

CENTRAL COALFIELDS LIMITED

STANDARD OPERATING PROCEDURE (SOP)

For IT initiative



CCL
A Miniratna Category-1 Company

CENTRAL COALFIELDS LIMITED
(Govt. of India Undertaking)
DARBHANGA HOUSE, RANCHI 834 029
Office of the DIRECTOR (TECH./OPRNS.)
फोन/Phone : (Off) 2360006,
फैक्स/Fax : 0651-2360007
ई-मेल/E-mail : dto@centralcoalfields.in

Ref no: CCL/ TS to DT(O)/2018/ 476

Date: 30.06.2018

To

All Area GMs
Kuju, Argada, Hazaribagh, B&K, Dhori, Kathara, Rajrappa,
Barka Sayal, NK, Piparwar, Rajhara, Magadh & Amrapali.

GM(E&M)/GM(Oprns.)/HOD(E&T)/HOD(Weigh Bridge), CCL, HQ, Ranchi.

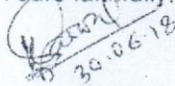
Sub : Approved SOP for IT initiative implemented in CIL & Subsidiaries.

Dear Sir,

Enclosed please find herewith a letter vide Ref. No. CCL/Vig./18-19/SOP-IT Initiative/156 dated 8/9.04.18 from CVO,CCL which is self explanatory.

I have been directed to intimate that compliance of above directive must be ensured for implementation of IT initiatives in CCL.

Encl : 17 pages as above.

Yours faithfully,

30.06.18

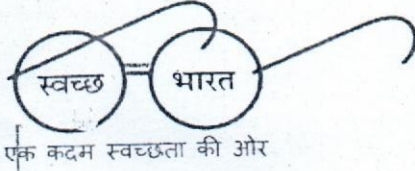
TS to Dir. (Tech./Oprns.)
CCL, Ranchi.

Copy for kind information to :

1. Director (Tech./Oprns.),CCL, Ranchi.

Copy to :

1. GM(Vig.), CCL, Ranchi – for kind information to CVO, CCL.



सेन्ट्रल कोलफील्ड्स

(भारत सरकार का एक उपक्रम)

दरभंगा हाउस, कचहरी रोड, राँची

CENTRAL COALFI

(Govt. of India Undertaking)

Darbanga House, Kutchery Road, Ranchi 834 029, Jharkhand

कॉर्पोरेट आइडेंटिटी नं./

Corporate Identity Number : U10200JH1956GO1000581

फोन/Phone : (0651) 2301606, 2360123, 2316707 (DID)

फैक्स/Fax : (0651) 2360003

ई-मेल/e-mail : cmd@ccl.gov.in, वेबसाइट/Website : http://www.ccl.gov.in

Ref. No. : CCL/Vig/18-19/SOP-IT Initiative/156

Date: 8.04.18

Confidential

To
The Director (Finance)
The Director (Personnel)
The Director (Tech./Oprn.)
The Director (Tech./P&P)
CCL, Ranchi

Sub: Approved SOP for IT initiative implemented in CIL & Subsidiaries

Dear Sir,

The subject matter was deliberated in detail during the Review Meeting of the Joint Secretary & CVO, MoC held on 9.01.18 in New Delhi and a consensus was reached in the above meeting for developing a uniform SOP for IT initiatives for surveillance like GPS/GPRS based VTS/RFID/CCTV so as to ensure their effectiveness and sustainability across all subsidiaries of CIL.

Accordingly, a SOP has been prepared by CIL and the same has been circulated vide letter No.CIL/VIGIL/16/14/0002/2018/1710-1729 dated 29.03.18 after competent approval. The same is enclosed for adoption.

In the said SOP, subsidiary companies have been allowed to assign responsibility for different activities as per their specific set up so as to avoid any ambiguity. A clear responsibility for each activity/sub activity is a must to make this SOP effective in the long run. Accordingly, a draft Responsibility Matrix within the broad ambit of Approved SOP has been prepared clearly defining the roles & responsibilities of various executives at different levels for installation, operation and maintenance of these initiatives (copy enclosed).

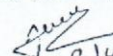
You are requested to vet and approve the above Responsibility Chart with or without any modifications, if necessary, as per the conditions prevailing in CCL. The Approved SOP alongwith the approved Responsibility Chart may be circulated to all the Areas and Units to ensure compliance with the directives of CIL and MoC on implementation of IT initiatives.

The matter must be given top priority.

