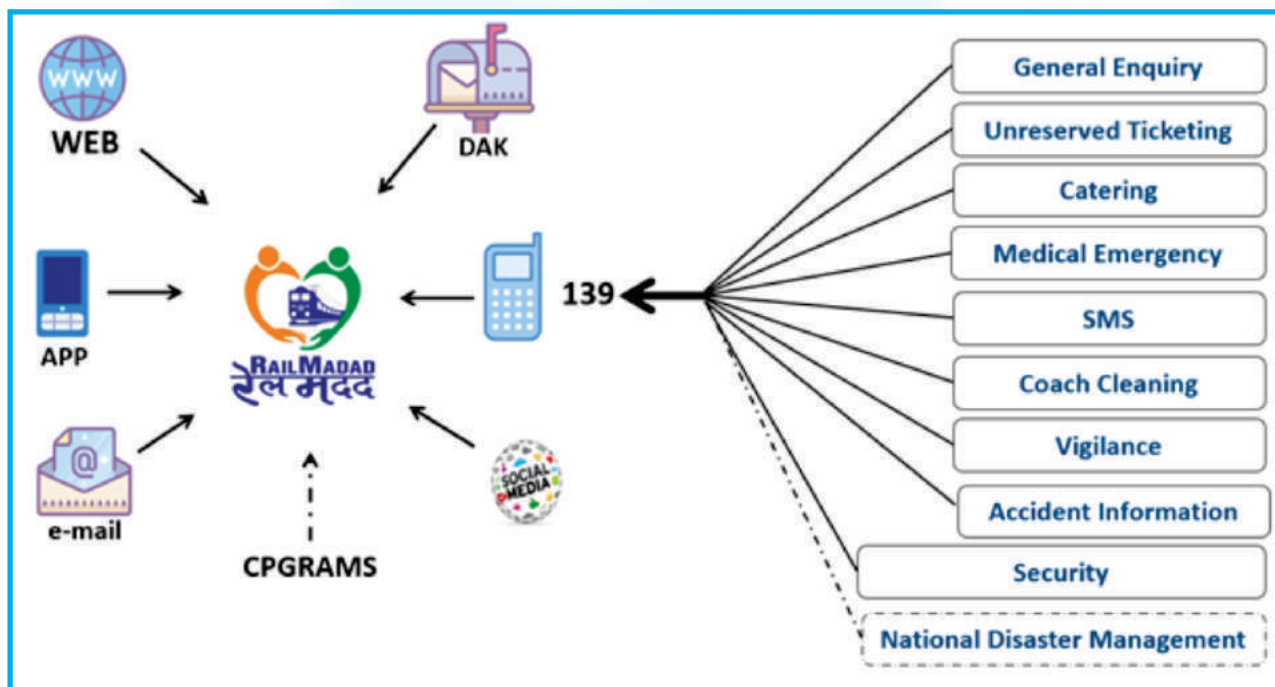
Mobile Application for Assistance During Travel: RailMadad

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

The expanding outreach of information technology has transformed many aspects of life in the 21st century, including the way citizens express their grievances and how the government addresses them using the same tool. In this endeavour, the Ministry of Railways has started an online Grievance Portal System, which helps citizens to lodge complaints from anywhere using any device (like laptop, mobile phones etc.) in a way that is convenient and saves time, effort, and the traditional paper work.

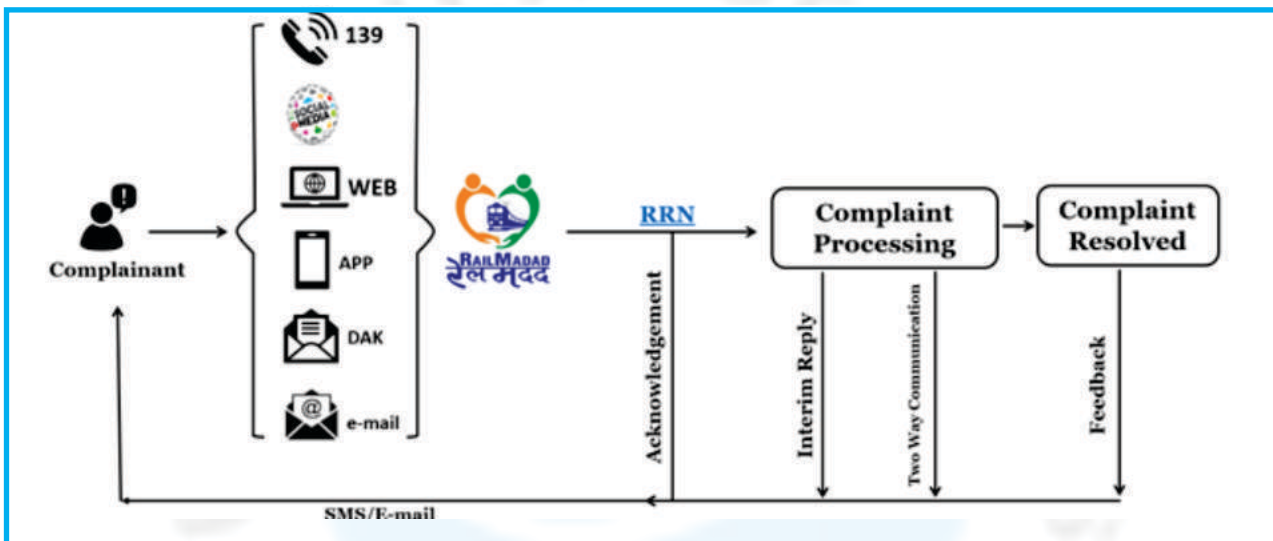
RailMadad – The Complete Grievance Redressal Dashboard for Indian Railways

RailMadad Application is a unified digital platform that facilitates Railway users to register their complaints and grievances through seven different channels viz. Web, Mobile Apps (Android and iOS), SMS, IVRS Helpline 139, Twitter, Manual Dak Complaints (Complaint Books) & e-mail, enables them to check real-time feedback on the status of redressal of their complaints. The complaints range from corruption related matters, to security, and various amenities/cleanliness, etc.

