

F. No. CPAM-55020/10/2020-CPIAM

भारत सरकार/ Government of India

कोयला मंत्रालय/ Ministry of Coal
(CPIAM Section)

Room No. 622A, Shastri Bhawan,
New Delhi, dated: 25th August, 2022

OFFICE MEMORANDUM

Subject: Seeking comments of stakeholders on draft Coal Logistic Policy 2022.

The undersigned is directed to inform that this Ministry has prepared a draft Coal logistics Policy, 2022 with a vision "to develop a technologically enabled, integrated, cost-efficient, resilient, sustainable and trusted logistics ecosystem in the country for accelerated and inclusive growth". A copy the said draft policy is enclosed herewith.

2. All stakeholders are requested to provide their comments on the enclosed draft policy, if any, to this Ministry within 15 days from the date of placing of this OM on the website of this Ministry at e-mail id: hitlar.singh85@nic.in. Comments received thereafter shall not be considered.

Encl.: As above.



(Hitlar Singh)

Under Secretary to the Govt. of India
e-mail id: hitlar.singh85@nic.in

To,

1. NIC - for placing on website of MoC for stakeholder consultation
2. Stakeholders.

Table of Contents

1. Background.....2

2. Definition.....3

3. Vision, and Objectives3

4. Targets4

5. Strategies for achieving the targets.....4

6. Proposed interventions, incentives, and implementation methodology:7

7. Monitoring and Coordination:7

8. Action Plan:7

1. Background

1.1 Coal is the mainstay of the Indian energy sector. The volume of Coal handled by Rail, Road, MGR & Conveyor belt for the year 2021-22 is 415.658 Mt, 235.826 Mt, 116.602 Mt, and 50.911 Mt respectively. The domestic coal production capacity is estimated at 1,500 MTPA by 2030, which may continue up to 2040 or beyond. Creating transport infrastructure and managing logistics to transport targeted coal produced from point of origin to consumption centers are major challenges for the sustainable development of coal in the country. To achieve the target of 'Atmanirbhar Bharat', robust coal evacuation infrastructure is needed in the country. Given the dynamic situation in the world coal market, globalization, and rapid developments in the Indian coal sector, coal logistics is set to play a pivotal role in the economic development of the country. As per 'Coal Vision 2030' commissioned by Coal India in 2017, domestic coal demand was estimated to be 1,300- 1,900 MTPA by 2030. Transportation of such high coal volume and creating necessary evacuation capacity are challenging, the bulk of the coal has to be transported to power utility and user industries. Challenges in coal evacuation are:

- a. Lack of investments in logistics infrastructure
- b. Higher coal logistics costs owing to inherent characteristics
- c. Non-availability of wagons and congestion on the rail network
- d. Limited coal transportation by alternate transportation models
- e. Limited logistics planning in multi-modal transport

1.2 The logistic sector is considered the backbone of economic growth. Even the growth of Coal & other sectors depends heavily on the efficiency of the logistics network. Coal logistics efficiency is a function of infrastructure, services (digital systems/processes/regulatory framework), and human resources. The PM Gati Shakti National Master Plan (NMP) for multimodal connectivity infrastructure to various economic zones, has been launched. PM Gati Shakti NMP is a transformative approach for improving logistics efficiency and reducing logistics cost, with a focus on the integration of existing and proposed infrastructure development initiatives of different agencies, to ensure first and last mile connectivity, for seamless movement of people and goods. Coal logistic chain involves the movement of coal from the mine to a nearby washery or coal handling

plant for value addition. Subsequent to that coal is moved to a dispatch point which can be a railway siding, port, or inland waterways terminal using the road, conveyor, merry-go-round (MGR) train, or rail. Similarly, trunk line movement and last mile connectivity happens using a different mode of transportation for various origin and destination (O-D) of Coal. The expected coal movement in Net tonne kilometers (NTKM) is analyzed by consulting various stakeholders involved in the coal logistic chain.

2. Definition

2.1. 'Coal Logistics' means the transport or carriage of Coal from origin to destination through a single mode or multimodal mode of transportation and includes storage, loading, or unloading of coal for the purpose of delivery to the power plants, steel manufacturing, cement sector, washeries & various other non-regulated sectors. The Coal logistics infrastructure comprises nodes and connections, more recognizable as ports, railways sidings stations, warehouses, coal stockyards, loading, unloading, intermediate storage, and other coalfield areas connected by roads, railways, shipping, inland waterways, air routes, pipelines, conveyors, MGR, etc., that are used by a wide range of mine operators. This system is operated under a framework through a workforce with a wide range of knowledge of skills and technologies. The aim of the Coal Logistic Policy is "To identify, evaluate & eliminate gaps in existing coal evacuation infrastructure & environment-friendly transportation of coal from the mine to the end-use plant".