Encl: As above
Copy for kind information:

1. CMD, CCL
2. CVO, CIL

Yours faithfully,


(A.K. Srivastava, IFS)
CVO, CCL

*discussed
A copy of the same
is circulated to
all GMS & etc*

For (i) All Area GMS

HP LaserJet P1505

Self Test / Configuration

Product Information

Product Name: = HP LaserJet P1505
Formatter Number: = CA6803J
Product Serial Number: = VNF3S31473
Service ID: = 19255
Firmware Version: = 20100824
Max Print Resolution: = FastRes 1200

Memory

Total Memory: = 2 MBytes
Available Memory: = 0 MBytes

Counters

Total Pages printed = 44257
Input Jams = 73
Output Jams = 5
Narrow Media Page Count = 63
Cartridge Jams = 16
Average Job Size = 3.30
Total Jobs Printed = 13375
Average Coverage = 4

Status Log

Code	Page
13.0001	44246
13.0001	44023
13.0001	44023
13.0001	43808
13.0001	43782

Coal India Limited

कोल इण्डिया लिमिटेड
Coal Bhavan,
Premises- 04 MAR, Plot No.-AF-III,
Action Area- 1A, New Town, Rajarhat,
Kolkata -700156,
CIN/कॉ.प.सं.: L23109WB1973GOI028844
Website वेबसाइट : www.coalindia.in



(A Maharatna Company)

Vigilance Division

सतर्कता विभाग
कोल भवन,
परिसर - 04 MAR, प्लॉट नं.- ए.एफ.-III
एक्शन एरिया -1 ए, न्यू टाउन
राजारहाट, कोलकाता -700156,
Phone फोन-(033) 2324 4134/4152
Fax फैक्स- (033) 2324 4055
email ई-मेल- cvo.cil@coalindia.in

(An ISO 9001:2015, ISO 14001:2015 & ISO 50001:2011 Certified Company)

Ref. No. संदर्भ संख्या: CIL/VIGIL/16/14/0002/2018/ 1710-1729

Date दिनांक: 29.03.2018

प्रति,
निदेशक (वित्त), सीआईएल,
निदेशक (म & स), सीआईएल,
निदेशक (तकनीकी), सीआईएल,
निदेशक (का. एवं औ. सं.), सीआईएल।
अध्यक्ष-सह-प्रबंधक निदेशक,
BCCL/CCL/ECL/MCL/NCL/SECL/WCL

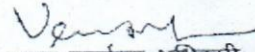
Subject - Approved SOP for IT Initiatives implemented in CIL & Subsidiaries

महोदय,

The approved SOP for IT initiatives implemented in Coal India Limited and its Subsidiaries is enclosed for necessary action. It is requested to please ensure the implementation of SOP for effective utilisation of the IT Initiatives.

This has the approval of Chairman, CIL.

Encl.: as above.


मुख्य सतर्कता अधिकारी
कोल इंडिया लिमिटेड

प्रतिलिपि :

1. अध्यक्ष, सीआईएल - सूचनार्थ ।
2. मुख्य सतर्कता अधिकारी, BCCL/CCL/ECL/MCL/NCL/SECL/WCL - आवश्यक कार्यवाही हेतु ।



**VIGILANCE DIVISION
NOTING SHEET**

2017
Ref.No. : CIL/VIG/ 2037

Dated : 19-03-2018

Sub: STANDARD OPERATING PROCEDURE (SOP) FOR IT INITIATIVES IMPLEMENTED FOR SURVEILLANCE LIKE GPS/GPRS/RFID/CCTV/VTS ETC.

Placed below is the SOP prepared in consultation with CVOs of all the Subsidiaries of CIL for IT Initiatives so implemented for the surveillance in reference to the discussion had with CVO, MoC in the month of January'2018.

The SOP so prepared shall also be for the purpose of procurement of items/system related to the IT Initiatives required additionally or for the purpose of replacement etc. the concerned Technical department / MM Department/CMC Department, as applicable.

It is specified in the SOP that the action required to be taken should follow due process with the approval of the competent authority as per DOP of the respective companies.

The SOP so prepared covers following IT initiatives broadly:

1. GEO FENCE
2. GPS/GPRS
3. CCTV
4. WEIGH BRIDGE WITH RFID & BOOM BARRIER

Submitted for Competent Approval.

G P Agrawal
(G P Agrawal)
GM (E&M)/Vigilance
19/3/18

CH: 409 IN/VIG
Date: 20-3-2018
26-03-2018

CVO, CIL It is requested that the SOP enclosed should be considered for company wide adoption. It will be a great infrastructure transparent working in the field.
M. Mohan

**STANDARD OPERATING PROCEDURE (SOP) FOR IT INITIATIVES
IMPLEMENTED FOR SURVEILLANCE LIKE GPS/GPRS/RFID/CCTV/VTS
ETC.**

The SOP for IT Initiatives so implemented for the surveillance shall be implemented under the guidance/supervision of the Director In-charge of the Company, nominated for the purpose. Responsibility of effective use of the system & providing necessary infrastructure for smooth operation of system shall be of the Area / Project / Unit, however responsibility for availability of the system shall be on the HOD of the Project and Technical Departments as nominated for the purpose.