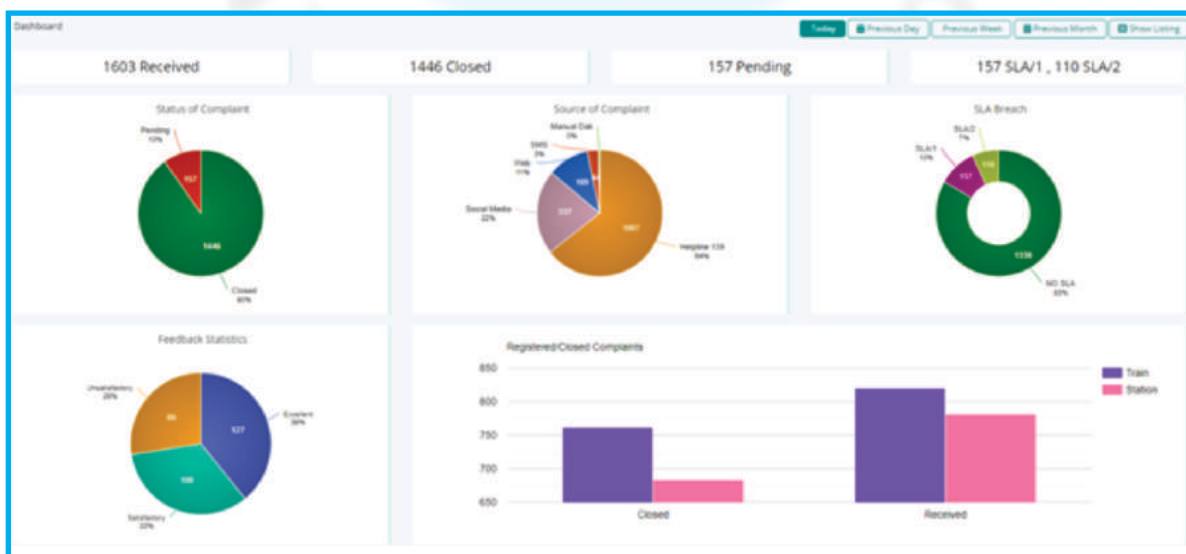


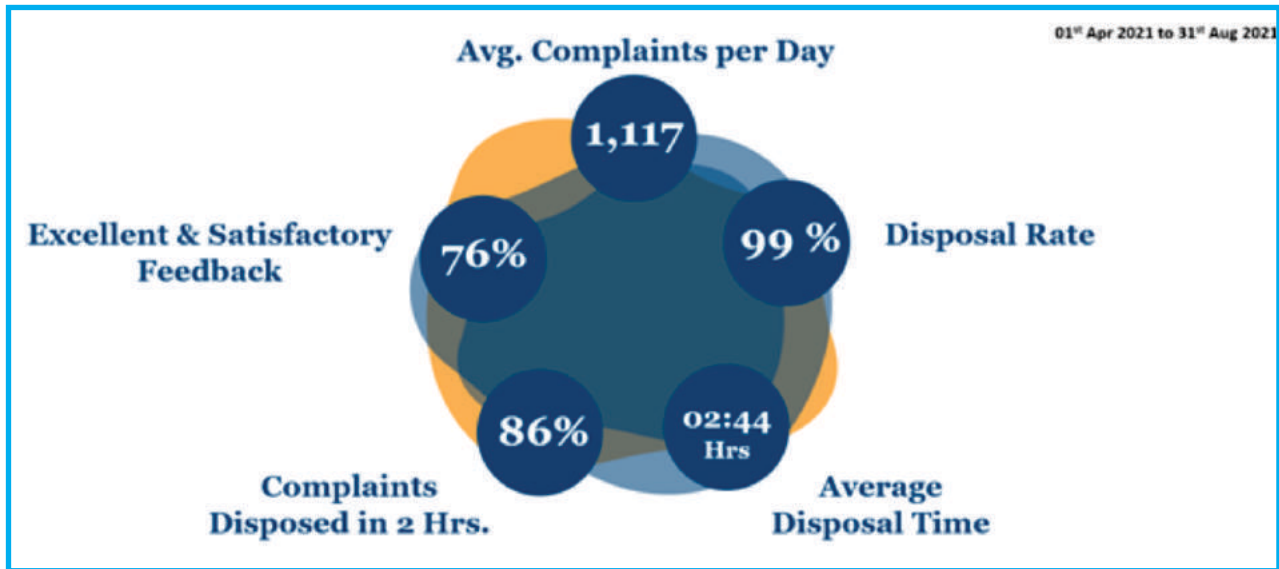
The automated process with pointed responsibility and an auto-escalation system has brought about a quantum improvement in swiftness and quality of redressal of public complaints. It has been recognized as a major citizen centric initiative of Indian Railways leading to the accountability of the department towards the citizens.

The application developed by CRIS converges multiple channels to enable passengers to register their complaints and suggestions. The work flow & the business logic has been designed meticulously. A RailMadad reference number (RRN) is registered and with the RRN the entire tracking of redressal is done. The system is completely automated and a very stringent timeline has been laid down for field staff for redressing the grievances lodged by the users. In case of breaches in response time specified for redressing a grievance, higher officials are informed and updated through an automatic escalation system. The system also obtains feedback from the complainant on the redressal.



The comprehensive MIS (Management Information System) reports Dashboard helps the administration to monitor the entire process of grievance redressal by analysing various types of management reports which gives a micro to the macro picture.





The entire paradigm shift has brought about a considerable and significant improvement in the swiftness and quality of redressal of passenger complaints & their satisfaction, and enhanced accountability of the public authority and transparency in the system.

The application has received appreciation and kudos from various reputed agencies. The application for its efforts in achieving good governance goals has been conferred with:

1. **Silver** Award by National e-Governance in “Excellence in providing Citizen-centric Delivery”. This award was conferred during the 23rd National Conference held in Mumbai in the year 2020.
2. **Gold** Award (highest award) in Governance category at 68th SKOCH Award.

Conclusion

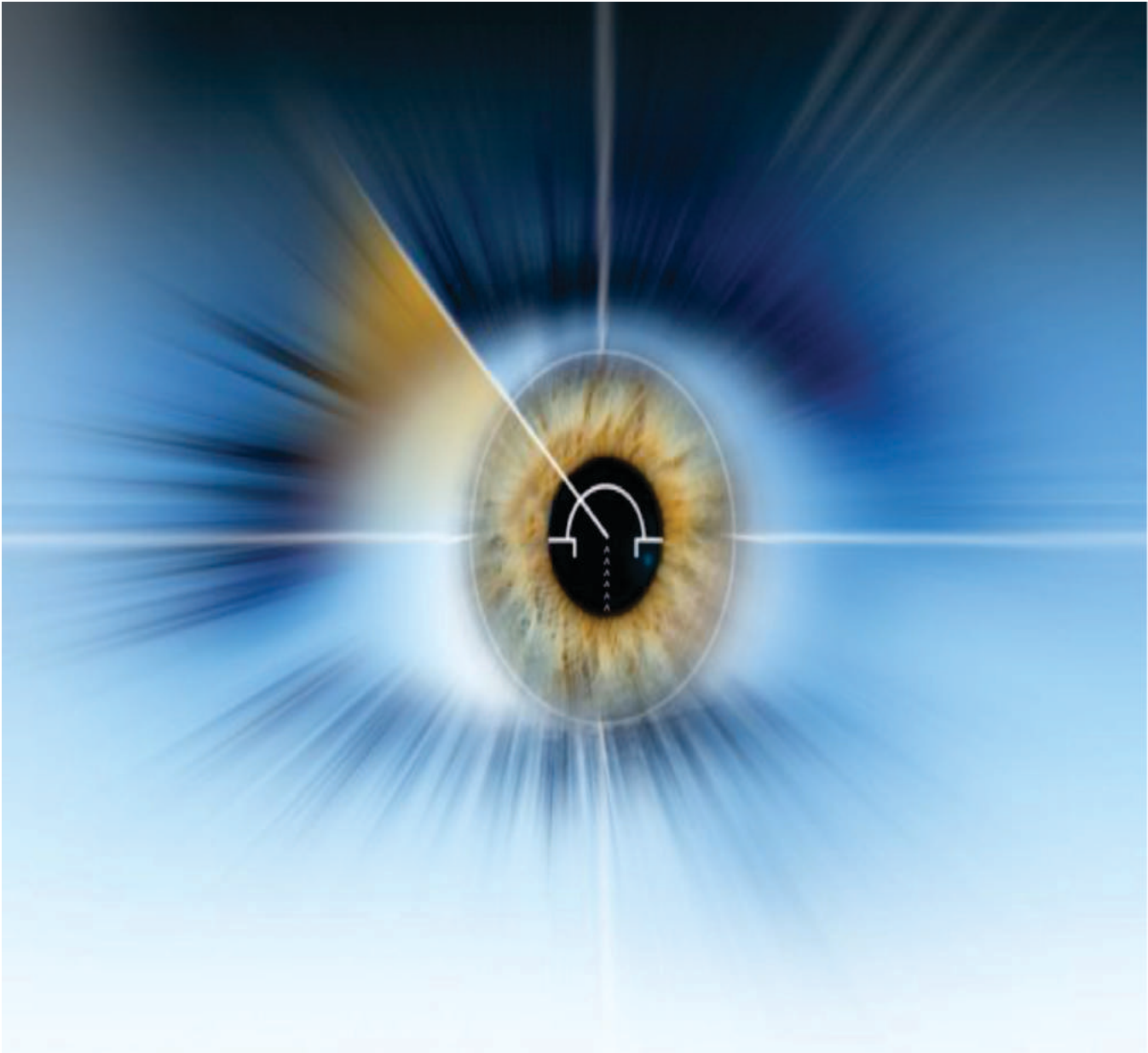
A comprehensive Complaint Portal of Indian Railways, RailMadad has assisted the Railway Management to identify areas of grievance and those needing system improvement. It has increased transparency and accessibility for the common citizens. This is a scalable application with infinite potential to reach out to the citizens in the hour of need.

