Safe Iron Ore Despatch Process under I3MS, Including Stack Preparation

Introduction:

The despatch of iron ore from Odisha is tightly controlled to ensure transparency, prevent illegal activities, and maintain accountability. The **Integrated Mines and Minerals Management System (I3MS)** plays a central role in this process, especially following the recent updates in the **Odisha Minerals (Prevention of Theft, Smuggling, Illegal Mining, and Regulation of Possession, Storage, Trading, and Transportation) Rules (OMPTS)**. This article provides a step-by-step overview of the iron ore despatch process, from **stack preparation** to **final delivery**, following the I3MS framework. Visual aids have been provided to clarify each stage.

---

1. Stack Preparation

The process starts with **stack preparation**, where iron ore is segregated by grade and quantity. Proper stack management ensures accurate record-keeping in the I3MS system.

Key Steps:

- Segregation of ore by grade and volume as per standards.
- Marking of stacks with unique identifiers.
- Applying **Form S** for Stack verification.
- Joint survey by mining officials and leaseholders.
- Entry of stack data into the I3MS portal for transparency.

Fig. 1

2. Application for Despatch Permit (Form J)

Once the stack is prepared and registered, the mining leaseholder must apply for a **despatch permit** via **Form J** in the I3MS system. The system verifies whether the requested quantity for despatch aligns with the available inventory and regulatory requirements.

Key Steps:

- Submission of Form J in the I3MS.
- Verification of stack records and mining quotas.

- Payment note creation.
- Approval of despatch permit based on compliance in **Form L**.

---

3. Vehicle Scheduling and e-Pass Generation (Form M)

After the permit is issued, the vehicles assigned for transportation must be registered in the I3MS, and an **e-pass (Form M)** is generated for each consignment. This e-pass contains details such as the source, destination, vehicle registration, and transport route.

Key Steps:

- Vehicle registration and linkage with the e-pass.
- Issuance of **Form M** for each transport vehicle.
- GPS tracking enabled for real-time oversight.

---

4. Safety check of Transporter vehicles

Linked vehicles shall undergo thorough safety checks such as Vehicle fitness, RTO documents verification, safety devices and after being certified by security team the vehicle shall be given clearance to enter the mine premises.

Key Steps:

- RTO documents, insurance copy verification
- Safety devices such as DFMS, Camera, AVA etc shall be checked and verified.
- Driver and vehicle cabin shall be checked for carrying any hazardous substances.
- Appropriate PPE to be ensured and mobile phone of the driver to be collected by security personnel before giving entry.

---

5. Weighment at the Source

Before loading the iron ore, vehicles undergo **tare weighment** at a government-approved weighbridge. After the loading is complete, a **gross weighment** is conducted to ensure that the authorized quantity of ore is being transported. This data is automatically uploaded to the I3MS.

Key Steps:

- Tare and gross weighment before and after loading, load adjustment to be done according to permissible limits.
- Digital logging of weighment data in the I3MS system.
- Verification of the transported quantity with the despatch permit.

Fig. 2

6. GPS Tracking During Transit

The vehicles transporting iron ore are equipped with **GPS devices**, ensuring that they follow the approved routes. Any deviations or unauthorized stops generate alerts in the I3MS system, helping authorities monitor and prevent illegal off-loading.

Key Steps:

- Real-time monitoring of the vehicle's route.
- Immediate alerts for any deviations.
- Detailed reports generated for tracking compliance.

7. Final Weighment and Delivery

Upon arrival at the destination (e.g., steel plants or export facilities), the vehicle undergoes a final weighment to verify that the transported quantity matches the originally loaded amount. The consignee acknowledges receipt in the I3MS system, completing the transaction.

Key Steps:

- Final weighment at the delivery point.
- Receipt acknowledgment by the consignee.
- Reconciliation of transported and received quantities in I3MS.