For the purpose of procurement of items/system related to the IT Initiatives required additionally or for the purpose of replacement etc. the concerned Technical department / MM Department/CMC Department, as applicable, shall be responsible. The action required to be taken should follow due process with the approval of the competent authority as per DOP of the respective companies.

A QRT (quick response team) of CISF / Security agency should be made at each Area level for quick action based on the input received from GPS / surveillance system at Area control room.

1. GEO FENCE:

- Actual boundary of the mine is to be identified by the Manager of mines with route for transport of coal.
- The mine boundary and route of transport of coal is to be approved by Project Officer/Sub Area Manager/Agent as designated before forwarding to SO (Mining)/ GM (Operation) of the Area for creation of virtual geo-fence in the application.
- GEO Fence boundary shall be created by SO(E&T)/ SO(System)/ Nodal Officer whoever is assigned for the job for all Mines of the Area as per the data provided by SO(Mining)/ GM (Operation) of the Area.
- Any change in GEO Fence boundary/route shall follow the same above procedures for implementation.

- Movement of the vehicles carrying coal to be monitored in the control room established at project level as well as Area level and violation of GEO Fencing/route to be recorded and acted upon.
- The system shall be maintained by Area officials for all the mines of the Area. SO(Mining)/ GM (Operation) shall be responsible for monitoring and ensuring correctness of Mines boundary and route for coal transport in all the Mines and SO(E&T)/SO(System)/Nodal Officer for drawing correct boundary as per requirement.
- Security Officer of the Area shall be responsible for acting upon violation of GEO fence boundary/route and further action thereon.
- Daily report of violation of GEO Fence/route shall be reported to GM of the Area with the action taken thereon.
- Weekly / Monthly report shall be given to Director in-charge by the GM of the Area highlighting cases of violation reported during the period, action taken thereon and result observed.
- Inclusion and exclusion of the vehicles into or out of Mines under GEO Fencing shall be necessarily with the permission of Project Officer including temporarily withdrawal for repairing / maintenance etc.
- Project officer shall ensure introduction of vehicles within the GEO Fencing Mines duly fitted with GPS/GPRS and RFID Tag.
- Authorities may nominate their subordinate officers for their assistance.
- CVO of the respective company may call record any time for investigation.

2. GPS/GPRS:

- Requirement of GPS/GPRS devices and RFID Tags are to be assessed by the Project officers for their mines based on total departmental / contractual vehicles to be deployed/are being deployed for transportation of coal and other purposes.
- In order to ensure functioning of above devices timely action for repairing/replacement shall be taken by the Project officer including submission of Indent / proposal and procurement / repairing action as per DOP.
- Project officer may nominate the officials of respective department for above purposes with their role and responsibility

-
- The contractors who are deployed for transportation of coal should be directed to ensure fitment of above devices in their vehicles and functioning properly.
 - Necessary provision be made for fitment and functioning of above devices by the contractor in the NIT itself in transport contract.
 - Record to be maintained by the mine Manager for availability and functioning of above system in all the vehicles.
 - Deployment of vehicles for the purpose of coal transport either through departmental vehicle or contractor vehicle should have written permission of Manager of Mine, so that there is no violation of GEO Fence boundary recorded for the authorized vehicles.
 - Monthly report shall be sent by Area GM to the Director in-charge as regards to functioning of the system and action taken by them for repairing / replacing the system.
 - CVO of the respective company may call record any time for investigation.

3. CCTV:

- Strategic location shall be identified by the Project officer in consultation with Manager of the Mines, Security personnel etc. requirement of CCTV may be assessed accordingly. This should include Mine entry, Mine exit, Weigh Bridge, Stores Premises specifically.
- Procurement may be made preferably centrally with the approval of authority as per DOP.
- Effective use and proper functioning to be ensured by the Mines Management authorizing responsible officer of the project preferably having technical background.
- Record of clippings of standalone CCTV shall be maintained by the respective department of Area / Nodal Officer for a minimum period of seven days. However, integration of all CCTVs through proper networking to be done for monitoring from control room on continuous basis with action thereon.
- Record of other CCTVs shall also be made and maintained for not less than seven days.
- Controls rooms should be established at project level as well as Area Level for effective surveillance and to acted thereon round the clock.

- Security Officer of the Area shall be responsible for prevention of illegal activities so observed with due assistance from local police as well as officials posted in the Project/ Mines.
- Daily report to be forwarded to Area General Manager by the Security in-charge of the Project based on monitoring at control room and action taken thereon if any.
- Monthly report shall be submitted to Director in-charge by the Area General Manager highlighting the incidences observed through surveillance system during the month will action taken thereon.
- CCTV are also required to be installed near coal heaps for recording movements nearby round the clock.
- CVO of the respective company may call record any time for investigation.