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Preventive Vigilance Initiatives

STRENGTHENING VIGILANCE ADMINISTRATION





Portal for Software-based Property Returns

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

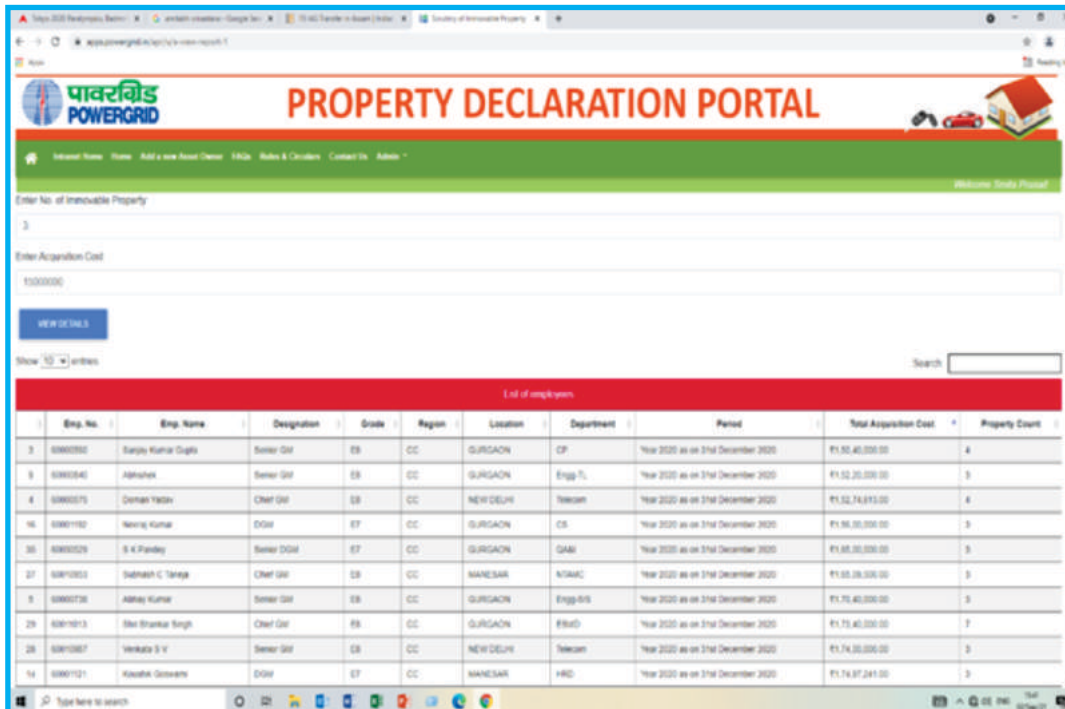
In accordance with CVC and DPE guidelines, Vigilance departments of CPSUs are required to conduct scrutiny of the immovable property returns (IPR) of about 20% of employees every year on a random basis, so that the total scrutiny cycle gets completed over five years.

Although an online system for declaration of property by employees was implemented in POWERGRID a few years back, yet manual scrutiny of declared returns still remained a cumbersome task involving a lot of time and effort of Vigilance officials at Corporate and Regional offices.

Software-based scrutiny of IPRs has been introduced in 2021 in POWERGRID for the first time for facilitating quick scrutiny of employees' property returns and effective utilization of available manpower for Vigilance functions and activities.

The software-based scrutiny required the development of a New Property Declaration Portal as various anomalies were noticed during trials with the old online property declaration system and database. During the process, CDA Rules were also required to be amended for incorporating missing definition of moveable property in line with DPE guidelines.





The New Portal for Property Declaration has been launched on 24.02.2021 and software-based scrutiny of IPRs has commenced from 01.04.2021

2. BACKGROUND

Earlier scrutiny of declared assets of employees and other moveable/immovable property transactions was carried out by Vigilance officials manually. It was a cumbersome & time-consuming task to manually keep & retrieve the records for scrutiny.

It was also observed that the previous system of online declaration of assets and liabilities had also become obsolete and inconsistent in many respects. Further, anomalies were noticed during scrutinizing the Immovable Property Return (IPR) of the employees using software developed for the purpose. It was noticed that due to incorrect formatting of the earlier online portal, employees reported multiple Immovable Property related movable properties transactions, such as EMIs, down payments, borrowings, etc. resulting in the rise of artificially inflated number of Immovable Property transactions, thus, making the whole process cumbersome for the employees on the one hand and less amenable to scrutiny by Vigilance on the other hand.



3. IMPLEMENTATION

The entire Property Declaration/Intimation procedure has been re-engineered. CDA Rules have been suitably amended with the approval of POWERGRID's Board of Directors and definition of "Movable Properties" and explanation of Items covered under 'Movable Properties' has been introduced in the Amended CDA Rules in line with DPE guidelines. The new portal for Property Declaration and Software for Scrutiny of IPRs has been developed in-house by using ASP.NET with MS SQL Server database.

Earlier, IPR was required to be filed once in every two years for each calendar year. Since the filing of IPR has been greatly simplified and made user-friendly with the introduction of the new portal, CDA Rules have been amended for filing of IPR on an Annual basis. This has made scrutiny easier and closer in time to actual events, thus serving the objective better.

4. IMPACT AND BENEFITS

Simplification of the property declaration/ intimation process has resulted in easy user-friendly filing of annual IPRs and movable property intimations. It has also eliminated the possibility of superfluous/wrong entries.

The new portal helps in effective management of property declaration/ intimation data of the employees by the administrative department and improved quick scrutiny by Vigilance officials, as various reports can now be generated covering different aspects/queries, as required.

It has helped in optimum utilization of available manpower and effective handling of one of the important Vigilance functions.

5. POTENTIAL FOR REPLICABILITY

The New Property Declaration Portal & Software-based scrutiny system can be replicated in other PSUs with suitable modifications as per their specific IT systems.

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Creating Opportunity for Development of New Indigenous Vendors: Development Order Policy

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

A new development order policy has been implemented by ONGC, wherein the development order process is without linking to a regular tender. In the new Development Order Process vendors are not required to fulfill any BEC/past supply experience criteria. Development Order Policy has been implemented w.e.f. 02.12.2020.

Salient Provisions to promote manufacturers/service providers:

WORK FLOW

- Development Order Process for Information to vendors has been published on the ONGC tender site www.tenders.ongc.co.in.
- List of items (Goods) for development order published on ONGC tender site www.tenders.ongc.co.in and e-tender portal for Information to vendors. The list may be reviewed periodically as per requirement.
- Besides publishing a list of items identified by ONGC for placement of development orders, vendors may also suggest the items in use by ONGC which they can develop and supply.
- Processing of development order for oil field services allowed, wherever it is feasible to award a development order for smaller quantities/period and low risk is involved in the execution of development order.
- ONGC may also periodically publish EOI on ONGC Tender website to make efforts in identifying the probable vendors through industry insight reports/contacts.
- ONGC after being prima facie satisfied that such domestic vendor (manufacturer/service provider) has Basic Capability to develop the item/provide the service, inspection of the factory/facilities will be carried out.
- After satisfactory inspection of factory/facilities and ascertaining capability to manufacture the item/provide the service, formal enquiry to be issued and subsequently Development Order is placed.