3. Vision, and Objectives

The existing and upcoming coal logistic infrastructure of each region needs to be evaluated to identify the challenges and gaps in efficient and environment-friendly transportation of coal from the mine to the end-use plant. Keeping in view, the policy framework has been prepared.

3.1. The vision of the coal Logistics Policy is "to develop a technologically enabled, integrated, cost-efficient, resilient, sustainable and trusted logistics ecosystem in the country for accelerated and inclusive growth".

3.2. Key objectives of the coal logistic policies are:

- a. **Availability:** To ensure the availability of adequate coal evacuation infrastructure.
- b. **Optimization:** To optimize the total logistics cost of coal (time and transport price sensitive).
- c. **Integration:** To promote an interconnected multimodal network of transport infrastructure & greener transportation initiatives for efficient movement of coal covering the entire country.
- d. **Modernization:** To promote greater adoption of information communication technology, upgraded infrastructure, use of drones, and innovation to improve efficiency and address the evolving needs of the sector.
- e. **Inclusivity:** To promote inclusivity by addressing the needs of logistics supply and user side.

4. Targets

4.1. Targets for achieving the vision of the Coal Logistics Policy are to

- (i) Create the optimal infrastructure for coal transportation at the origin & destination point
- (ii) Optimize the total coal transportation in the country
- (iii) Promote common use coal evacuation infrastructure & investments by the user.
- (iv) Develop efficient, eco-friendly multi-modal integrated National Coal Evacuation Infrastructure and to establish Smart Coal Logistics corridors for ensuring complete oversight on every tonne of coal from mine to the consumption point to ensure online and real-time analysis for market actions.

5. Strategies for achieving the targets

5.1. Reduction in Coal logistics costs is planned to be attained through measures that improve efficiency in transportation, cost optimization. technological upgradation etc. The strategy will involve:

- a. ROW (Rights of Way) of rail and roads and first-mile evacuation are planned as part of the mine allocation process.

- b. Arrangements of relevant business models need to be encouraged for the formation of first mile as well as last mile connectivity.
- c. Common user facilities like Railway Siding to be developed in cases where there are 2-3 mines close to each other. Various business models can be adopted for this purpose.
- d. One of the models can be, wherein the State Government carries out land acquisitions and the other stakeholders i.e., the block allocates would make investments for the development. It is a common user line.
- e. An exercise needs to be undertaken when Railway Administration uses its Rights to allow usage of siding or built another facility by connecting the siding with another siding or handling facility. The original investor needs to be suitably compensated.
- f. Planning for construction and use of shared evacuation infrastructure, which is to be part of the mine allocation process.
- g. Institutes like CMPDIL/ISM etc. can be identified as nominated agencies for assisting mine owners in developing FMC.
- h. Considering the benefits of conveyor, use of it needs to be promoted wherever it is economical to use.
- i. Railway freight rates for its highest volume commodity, Coal, be subject to regulation as a part of Govt decision.
- j. Green transportation initiatives would focus on modal shift to conveyors, railways and waterways from road transportation of coal.
- k. To make the RSR (Rail – Sea – Rail route) route cost-competitive vis-a-vis ARR (All Rail Route), the rationalization of rail tariffs needs to be evaluated. The 2-leg rake transportation costs & Terminal Charges (INR 20 per tonne

for both inward and outward traffic for all commodities except Containers; introduced in 2016) significantly contribute to increased rail costs in RSR. In specific case studies analyzed as part of the report, the costs for first-mile and last-mile connectivity via rail on RSR routes constitute as much as 71% of TLC (Total Logistics Cost) for the RSR route. Thus, railway tariff rationalization for first- and last-mile connectivity to and from ports can enhance the viability of RSR routes for coal.

