

# **CTM**

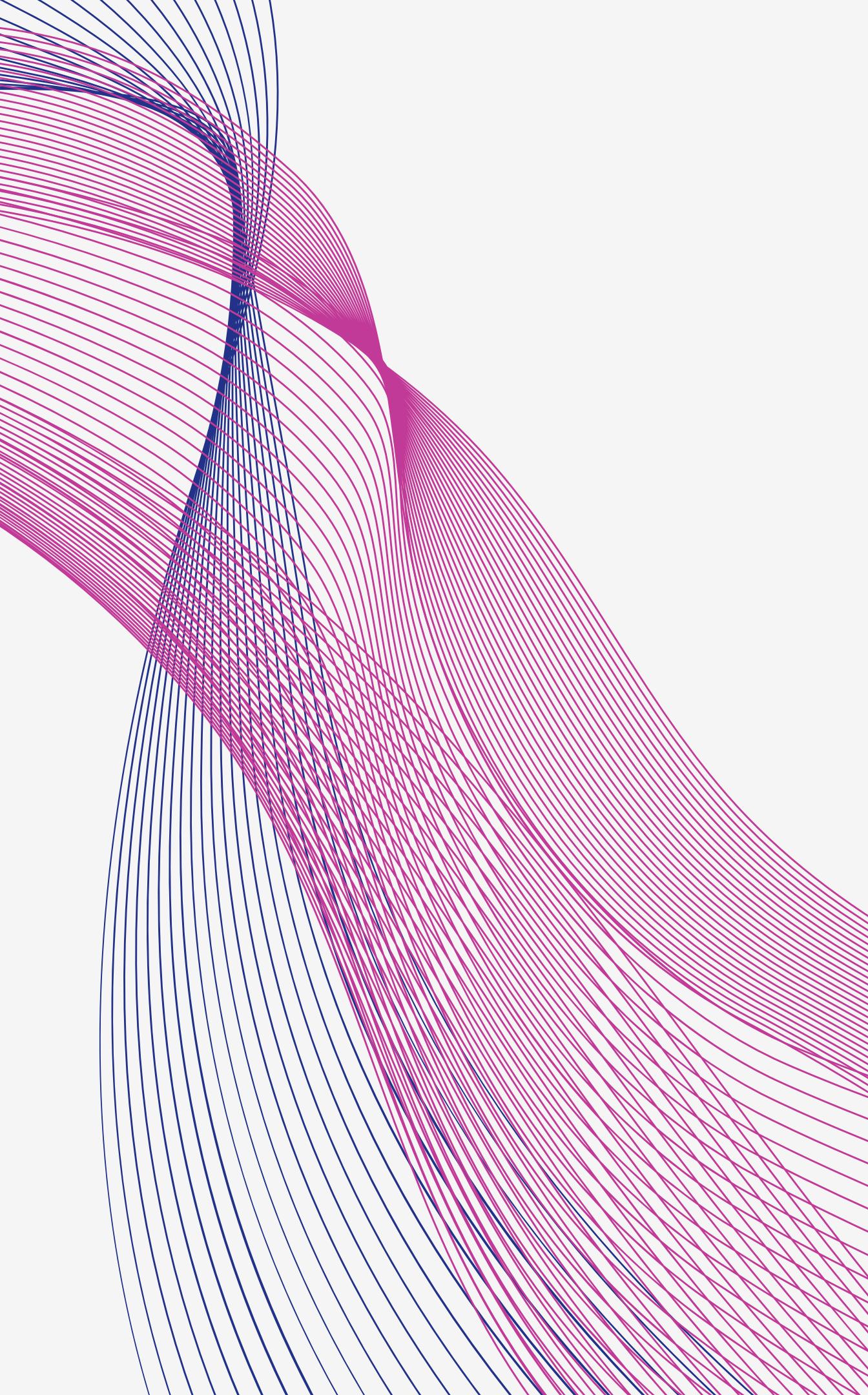
## CENTRAL TRANSMISSION MEDIUM

FOR STATE POLLUTION CONTROL BOARD

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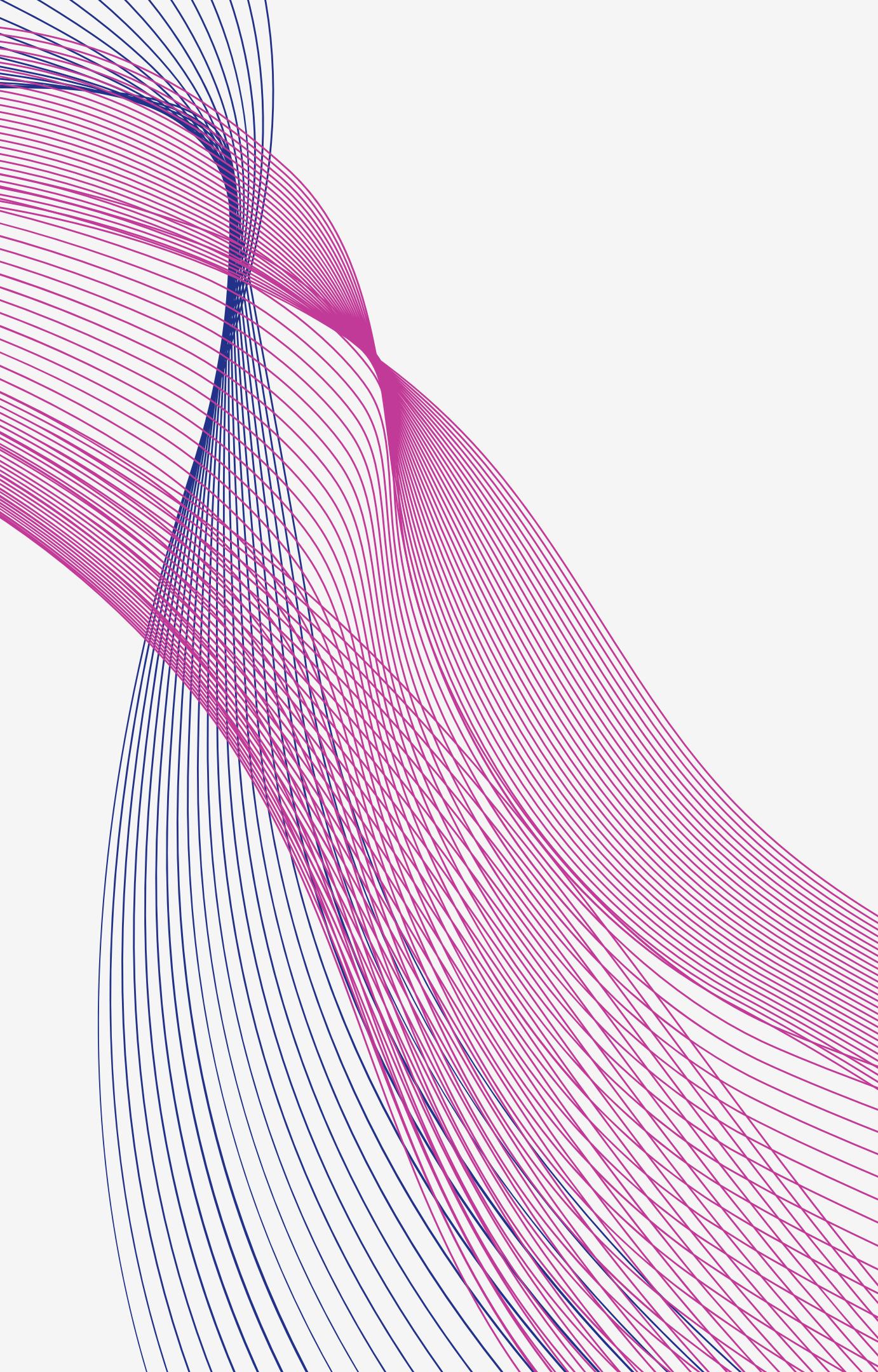
PRESENTED BY VEPOLINK



# INTRODUCTION

At Vepolink, we are dedicated to revolutionizing environmental compliance and pollution management in India. Recognizing the critical gap between vendors and State Pollution Control Boards (SPCBs), we have developed an innovative solution to simplify and streamline the transmission of pollution data.

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Our app will serve as a central transmission medium, enabling vendors to seamlessly transfer pollution data from their client entities to SPCB servers. By acting as an intermediary, our app eliminates the complexities associated with direct integration for vendors, while working closely with SPCBs to enhance compliance, ensure accuracy, and introduce value-added features.

Beyond data transmission, our app empowers polluting entities and vendors with tools for maintenance management, calibration record-keeping, and hassle-free onboarding, fostering an ecosystem of improved transparency and accountability. Together, we aim to set a new standard in environmental governance, making compliance efficient and future-ready.

# Mission STATEMENT

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The Central Transmission Medium (CTM) is an advanced software platform designed to act as an intermediary between state pollution control boards (SPCBs) and vendors responsible for collecting and transmitting pollution data from various entities, such as manufacturing plants, hospitals, or offices.

Instead of each vendor directly integrating with SPCB servers a process that is often complex, inconsistent, and prone to delays—the CTM serves as a unified data aggregation and transmission hub. Vendors upload data collected from their client entities to the CTM, which then standardizes, validates, and transmits the data to the SPCB servers in a compliant and efficient manner.