- ONGC to provide all technical assistance to vendors, wherever required.
- No requirement to fulfill any BEC/past supply experience criteria.
- No EMD, No Performance Bank Guarantee / Security Deposit.
- **Rates for Order placement:** Rates quoted by the vendor or the rates at which ONGC has placed the latest order for the same item/service of the same technical specifications/scope of work, whichever is lower.
- If any item/service being offered is not exactly the same as that of LPR, the contract may be awarded after ascertaining the reasonability of rates.
- **Payment (Goods):** 50% payment after receipt of material at work center after prior satisfactory inspection. Balance 50% payment to be made against the satisfactory performance certificate issued by ONGC after field trial testing.
- **Payment (Services):** Decided on case to case basis. ONGC to decide payment terms on a milestone basis.
- **Delivery/Completion Period:** As quoted by the bidder and mutually agreed between bidder and ONGC.
- A development order shall be considered as executed and the respective bidder shall be considered as developed / proven source only after satisfactory inspection and field trial testing and issuance of a certificate by ONGC.
- The extension may be granted by the Competent Purchase Authority without Tender Committee. Any extension beyond 6 months shall only be considered if there are rational / compelling reasons for the same.
- Action like initiating the banning process or putting the vendor on Holiday for regular tenders will not be taken for non-execution of the development order. However, such vendors will not be considered for any other development order for a period of one year. Only one development order is placed on a vendor at a time.
- On its successful development, the vendor may be considered for development order for other items (but one at a time) in case it applies for the same.
- Any exception to this can be allowed in case manageable by the vendor concerned, with the approval of the Director - I/c INDEG.
- Not more than 3 Development Orders on different manufacturers/service providers for the same item/service at a time (including development orders under execution).
- Guidelines on Inspection and Field Trial Testing has also been prescribed.



- In case the bidder has satisfactorily executed a development order (i.e. including satisfactory inspection and Field Trial Testing) for similar items/services in the past in ONGC/OIL , then the bidder does not have to satisfy the experience criteria of BEC in ONGC. However, ONGC will reserve the right to change this policy anytime in the future.
- For time being, not undertaken for works contracts / LSTK contracts.

2. BACKGROUND

In pursuance to promote self-reliance, Make in India, and to promote MSMEs (Micro, Small and Medium Enterprises), Govt. issued guidelines that no Global Tender Enquiry (GTE) shall be invited for tenders up to Rs. 200 Crores or such limit as may be prescribed by the DoE from time to time.

Standing Committee on DMI&SP [Domestically Manufactured Iron and Steel Product] Policy mentioned not to link placement of development order with tender action.

Erstwhile Development Order Policy had provisions that Domestic bidders, who participate in the tender and fulfil all the criteria of BEC, excluding past supply experience criteria, would be considered for placement of development order after satisfactory inspection of their plant and facilities and provided no development order is pending with such parties.

3. IMPLEMENTATION

In order to have better management, reporting, and smooth development order process, the development orders are being processed in a centralized manner by INDEG (Indigenization) group with the support of Corporate Technical Services and Corporate MM in ONGC. Development Orders under the new policy are already placed for six items to date namely Chrome Casing Pipes, Chrome Tubing Pipes, Drill pipes, Sucker Rod Pumps, XC Polymer, NIFA & three development orders being processed for other items.

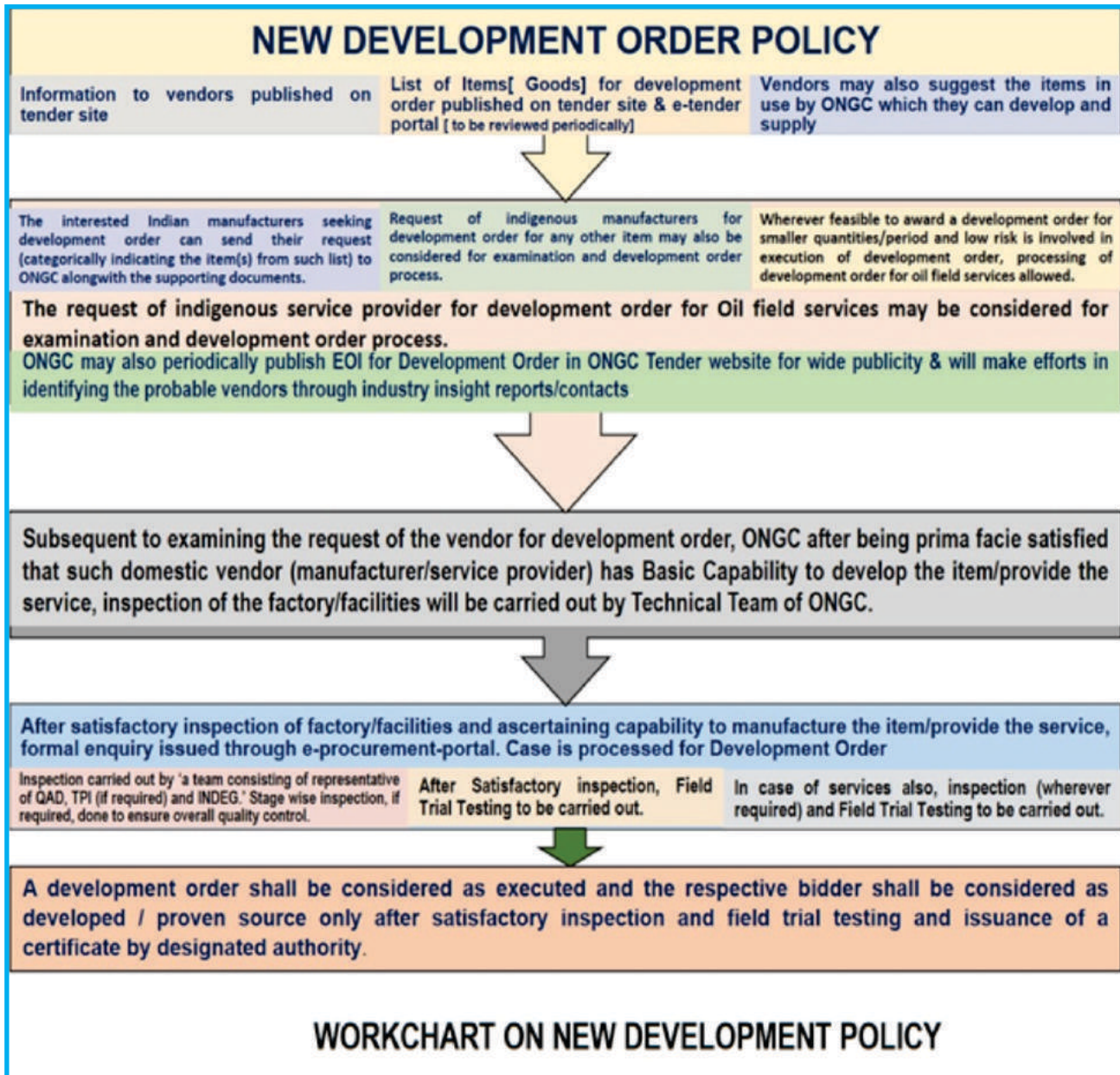
4. IMPACT AND BENEFITS

The implementation of the new Development Order Policy is likely to develop indigenous vendors. This is in line with the intent of the Government under Atmanirbhar Bharat.

5. POTENTIAL FOR REPLICABILITY

The development Order process being implemented in ONGC may develop indigenous vendors capable of manufacturing goods / providing services, and also shall lead to more competition in tenders.