4. WEIGH BRIDGE WITH RFID & BOOM BARRIER :

- Every Road Weigh Bridge needs to be equipped with CCTV Cameras, RFID Reader & Boom Barrier. RFID Tag should be pasted in all coal carrying vehicle with details information of the vehicle.
- Project Officer of the respective Project shall nominate Officer responsible for ensuring effective use / functioning of the devices used including installation, commissioning and repair maintenance as per requirements.
- Provisions for capturing registration no. of vehicles reporting at Weigh Bridge should be made automatically with Tare Weight, Gross Weight etc. without manual interference.
- Provisions be made for display of Weighment outside the cabin and nobody should be allowed to enter in the cabin to avoid any outside influence.
- Positioning of CCTV Cameras shall be in such a way that weigh bridge staff can see positioning of the truck, number plate, drivers cabin & loaded area from his seat on the monitor placed in his cabin.
- Weigh bridge staff shall be responsible for instantaneous reporting of any failure observed during his duty period to the In-charge coal sale, who in turn report to appropriate authority immediately for remedial measures.

Goose

Mine Manager & Dispatch Officer to ensure presence of vehicles for installation of devices
Res: Mines Manager & Dispatch Officer

Project Engineer (E&M) with the help of Service Provider to ensure installation of GPS/GPRS devices & RFID tags in each vehicle.
Res:- Project Engineer (E&M)

Project Officer to certify the installation report & send to the Area GM
Res: Project Officer.

Area GM to certify & send the installation report to GM(E&T), CCL(HQ).
Res: Area GM

In case of any difficulty, the GM(E&T), CCL to provide the necessary support.
Res: GM(E&T). CCL

(III) Operation of VTS

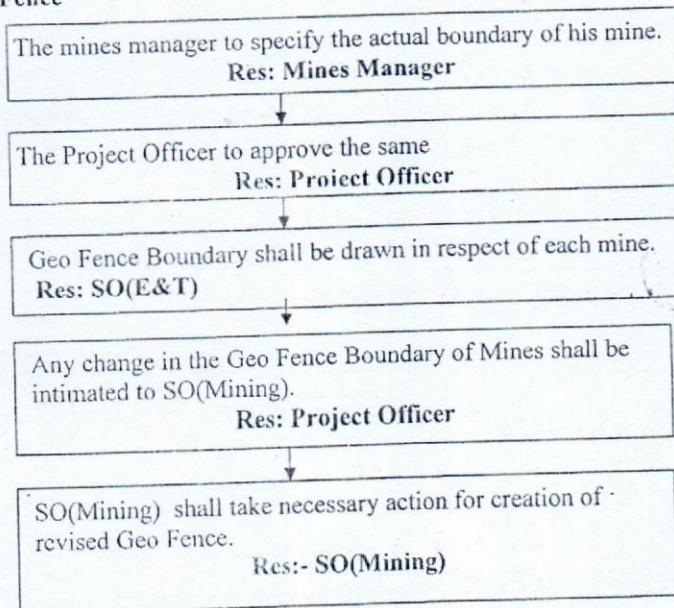
All the contractors engaged in coal transportation shall be explained the purpose of the system and designated route & geo fence boundary of the mine.
Res: Mine Manager & Dispatch Officer.

Maintenance of the same fleet, as far as practicable, by the contractor to be ensured
Res: Project Officer

Inclusion or exclusion of the vehicles into or out of VTS has to be permitted by the Project Officer. Temporary withdrawal of the vehicles from the Geo fence boundary of the mine for the reasons like maintenance, repair, etc., has to be permitted by the Project Officer who shall intimate the same to the Dispatch Officer
Res: Project Officer.

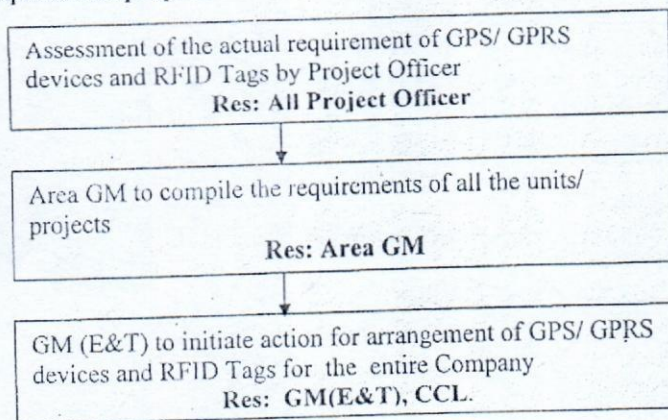
Draft Responsibility Matrix for implementation of GPS/ GPRS, RFID and CCTV based Vehicle Tracking System:

1. Geo Fence

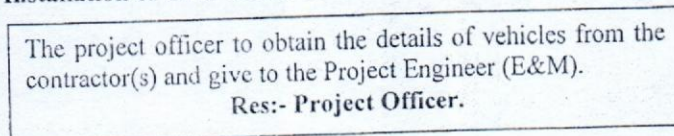


2. GPS/ GPRS based Vehicle Tracking System:

(I) Requirement proposal:



(II) Installation of GPS/ GPRS devices in vehicles operating in units/ projects.



Dispatch Officer to take up the matter with SO(E&T)/Nodal Officer (VTS) for fitting/removal of devices.
Res:- Dispatch Officer & SO(E&T)/Nodal Officer (VTS)

SO(E&T)/Nodal Officer (VTS) to take action for synchronization of vehicle into / out of VTS. Each Shift I/c functioning at Control Room to furnish report of any deviation/ alert of his shift to SO(E&T)/Nodal Officer (VTS) who shall furnish Daily Report to the Dispatch Officer, Project Officer, Area Security Officer & Area GM.
Res:- Shift I/C Control Room & SO(E&T)/Nodal Officer (VTS)

Analysis of alerts like Speed, Undue Stoppage, Route Deviation, Tampering, Geo Fence, Park Fence at each mine shall be done by Dispatch Officer who shall obtain the confirmation from the Area Control Room. The Dispatch Officer shall intimate the violation in writing to the Project Officer & Area Security Officer.
Res:- Dispatch Officer . Project Officer & Area Security Officer

Project Officer to take necessary action in association with Area Security Officer against vehicles, such as Disallowing/ Debarring the vehicle, FIR, Recovery from contractor's bill.
Res: Project Officer & Area Security Officer.

Project Officer to send a monthly report on action taken against erring contractors to the Area GM. **Res: Project Officer**

Area GM to send a monthly report in respect of his Area to GM (Oprn.), CCL(HQ) with a copy to GM(E&T). **Res: Area GM**

GM(Oprn.) to put up a monthly report for entire CCL at GM Co-ordination meeting at HQ with a copy to CVO, CCL
Res: GM(Oprn.) ✓

(IV) Maintenance of VTS

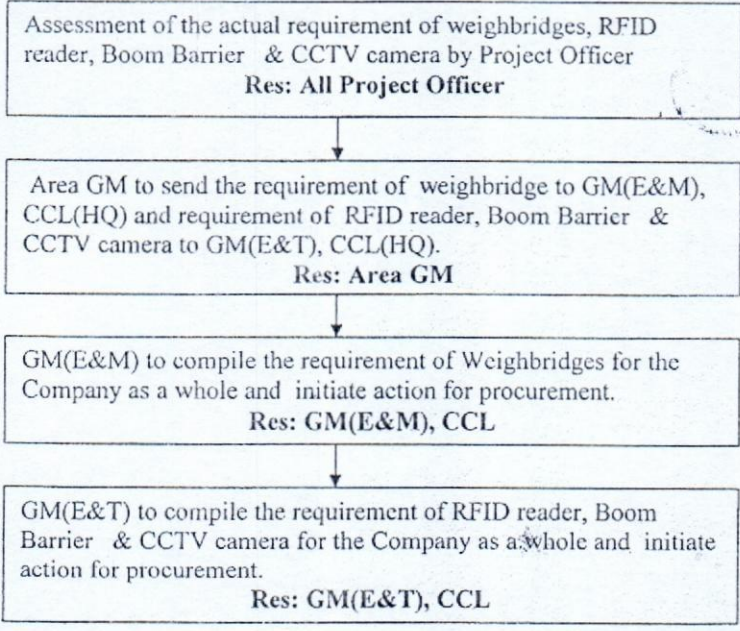
The SO(E&T)/Nodal Officer (VTS) to ensure the smooth functioning and maintenance of the VTS and to co-ordinate with the service provider for providing technical support for smooth operation and maintenance of the VTS.
Res: SO(E&T)/Nodal Officer (VTS)

At unit level the Project Engineer(E&M) to ensure proper functioning/ maintenance of GPS/GPRS devices & RFID tags
Res: Project Engineer(E&M)