# Proposed OBJECTIVES

The central transmission medium will be developed with these objectives in mind, which are tailored to benefit both the vendors and the State Pollution Control Board.

- **Seamless Data Transmission**
- **Standardization and Validation**
- **Vendor and Entity Management**
- **Real-time Monitoring and Reporting**
- **Regulatory Updates**
- **Scalability**

# CTM Benefits for SPCBs

01

## Enhanced Compliance and Oversight

CTM streamlines the data submission process, ensuring all entities and vendors adhere to pollution control regulations effectively.

02

## Reduced Workload

With data pre-processed and validated by CTM, SPCBs are freed from the task of handling errors or discrepancies in vendor submissions.

03

## Centralized Control

All pollution data across the state is available in one place, providing a comprehensive view of environmental compliance.

04

## Improved Decision-making

Access to real-time, high-quality data empowers SPCBs to analyze trends, enforce regulations, and design better pollution control strategies.

05

## Future-ready System

The CTM enables SPCBs to implement new features or policies with minimal disruption, making the system adaptable to evolving needs.

# CTM Benefits for Vendors

01

## Simplified Integration

Vendors no longer need to manage complex integrations with SPCBs or worry about frequent changes to SPCB server requirements.

02

## Cost Efficiency

By leveraging CTM, vendors save on development and maintenance costs associated with direct SPCB integrations.

03

## Focus on Core Services

Vendors can focus on providing quality instrumentation and data collection services instead of dealing with compliance-related technical challenges

04

## Value-added Features

CTM offers tools like calibration records and maintenance management, adding more value to the services vendors provide to their clients.

05

## Improved Client Onboarding

Vendors can quickly onboard new entities into the system without worrying about setting up complex compliance mechanisms.

# Development Team

The development team is the backbone of the Central Transmission Medium (CTM) software application, responsible for designing, building, and deploying a robust and scalable solution.

Comprised of specialized roles, this team ensures the application meets technical, functional, and compliance requirements. Each member brings unique expertise to the table, collaborating to create a seamless and efficient system.

## **key members of the development team**

- Senior Solutions Architect
- Senior Django/Python Developer
- Junior Django Developers
- AWS Data Engineers
- Software Application Tester
- Team Coordinator

# Development Team

S.No.	Position	Role	Requirement
1	Team Coordinator	Acts as the liaison between the development team and senior management, ensuring clear communication, resource allocation, and timely deliverables.	1
2	Senior Solutions Architect	Responsible for designing the architecture of the software application, ensuring scalability, security, and compliance	1
3	Senior Django/Python Developer	Leads API design and development, ensuring the core functionality of the application is robust and efficient.	1
4	Junior Django Developer	Focused on developing the dashboard application, including the front-end interface and integration with back-end APIs	2
5	AWS Data Engineer	Develops and maintains the data pipeline, ensuring seamless and secure data flow between vendors, the CTM, and SPCB servers.	2
6	Software Application Tester	Ensures the quality and functionality of the software through comprehensive testing and bug identification.	1

# Development Team

Importance of the Development Team	
Architecting the Solution	The team is tasked with creating a well-structured, scalable, and secure architecture tailored to the needs of SPCBs, vendors, and polluting entities.
End-to-End Development	From API design to front-end dashboards and data pipelines, the development team ensures every component of the software is functional, user-friendly, and compliant with industry standards.
Seamless Integration	By focusing on modular design and interoperability, the team ensures smooth integration between the CTM, SPCB servers, and vendor systems.
Operational Readiness	They establish a strong foundation for the software to handle large-scale operations while maintaining high performance and reliability.
Collaboration and Communication	The team works closely with senior management and stakeholders to ensure the software aligns with organizational goals and addresses user requirements effectively.