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Power Finance Corporation Limited

Revision of Financial & Administrative Procedures and Processes: Policy Initiative to Check Fraudulent Transactions

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Overhaul of financial & administrative procedures and processes in the light of suspected transactions identified in the books of accounts, in a subsidiary company of Power sector CPSE

Measures:

- The Financial & administrative powers of the Chief Executive Officer (CEO) were curtailed by prescribing specified limits.
- Accountability is ensured by mandating the CEO to report to the Board of Directors of the Company for certain expenditures and powers.
- Administrative powers relating to personnel matters were withdrawn and placed with the parent company.
- System of Financial Concurrence was put in place.
- The power of re-appropriation within the budget head more than the amount of 25% of the allocation was given to the Board of Directors of the company.
- Any relaxation allowed in TA claims, local conveyances, programmes related to business activities, & the purchase of items through GeM portal/Kendriya bhandar/ Govt. department/PSU is to be reported to the Board of Directors of the Company on a bi-annual basis.
- The Distinct & separate functional wings for Billing, Banking, and Accounts have been created.
- Detailed work allocation order was issued for all the executives.
- Company had been directed to ensure due diligence & prudence while procuring gifts/mementoes and to maintain a stock register for receipt/issuing of Mementoes.
- To ensure proper scrutiny, scanning of Vouchers, recording its narration in ERP/IT system.
- Internal Audit system was improved.
- Sensitisation workshops were conducted for employees.
- Procurement through GeM was introduced.
- Long tenure employees were transferred.

The aforementioned measures were suggested to the management of the company during FY 2020-21. The management adopted the systemic improvements as recommended by Vigilance in the whole organization.



2. BACKGROUND

The Statutory Auditors of the company reported certain suspected fraudulent transactions in the Books of Accounts of the company. Investigation resulted in highlighting the shortcomings of the system.

The existing system which was replaced:

- The Financial Powers were concentrated at the level of the CEO.
- Absence of Distinct Financial Concurrence.
- Billing, Banking, and Accounts were headed by the same person.
- Record Maintenance system was absent.
- Lack of Financial Prudence and violation of financial principles.
- Ineffective Internal controls/Audit System.

Problems/Vigilance Risk addressed:

- Absolute powers, discretion.
- Lack of Accountability and Transparency.
- Non-procurement through GeM.
- Ineffective internal controls.

3. IMPLEMENTATION

Required/Used Resources:

- Technology: To ensure proper scrutiny, scanning of Vouchers, recording its narration in ERP/IT system and procurement process.
- Human Resource: To streamline processes, procedures, internal controls, and record maintenance.
- Training: To create awareness and sensitization for financial prudence.
- Time: To study the drawbacks and streamline the procedures.

Whether sourced from abroad or source locally:

- Sourced locally, referred to GOI, CVC, DPE guidelines, trainers, and general financial principles.
- Used ERP system of the company.

4. IMPACT AND BENEFITS

Preventive Measures	Impact	Benefits
Administrative and Financial Powers curtailed and mandating report to BoD for certain expenditures and powers	Increased Accountability, Transparency and Reduced discretion	Prevent Mis-use of power and Financial Prudence
Financial Concurrence System	Effective evaluation of financial proposals.	Reduction in cost
Separate billing, banking and accounts units	Maker-checker system has been established	Prevention of financial frauds.
Maintenance of stock register and vouchers updating in ERP	Transparent record maintenance	Increased Accountability
Internal controls and e-procurement	Improved systems	Increased efficiency
Rotation and training of staff	Transparency and Awareness	Sensitisation and prevention of collusion

Impact on other functions:

- The above preventive measures would promote good governance practices in the company. The employees will efficiently discharge their functional responsibilities. This will lead to a reduction in operation costs and improving the revenues accordingly.

How and to what extent the prevailing business processes have been re-engineered:

- The Management Information system has become more robust giving the opportunity to look into the business activities.
- The Management would be able to utilize Human Resources effectively.
- Since the financial business processes have been streamlined, the chances of fraudulent practices will be prevented.

How the vigilance risk has been reduced:

- By limiting powers, reducing discretion, increasing transparency and accountability, using technology, streamlining systems, and increasing internal controls.



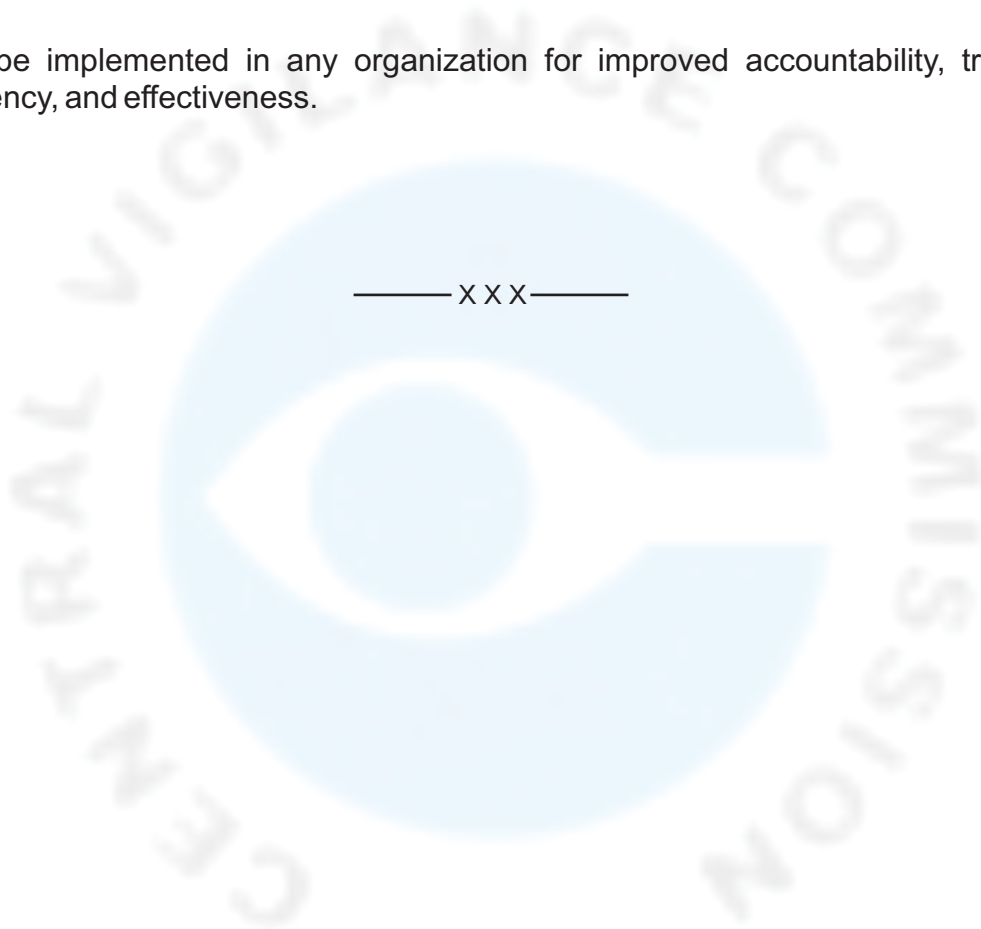
Estimated benefits envisaged in long run for the organization:

- Prevention of Mis-use of authority and Mis-utilisation of the funds.
- Financial Prudence and Reduction in cost.
- Increased Accountability, transparency and efficiency.
- Improved feedback mechanism to management.

5. POTENTIAL FOR REPLICABILITY

Can be implemented in any organization for improved accountability, transparency, efficiency, and effectiveness.

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AUTOMATION OF OPERATIONS





Hindustan Petroleum Corporation Limited

Online Reporting of Shortage in Delivery of POL Products and Integration with ERP System

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

This system converts the manual reporting of shortage in delivered product to online and integrates it with HPCL ERP system without manual intervention.