Flow chart of Dispatch cycle

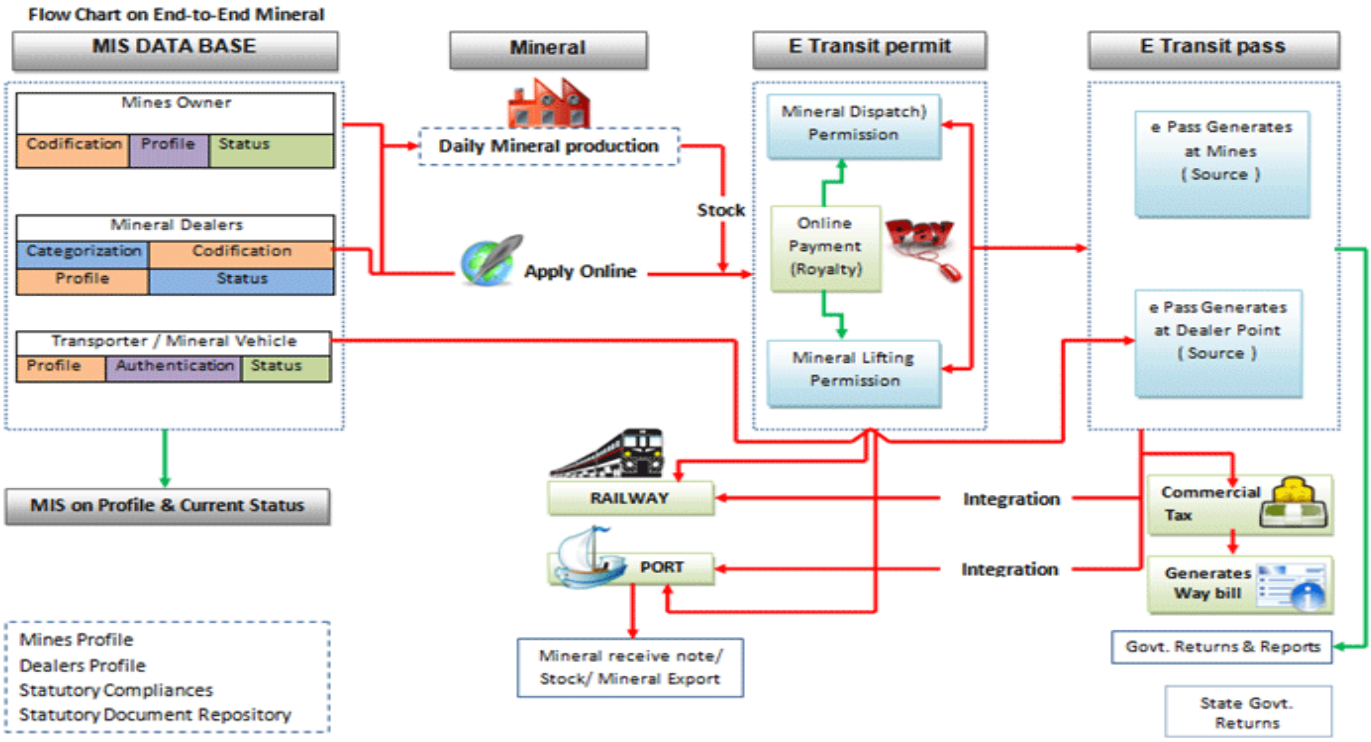

Fig. 3

Conclusion:

The integration of stack preparation, real-time tracking, and digital monitoring within the **I3MS** framework, aligned with the updated **OMPTS guidelines**, ensures a secure and transparent iron ore despatch process in Odisha. By streamlining operations from **extraction to delivery**, this system greatly reduces opportunities for **illegal mining and smuggling, setting a benchmark for mineral transportation across India.**

References:

-OMPTS Guidelines
-i3ms website
-Neelachal Iron Ore Mine Dispatch process

Prepared by: **Neelachal Iron Ore Mine** team.
-Chenchu Rathnam, Manager
-Kannuri Prudhvi, Area Manager
-Ajay Yadav, Area Manager