- i. An optimization study is available and there is a need to revisit it in order to be competitive in TLC and per unit energy cost. In specific O-D (Origin-Destination) pairs, the modification in coal linkages between coal mines and power plants may be evaluated for movement via the RSR route with a view to reducing overall TLC and cost per calorie delivered for such coal movement.
- m. With the objective of reducing TLC for imported coal movement to the hinterland, the IWT (Inland Water Transport) route over NW(National Waterway) -1 can be a more suitable transportation mode for specific O-D pairs for imported coal transhipped at Sagar Island / Sandheads (near Haldia Port) on to barges for further movement to thermal power stations located in proximity to NW-1, provided suitable LAD(Least Assured Depth) and infrastructure are present along NW-1.
- n. Smart Coal Logistics Corridors to be established for ensuring complete oversight on every tonne of coal from the mine to the consumption point to ensure online and real-time analysis for market actions. 'Smart Coal Logistics Corridors' can be defined as technology-enabled coal logistics chains that provide real-time information regarding logistics processes from the mine to the destination and can help achieve expected outcomes such as - (a) Visibility across logistics chains, (b) monitoring asset utilization, (c) measurement of KPIs of stakeholders involved in the logistics chain, (d) enhancing safety and sustainability of the processes, and (e) provide the Ministry of Coal with advanced analytics such as heat-map generation, route planning, TLC minimization, etc.

5.2 Development of data-driven systems, for monitoring various components of the logistics ecosystem to enable higher logistics efficiency, is envisaged through PM Gatishakti NMP Portal.

6. Proposed interventions, incentives, and implementation methodology:

6.1. Multi-modal integrated National Coal Evacuation Plan and Smart Coal Logistics Corridor Plan are being formulated.

6.2. It is proposed to constitute a Technical Support Unit and Inter-ministerial Committee (IMC) for identification, formulation & support of the Multi-modal integrated National Coal Evacuation Plan. Issues will be taken up with concerned Organizations, including the Ministry of Railways, Ministry of Ports, Shipping & Waterways, Ministry of Commerce, State Governments, etc. for its approval, execution. Its implementation will be monitored by the IMC.

7. Monitoring and Coordination:

7.1. The institutional framework for implementation, monitoring, and support mechanism are designed to have a three-tier system:

- a. Technical support unit (TSU)
- b. Inter-ministerial Committee (IMC)
- c. Network Planning Group (NPG)

8. Action Plan:

8.1. The earlier consultant has submitted the following reports for evacuation of coal, which need to be considered together to prepare a multi-modal integrated National Coal Evacuation Plan to fulfill the requirement by 2030-

- a. National Coal Logistics Plan
- b. Smart Coal Logistics Plan
- c. Concept on Mineral Highways
- d. Report on "Transaction Structuring Under Common Use Infrastructure for Coal Evacuation"

8.2. Further, the earlier consultant was assigned the work to prepare a coal evacuation plan for non-CIL coal blocks. Accordingly, the National Coal Logistics Plan, submitted to MoC covers all existing and upcoming non-CIL coal

blocks and a large number of CIL blocks. CIL has assigned Deloitte to prepare a coal logistics plan in respect of CIL coal blocks. This report is yet to be received.

8.3. **Verification of data:**

Ministry of Coal will verify data in respect of Non-CIL coal blocks mentioned in the reports by the consultant; and CIL will submit the coal evacuation plan for CIL blocks prepared by Deloitte and also verify and modify if needed, the data in respect of CIL coal blocks mentioned in the reports by the consultant.

8.4. **Integration of data:**

After verification of data, the Ministry of Coal will integrate data on Coalfield-wise production of coal by 2030 and collect details of consumers by 2030, along with their location and coalfields from where the consumer will get coal on minimum transportation cost.

8.5. **Assessment of infrastructure requirements:**

Ministry of Coal will assess in consultation with stakeholders (i) the quantity of coal to be transported through waterways (sea route + inland waterways), roads, and railways. (ii) The gaps in infrastructure which will be required by 2030 and after the completion of ongoing/completed 14 rails projects. (iii) Infrastructure that will be required for using waterways and how much to be developed.

8.6. After finding the Infrastructure Gap and analyzing the following reports, Ministry of Coal will prepare a multi-modal integrated National Coal Evacuation Plan to fulfill the requirement by 2030-

- a. National Coal Logistics Plan
- b. Smart Coal Logistics Plan
- c. Concept on Mineral Highways
- d. Report on “Transaction Structuring Under Common Use Infrastructure for Coal Evacuation”

8.7 **Approval by the NPG**

Multi-modal integrated National Coal Evacuation Plan and Coal Logistics Policy will be placed before the NPG for their approval.

8.8 Implementation of Multi-modal integrated National Coal Evacuation Plan

IMC will be constituted for the implementation of the Multi-Modal Integrated National Coal Evacuation Plan. Issues will be taken up with concerned Organizations and their implementation will be monitored by the IMC.