2. BACKGROUND

The delivery of POL products is done on a delivered basis through tank trucks. In the event of any shortage in the tank truck, the Retail outlet dealers mention the shortage quantity in the delivery confirmation copy of the invoice of the tank truck after following the SOP for ascertaining the quantity of shortage quantity. This shortage quantity also needs to be acknowledged by the transporter representative/ TT crew available at the retail outlet.

Later, on reaching the loading location the TT crew submits the delivery confirmation copy of the invoice to the loading location and on this basis, the acknowledgment of the delivery confirmation is done at the location. In case any shortage in delivered quantity is reported by the retail outlet dealer, then the same is booked manually in the ERP system to the account of the transporter and the equivalent amount is credited to the account of the retail outlet dealer and then delivery confirmation is processed. Only after delivery confirmation of the previous trip, any new trip can be assigned to the tank truck.

In this process, there are chances that the delivery confirmation of the tank truck is done without debiting the shortage to the transporter. Thus, to eliminate this human intervention, the system of online booking of shortage was introduced by HPCL.



3. IMPLEMENTATION

The in-house module has been developed by ERP team which enables the retail outlet dealer to enter the shortage in quantity received in the online portal / Mobile application against the trip and the same is then transferred to the transporter for his acknowledgment and comments in the online portal. After the acknowledgment of shortage by the transporter, the details of shortage automatically flows from the online portal to HPCL ERP system, and accordingly, the applicable debit from transporter and credit to retail outlet dealer is processed in the system after approval of dispatch location. Any correction/modification in the shortage quantity booked can only be done through the maker-checker mechanism.

4. IMPACT AND BENEFITS

Following are the key benefits of the application:

- Elimination of human intervention and chances of willful manipulation to obtain benefit.
- Increased transparency, tracking, and traceability.
- Swift processing of credit and debit.

5. POTENTIAL FOR REPLICABILITY

It can be replicated at all Organizations for reporting of shortages in the delivered product and connected activities.

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Introduction of Digital Signature on Invoices

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Digital Signatures were introduced on invoices being printed at POL locations in May 2020. Later, it was rolled out for LPG, Lubes, Petrochemicals, BD Gas, etc.

2. BACKGROUND:

Invoices were used to be ink signed manually on pre-printed stationery at our locations with the involvement of an officer in this job. There was always a possibility of duplicity / forgery of invoices and pre-printed stationery by the errant elements of the society. In fact, some complaints of forgery and manipulation had been reported. There was no technology-driven and fast method to get these invoices verified by government authorities as well as customers. Also, there were delays in the release of TTs from the location as they needed to wait for signed invoices. This led to mistrust and unnecessary human intervention in this process and undue delay in some cases.

3. IMPLEMENTATION:

In coordination with CO IS, the supplies group in Marketing Division Head Office (MKHO) took the initiative of removing this manual activity and introduced digital signatures of officer on duty along with Unique QR codes, on invoices. Invoices, which were used to be printed on pre-printed stationery through dot matrix printers were replaced by A4 size laser printing, and the number of prints now stands reduced to three instead of six earlier.

This not only reduced the cost of printing invoices substantially but also solved the problem of managing the pre-printed stationery. With the introduction of digital signatures and unique QR codes on invoices, digital copy of invoices in the form of a PDF file is now being sent to the customers on their registered e-mail IDs which enhanced customer satisfaction & secured delivery. This has become a deterrent towards the duplicity / forgery of the invoices as they can be checked for authenticity just by scanning the QR code and clicking on the Digital Signature.



4. IMPACT AND BENEFITS:

A technology driven, fast method is now available to check the authenticity of any invoice, which has become a big deterrent towards any possibility of malpractices due to duplicity and forgery. Improvement in turnaround time of vehicles is due to a reduction of waiting time at locations. Removal of a human touch point has resulted in enhanced satisfaction to internal as well as external customers. Manpower optimization has resulted due to automation. Digital copy through e-mails to customers and transporters has reduced their documentation burden and has also increased transparency & security as they now receive the digital invoice before the consignment reaches them.



5. POTENTIAL FOR REPLICABILITY:

Though the initiative was initially from Marketing Division Supplies Group, it has been successfully replicated in LPG, Lubes, BD Gas, Petro-chemicals, etc. It has the potential to be replicated for all similar activities.

The screenshot shows a digital invoice from SAP with a QR code and a signature validation status window. The invoice details include:

- Form No: ACR STA, Del Mode: Road, Delm: 11/24/2020
- SAP Entry No: 748731544, Date: 07-Sep-21, Time: 13:31
- Y.T.No: GJ08W8116, Dem: 15, S45.60
- Supplier: 24073200439, Consignee: 529190 VADNAR PORT
- Material Code / Material Description: 2142 CR L330TMH199900011389
- Quantity: 20.000 HL, Rate: 7418.680, Total: 148372.00
- Signature Validation Status: Signature is VALID, signed by SUMIT JADHAO <jadhaos@indianoil.in>



 Indian Oil Corporation Limited INVOICE UNDER RULE 11 of Central Excise Rules We hereby certify that the goods covered by this document have suffered applicable Taxes on clearance																																																																																											
Doc Name & number TAX INVOICE 202231428001337		Date 07-Sep-21 Time 13:31 Rem.Date/Time																																																																																									
Form No AC4 31A Del Mode Road Cont Code 11047555 <small>LAXMIBHAI JIVANSHI AHR</small>		SAP Entry no. 745721844 T.T.No. GJ03BW8116 Den@15 845.40 Supplier																																																																																									
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National Highways Authority of India (NHAI)

National Electronic Toll Collection System: FASTag

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

National Electronic Toll Collection (NETC) is a program that uses a FASTag device that employs Radio Frequency Identification (RFID) technology, for making toll payments directly from the Wallet/saving bank account linked to it. Whenever a FASTag vehicle having sufficient balance enters the fee plaza, an RFID reader installed at the toll plaza checks the authenticity of the same FASTag and allows the user to cross the fee plaza without actually stopping.

NETC Programme was started in 2013-14 at some fee plazas. However, from midnight of 15th/16th Feb 2021, all lanes are declared as FASTag lane at the fee plazas and vehicles not affixed with FASTag entering into FASTag lanes are disincentivized to pay double of the applicable user fee. Moreover, provision is made in Motor Vehicle Act, wherein having FASTag on the vehicle is made mandatory.

Scale of Operation

NETC Programme has been introduced and implemented on a large scale universally. Presently, there are more than 880 Toll/fee plazas under NETC Programme.

2. BACKGROUND

Before the inception of FASTag programme, toll fee was paid manually (Cash/plastic card) at the fee plazas. FASTag programme has facilitated road users to pay toll fees through RFID based FASTag which is linked to wallet/saving account without actually stopping at the fee plaza.

Problems/Vigilance /risk that was addressed.

Fee collection through FASTag at the toll plaza has created transparency among stakeholders. Now, no more risk of handling cash flow at the toll plaza and malpractices related to it has been minimized.

3. IMPLEMENTATION

Technology: FASTag is a passive device and it works on the principle of Radio Frequency Identification (RFID) technology which enables automatic deduction of the toll fee directly from the prepaid or savings account linked to it. FASTag is also vehicle specific and once it is affixed to a vehicle, it cannot be transferred to another vehicle.

Human Resource: Following are the stakeholders under NETC Programme:

- IHMCL
- User
- Acquirer Bank
- Concessionaire/Toll Operating Agency
- NPCI
- System Integrator
- Issuer Bank

The functional and technical document has been prepared locally. The component under FASTag technology like RFID tags, RFID reader and other equipments are procured locally as well as from abroad.

4. IMPACT AND BENEFITS

Customers can travel without stopping at the toll plaza by using the FASTag thus reducing congestion at plazas and, saves fuel, reduce air pollution, and reduces travel time. Customers can recharge FASTag accounts online through issuing member banks portal using UPI/ Credit Card/ Debit Card/ NEFT/ RTGS /Net Banking.