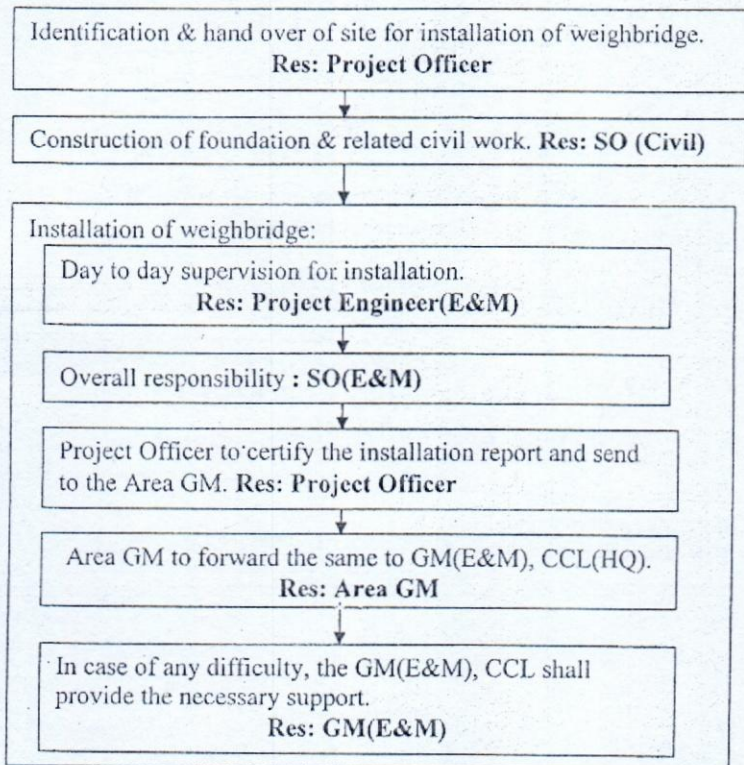
Security of the devices & system
Res: Unit Security I/c & Area Security Officer

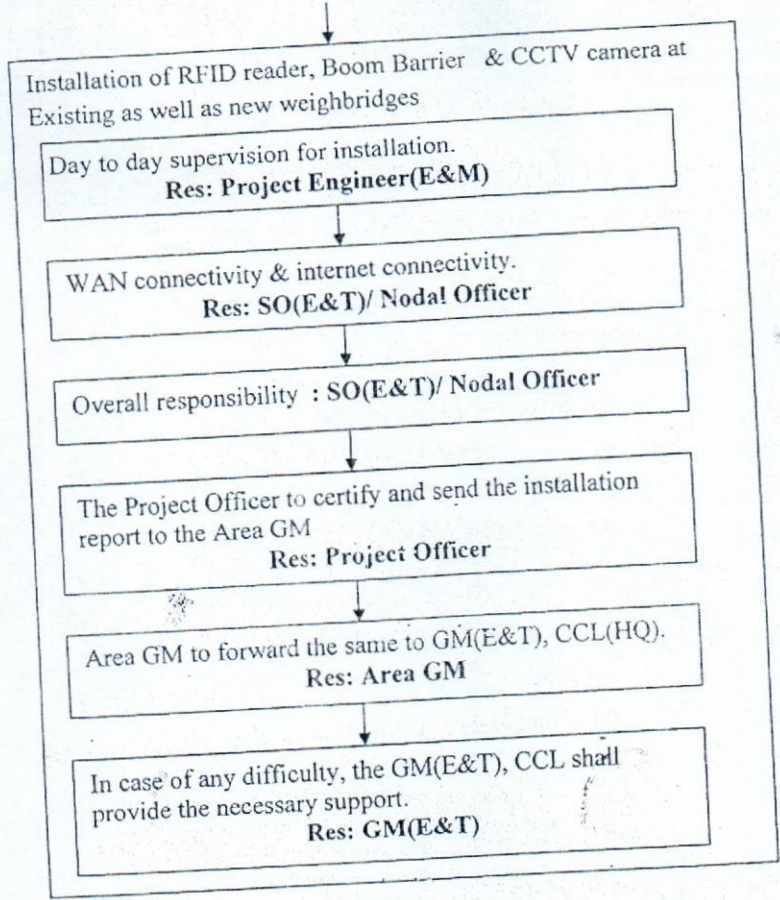
3. RFID, Boom Barrier & CCTV based Weighment Control & Monitoring System:

(I) Requirement proposal:

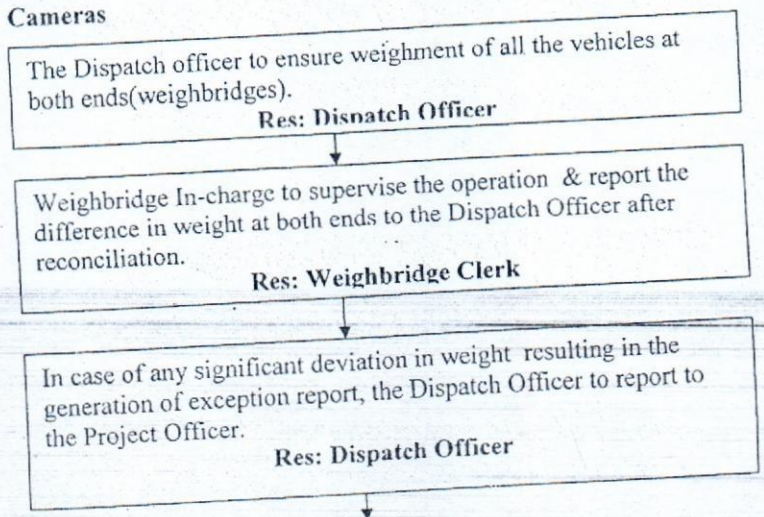


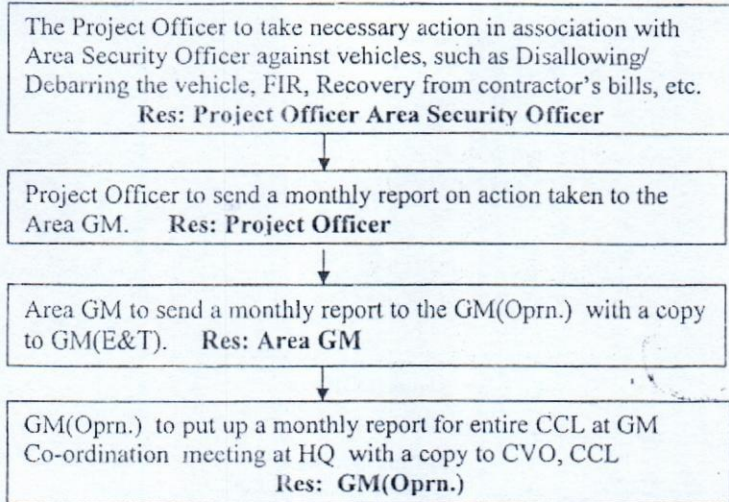
(II) Installation & Commissioning of Weighbridges and RFID Reader, Boom Barrier & CCTV camera:



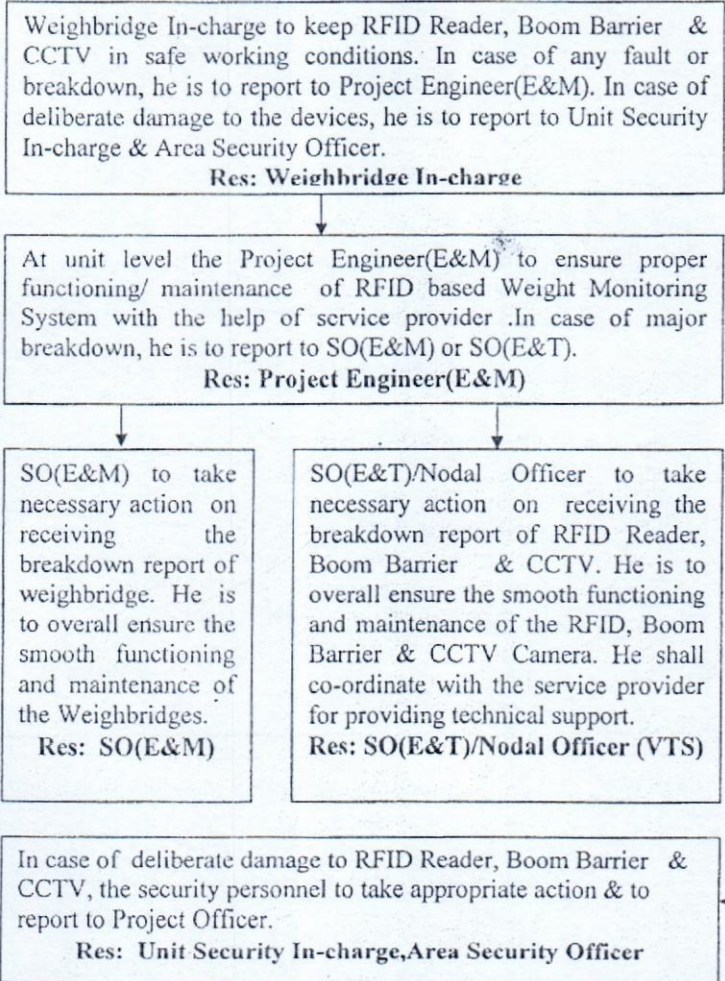


(III) Operation & Maintenance of weighbridges along with RFID, Boom Barriers & CCTV Cameras





(IV) Maintenance of Weight Monitoring System



4. CCTV based electronic surveillance system at all vulnerable points:

(I) Procurement by Area:

Assessment of the actual requirement of CCTV by the Project Officer for installation at all vulnerable points like coal stock, check post, entry-exit points, railway siding, magazine, stores, DDU, etc.