With the inception of FASTag technology (interoperable solution not plaza specific), now users have the facility to pay the toll fee amount without stopping at the fee plaza. Earlier, they only had the option to pay through Cash/Card by stopping at the fee plaza.

- It increases transparency in transactions. Reduce cash handling.
- Provides an interoperable secure framework capable of use across the country.
- Enhance audit control by centralizing user account.
- Reduce air pollution by reducing the congestion around the toll plaza.

5. POTENTIAL FOR REPLICABILITY

- City Toll Plazas
- Parking System
- Fuel Payments
- Enforcement vehicle linked fines
- Vehicle Tracking System



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Dredging Corporation of India Limited

Paperless Movement of Files: e-Office Application

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Implementation of E-Office Software application for paperless movement of files in Dredging Corporation of India Limited has been achieved. The application was on the trial run till the end of June 2021 and went on live from 1st July 2021. The system was initially made available to users at Head Office Visakhapatnam for a short duration on a trial run, familiarize employees with the new system, and receive suggestions for improvements. Once the cyber security audit was completed, it has been extended to all shore-based employees in Regional Offices, project offices spread all over India.

The system is going to be extended to Dredgers (ships) for various communications, filing returns pertaining to ISM and IMS systems, and to make available the latest revised Manuals/ Policies/ Circulars/ Office Memorandums to the Vessels.

2. BACKGROUND

The system replaces the current Manual movement of files with the electronic movement of files. The system tries to address the delay in the movement of files. As per 1.4.3 of Vigilance Manual 2017 “any undue / unjustified delay in the disposal of a case, perceived after considering all relevant factors, would reinforce a conclusion as to the presence of vigilance angle in a case.” In the new system, whenever a file is received by the user, he receives an alert. If a file is pending for more than 3 days at any level, it automatically moves to the next person in the workflow.

The system was initiated to address the pandemic situation such as COVID 19, to enable employees to work from home and to make requisite information/files/documents available to users from anywhere, anytime. The documents/Note sheets can be signed using Digital Signature Certificate or e-signed where the employee receives an OTP to his mobile/e-mail.

3. IMPLEMENTATION

The e-Office software runs on a high-end HP DL580 rack-based two sockets 20 cores 32 GB RAM and 1.2 TB Disk space server with Cent OS 7 Operating System which is a Linux Variant OS. The Network Perimeter side was also strengthened with a high end and highly



available Firewall. The e-Office software was procured from M/s Net Prophet Cyber works, New Delhi, who is NICS I empanelled Vendor. The application was customised as per the DCIL requirements. Along with e-Office, the digitization of files activity was also taken up by the company so that all the information is available in digital form to the stakeholders.

Some more employees at HO and Regional Offices were provided Laptop Computers with Dongle so that the system can be accessed from anywhere. The employees after being given a free hand to experiment with e-Office software were provided online training by the software provider.

Most of the implementation and roll out work along with customization was carried out online/ remotely due to Covid Pandemic.

4. **IMPACT AND BENEFITS**

Following are the key benefits of the implementation:

- The manual physical movement of files is replaced by a highly available system where files move electronically and are signed electronically. Due to this, the employees can continue to work from anywhere and anytime. Earlier, only ERP software was available to a few departmental (Material/Finance/HR) users for working from anywhere. Now, with the introduction of e-Office, it is extended to all departments, and important timely business decisions can be taken by the Management.
- No paper movement or paper printouts contributing to the environment. It is expected to reduce stationery usage drastically.
- The executive can monitor the movement of file status continuously till the file is approved or rejected. Pendency reports also can be generated in the system.
- The software application can be used where a document is signed by more than one employee with their comments such as tender committee proceedings, note sheets.
- The new initiative encourages transparency.

5. **POTENTIAL FOR REPLICABILITY**

The e-Office software implemented in Dredging Corporation of India Limited can certainly be used by any organizations.

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Real-Time Transfer of Pricing Data from Central Marketing Organization to Plants

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

This System Improvement initiative was taken up by CMO Vigilance based on the outcome of random Preventive Vigilance Checks carried out in 2019 wherein under-invoicing was noted in several Direct Dispatch Invoices leading to the issuance of Debit Notes. The route-cause analysis was done through examination and scrutiny of a large volume of data on invoicing. Large group interactions were done through VC involving C&IT, Finance, Marketing, and Vigilance of CMO and Integrated Steel Plants (ISPs) wherein results were shared and strategies were made. This was followed by CMO-Plant level interaction, visit Plants, etc. Recovery of the under invoiced differential prices was done at CMO and a decision was taken for a systemic improvement at CMO and Plant level (ISPs).

Considering the sensitiveness of the issue, the initiative was taken for System Improvement taking on board the plant Units (ISPs). The initiative was taken on 24.06.2019 and the same stands implemented by 19.11.2020.

2. BACKGROUND

Price Circulars are the communication issued by the Pricing Manager/CMO/HQ periodically, affecting the changes in the price structure of the steel items. These are based on change/revision approved by Revenue Maximising Team (RMT) / Director (Commercial) at the corporate level.

The Pricing Circular mainly consists of:

- Base prices of Steel Items,
- Quality Extra of Steel Items,
- Size/Dimensional extra of Steel Items, and
- Other extra like special TDC, Tolerance, Special tests, restricted chemistry, etc.
- The delivery of finished Prime Steel materials to Customers is either done through CMO Warehouses (i.e stockyard dispatch) or directly from Plants (Direct Dispatch).
- These Circulars when issued/ revised are communicated to the invoicing sections of different Plants/Units through email by the pricing manager CMO.



- Pricing Manager CMO feeds Price data into SAP/ERP system of CMO to incorporate the changes. Though, the changes are effected instantly in CMO ERP system, in the Plant's system the changes were not automatic.
- Plants incorporate these changes in their system through manual intervention into Price Master Files maintained in their ERP system.
- Thus, in the case of direct Dispatches, for the Plant ERP system, there was a time lag from the time-point of the Price effect and the time elapsed due to non-seamless data exchange which involved the risk of incorrect pricing.

3. IMPLEMENTATION

This system of Seamless transfer of pricing data from CMO to Plants system through ERP system of CMO on real-time basis has now been implemented in all SAIL Integrated Steels Plants. All the system modifications/developments have been done in-house.

4. IMPACT AND BENEFITS

- Maintaining Pricing Data centrally at one place i.e. at CMO end since Pricing Circulars etc. are issued by CMO only.
- Data feeding in SAP system only at CMO without duplication of subsequent manual feeding at Plants ends.
- An intermediate, interfacing programming protocol devised at Plants'/ CMO such that the changed/revised pricing data at the CMO end is automatically downloaded (on a real-time basis) at the Plant level seamlessly
- Necessary programme development work at all ISPs
- Reduction of load on Executives at CMO Branches on Price checking and eliminate the risk of unnoticed under-invoicing.

5. POTENTIAL FOR REPLICABILITY

The system was first implemented at Durgapur Steel Plant and then the same was subsequently replicated at Bhilai Steel Plant, Rourkela Steel Plant, Bokaro Steel Plant & IISCO Steel Plant. To ensure error-free invoicing, a periodical IT system audit will be organized at a periodical interval.

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GAIL (INDIA) Limited

Implementation of Electronic Bank Guarantee System

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

To reduce the possibility of fraud related to Bank Guarantee (BG), the implementation of an electronic Bank Guarantee has been suggested.

2. BACKGROUND

Bank Guarantee (BG) is widely accepted in GAIL against Earnest Money Deposit (EMD) during tendering, Performance Bank Guarantee (PBG), and security deposit (SD) in compliance to provisions of contracts.

As per existing procedure, vendors submit BG in hard copy to GAIL. On receipt of BG by Procurement Deptt., it is forwarded to GAIL Finance for BG confirmation and safe custody. The details of BG are entered into the SAP system along and an automatic message is generated to issuing bank for verification of BG and hard copy of verification letter is also sent by GAIL finance to issuing bank for verification of BG.

GAIL is using BGs in hard copies for which manual intervention is required for verification and authentication. In a vigilance case, it was observed that the vendor had submitted fake BG and it was observed that due to the manual process of verification, fraud in BG could be carried out by the vendor.

To avoid BG related frauds, as per the suggestions of Vigilance, the following is under implementation by GAIL:

- Implementation of electronic BG through SWIFT (Society for Worldwide Interbank Financial Telecommunications) messaging system.
- Incorporation of necessary amendments in standard tender documents to facilitate the use of electronic BG instruments against EMD, SD, etc. instead of physical form.



3. IMPLEMENTATION

The suggestion has been agreed upon by management and the same is under the advanced stage of implementation. With the implementation of the same, GAIL shall be the 1st PSU of having implemented the electronic BG system through the SWIFT messaging system.

4. IMPACT AND BENEFITS

With the implementation of electronic BG through SWIFT messaging services, BG frauds can be reduced /addressed.

5. POTENTIAL FOR REPLICABILITY

These can be replicated in various other departments/organizations and can be modified as per the requirements.

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PROJECT MANAGEMENT





National Highways Authority of India (NHAI)

Cloud-based Project Monitoring Tool: Data Lake

1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

Launched in July 2020 as NHAI's project monitoring tool, a cloud-based portal, Data Lake, has been implemented to track and monitor the progress of projects and act as the central repository of documents across the project lifecycle. The platform is currently being accessed by all key stake-holders on highway projects viz. Contractors / Concessionaires, Authority Engineer/Independent Engineer (AE/IEs), Project Directors (PDs), Regional Officers (ROs) & HQ Users with role-based access.

Since its implementation, Data Lake has served as a centralized project repository supported with system generated MIS reports and a role-based dashboard for internal and external users.

2. BACKGROUND

- It has integrated many prevailing standalone IT applications to provide one single platform to fetch information.
- Cover all monitorable activities required to be performed by the stakeholder as per his Terms of Reference (ToR).
- Communicate/manage project correspondence and documents facilitated by web forms and workflows for the approval process.
- Integrated transaction and reporting system.
- Collaborate, aggregate & visualize project parameters on dashboards & project monitoring reports.
- Monitor project progress through on-site real-time data gathering facilitating improved visibility on projects.
- Automated alerts and escalations for proactive tracking and actioning on pendency respectively.

3. IMPLEMENTATION

The product is developed in-house by outsourcing key IT skills for development and maintenance. From facilitating communication and coordination to ascertaining



compliance of contractual obligations, quality control, and avoiding potential conflicts, Data Lake has enabled NHA I to usher in a digital transformation and thereby ensure enhanced transparency and efficiency in its functioning.

4. IMPACT AND BENEFITS

- Real-time tracking of construction progress, delayed projects, and project issues have enabled faster resolution of bottlenecks and timely decision-making.
- Tracking and expediting closure of pending Extension of Time (EoT) and Change of Scope (CoS) through increased visibility on Turn Around Time (TAT) and user level pendency.
- Improved control over monitoring the Supervision Consultant (AE/IE's) obligation and its fulfilment through payment linked to key performance metrics like attendance, monthly progress reporting, and equipment-based surveys.
- System backed mechanism to capture Network survey Vehicle (NSV) data and monitoring of road condition including tracking and closure of on-ground rectification works.
- Remote visual inspection (incl. Right-of-Way (RoW), Encumbrances, road furniture, and inventories) and project update through drone video reporting to flag project issues and provide objective evidence against unrealistic claims and support counter claims on Contractor/ Concessionaire defaults.
- Automatic Storage of all documents exchanged between the stakeholders in a digital library, thereby helping in the resolution of disputes.
- Improved accountability and transparency in communication. System based validations to help administer processing payments of the stakeholders as per prescribed milestones achievement

5. POTENTIAL FOR REPLICABILITY

The system architecture is open and scalable. This has helped NHA I to integrate / subsume many smaller, standalone functional applications and has emerged as a robust solution. The most important aspect is its work flow-based routing of information among different role-based enabling system driven checks and balances as well as validations to put various concurrent processes under overall control.

Thus, Data Lake can be useful for all the organizations as a tool for project monitoring and especially those having lean and thin structure, where routine supervision by organization officials is not feasible.

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National Highways Authority of India (NHAI)

Monitoring of Plantation Activities through Geo-tagging: Harit Path



1. BRIEF DESCRIPTION OF THE MEASURE/ INITIATIVE

The nation-wide plantation drive has been actively taken up by NHAI's field offices to achieve the collective target of making greener national highways. In order to track the growth, health, and mortality rate of plants, photographs along with data of the plants will be captured using a GPS-based app '**Harit Path**'. Monitoring of plantations is done through geo-tagging and web-based GIS-enabled monitoring tools. The app helps to monitor the location, species details, maintenance activities, targets, and achievements of each of its field units for each and every plant under all plantation projects. Every plant is assigned a unique ID that reflects the precise condition of the plant.

2. BACKGROUND

Earlier, there was no system to track the plantation on the project corridor. Reliance used to be made upon the inputs from Contractor/ Concessionaire and AEs/ IEs/ Consultants in the matter. To track the growth, health, and mortality rate of plants, photographs along with data of the plants will be captured using a GPS based app 'Harit Path'. Monitoring of plantations is done through geo-tagging and web-based GIS-enabled monitoring tools. The app helps to monitor the location, species details, maintenance activities, targets, and achievements of each of its field units for each and every plant under all plantation projects. Every plant is assigned a unique ID which reflects the precise condition of the plant.



Due to the implementation of the above, all the plants which are being planted on the project corridor can be tracked and monitored at any point in time. The earlier system was prone to manipulation in a way that the actual number of the tree planted or their location or the condition of the planted tree could not be tracked and the contractor/ concessionaire could easily state that he planted the appropriate number of plants but due to animals the plants got damaged or removed etc.

3. IMPLEMENTATION

Application runs on login credentials which are provided at three levels viz., Regional Officer (RO), Project Implementation Unit (PIU), and Agency. Agency Login can be created by the PIU and credentials of the same are conveyed. Only after approval from the PIU Login, the agency shall be able to run the application. Field surveillance and geotagging are carried out by agencies and each agency has been granted an existing limit of 15 users i.e. 15 field workers of the same agency may do the geotagging simultaneously.

Through PIU login, Project Director (PD) can review the Geotagging process and grant authorization to the agency to start the work through the application. Verification of the geotagged trees also lies at the disposal of PD. However, if the data shows ambiguity, verification can be withheld at PIU level which in turn is reflected in the 'verified' tab of the portal. By default, auto verification is done within 7 days.

At the RO level, rigorous evaluation and analysis of the report are done and any ambiguity in the data provided can be reported and dealt with. Also, any NHAI staff login approval at the respective RO/PIU level is reflected in the RO/PIU login which can be accepted or rejected.

4. IMPACT AND BENEFITS

Due to the implementation of the above app, an official need not visit the site to check the status of the plantation. The initiative of Greener Highway will be strengthened. A greener highway will result in a positive impact on the environment including a reduction in global warming.

5. POTENTIAL FOR REPLICABILITY

Any department which is obligated to comply with the Compensatory Afforestation provision of Forest Department.

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Preventive Vigilance Initiatives





Inauguration of TMSAC Portal and unveiling ceremony of updated PNB Vigilance Manual 2020 by the Hon'ble Central Vigilance Commissioner, Shri Suresh N Patel at PNB, Corporate Office, New Delhi

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Satarkata Bhavan, Block A, GPO Complex,
INA, New Delhi -110023
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