Res: All Project Officer

After assessment of requirements of all the units/ projects, the Area GM to initiate action for procurement

Res: Area GM

(II) Distribution of CCTV to Projects

Area GM to arrange the supply of CCTV to the respective units/ projects through SO(E&T)/Nodal Officer.

Res: Area GM, SO(E&T)

The Project Officer to direct Project Engineer (E&M) for receipt & safe custody of the CCTV

Res: Project Officer

(III) Installation of CCTV at vulnerable points of the projects

The project officer to direct the Project Engineer (E&M) for installation of CCTV at sensitive points identified beforehand.

Res: Project Officer

The Project Engineer (E&M) to take action for installation of CCTV.

Res: Project Engineer (E&M)

The Project Officer to certify and send the installation report to the Area GM

Res: Project Officer

Area GM to forward the same to GM(E&T), CCL(HQ).

Res: Area GM

(IV) Operation of CCTV based surveillance system

The feed of CCTV at unit level to be monitored by the concerned Unit I/c and any deviation to be reported to the Project Officer
Res: Weighbridge I/c, Railway Siding I/c Chief Store Keeper, Magazine I/c, Unit Security I/c

Project Officer to report the adverse feed from CCTV to Area Security Officer
Res: Project Officer

All the CCTV to remain connected through LAN/WAN to the Area Control Room. The feed to be monitored by the Control Room Shift Incharge in each shift & report of any deviation to be given to SO(E&T) who shall furnish Daily Report of deviation to the SO (Mining)
Res: Control Room Shift I/c & SO(E&T)/ Nodal Officer

The SO(Mining) to report the adverse feed to the Area Security Officer and the Area GM
Res: SO(Mining)

The Area Security Officer to take appropriate action in consultation with concerned Project Officer.
Res: Area Security Officer

A monthly report on action taken shall be furnished by the Area Security Officer to the Area GM
Res: Area Security Officer

Area GM to send a monthly report to the GM(Oprn.) with a copy to GM(E&T).
Res: Area GM

GM(Oprn.) to put up a monthly report for entire CCL at GM Co-ordination meeting at HQ with a copy to CVO, CCL
Res: GM(Oprn.)

(V) Maintenance of CCTV

All the CCTV to be kept in safe working conditions & any fault or breakdown to be reported by the concerned Unit I/c to Project Engineer(E&M). In case of deliberate damage to the devices, he is to report to Unit Security In-charge & Area Security Officer.

Res:- Weighbridge I/c, Railway Siding I/c Chief Store Keeper,

The Project Engineer(E&M) to ensure proper functioning/ maintenance of CCTV.

Res: Project Engineer(E&M)

The SO(E&T)/Nodal Officer (VTS) to ensure connectivity of CCTV through LAN/WAN and internet. He is to ensure overall functioning and maintenance

Res: SO(E&T)/Nodal Officer

In case of deliberate damage to RFID Reader, Boom Barrier & CCTV, the security personnel to take appropriate action & to report to Project Officer.

Res: Unit Security In-charge, Area Security Officer

5. Area Control Room

(I) Establishment of Control Room

Establishment of Control Rooms in all Areas

Res: Area GM

The Control Room to remain well connected with all Projects /units through LAN/WAN and internet.

Res: SO(E&T) & SO(System)

Assistance for establishment & connectivity to be given by GM(E&T) & GM(System).

Res: GM(E&T) & GM(System)

(II) Operation & Monitoring of Control Room

Day to day operation:

- Monitoring of alerts like Speed, Undue Stoppage, Route Deviation, Tampering, Geo Fence, Park Fence and adverse feeds from CCTV
- Intimation of above to concerned PO & SO (Mining)

Res: Control Room Shift I/c, SO(E&T)
& Area Security Officer

Overall I/c of control room & round the clock deployment of manpower

Res: SO(Mining)

SO(Mining) to report any significant deviation to the Area GM and Area Security Officer for necessary action.

Res: SO(Mining)

The Area Security Officer to take appropriate action and send a monthly report on action taken to the Area GM.

Res: Area Security Officer

Area GM to furnish ATR on exceptions, alerts, feeds, etc. to GM(Oprn.), CCL(HQ) with a copy to GM(E&T).

Res: Area GM

GM(Oprn.) to put up a monthly report for entire CCL at GM Co-ordination meeting at HQ with a copy to CVO, CCL

Res: GM(Oprn.)

(III) Maintenance of Control Room:

- Maintenance of Control Room including LAN/WAN & internet connectivity.

Res :SO(E&T) & SO(System)

- Safety & security of control room and its equipment.

Res: Area Security Officer