# Support TEAM

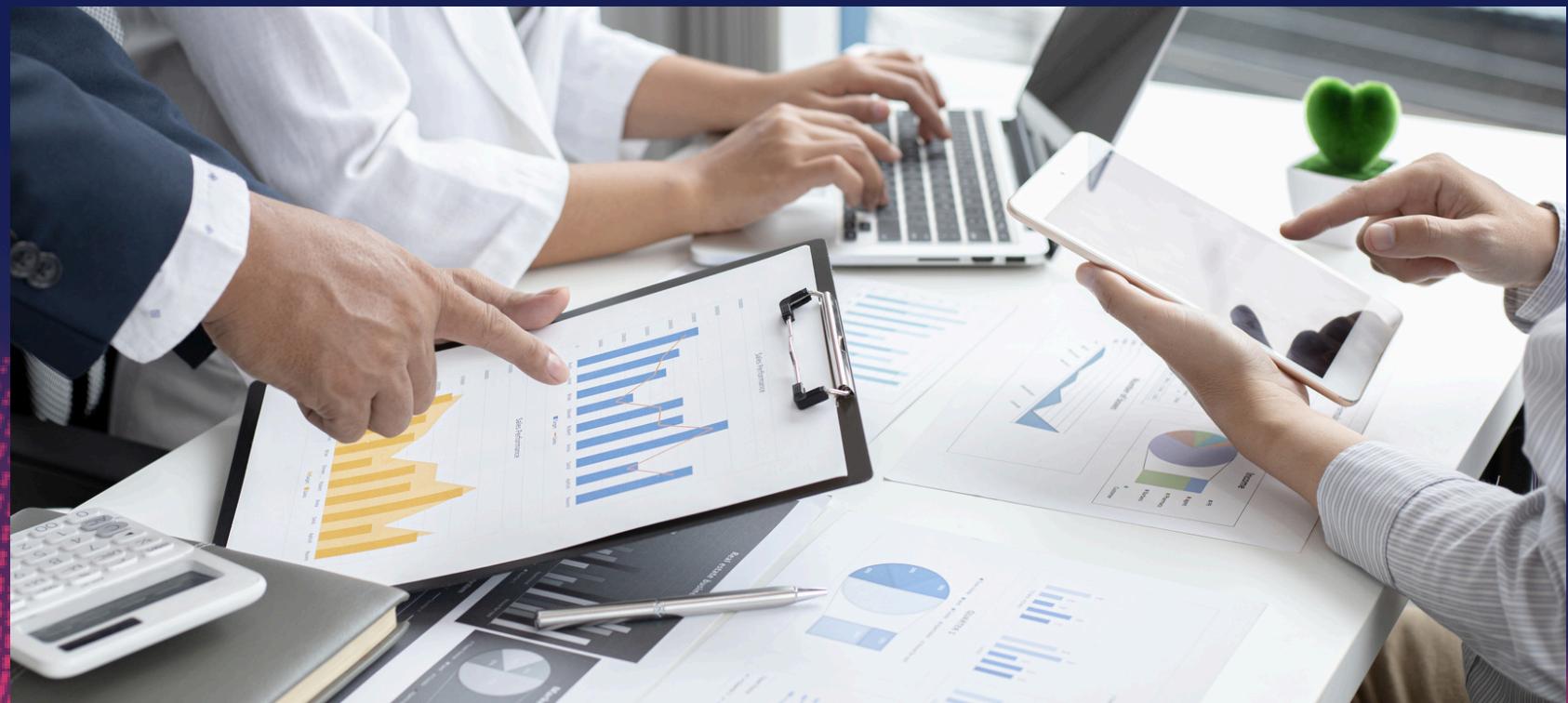
The support team is a critical component of the Central Transmission Medium (CTM), ensuring its seamless operation and fostering trust among all stakeholders—SPCB officials, vendors, and polluting entities. **Comprising a senior support staff and two junior support staff and a regional manager for each region**, this team is dedicated to maintaining the system's integrity, addressing user queries, and facilitating compliance.

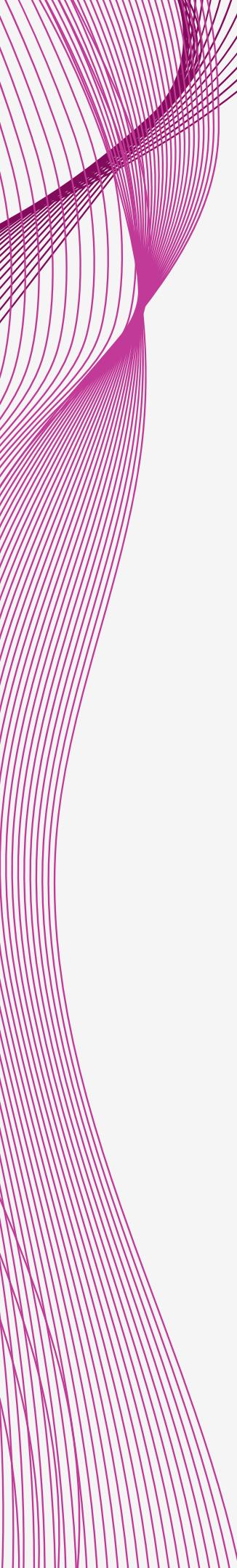
## Importance of the Support Team

1. Ensuring Data Continuity
2. Client Relationship Management
3. Compliance Facilitation
4. Operational Reliability

## Daily Tasks of the Support Team

1. Data Monitoring
2. Query Resolution
3. Compliance Communication
4. System Maintenance
5. Reporting and Feedback





## Importance of the Support Team

- Ensuring Data Continuity
  - The team monitors daily data transmissions from vendors to the SPCB, promptly addressing any disruptions to maintain compliance and operational efficiency.
- Client Relationship Management
  - By serving as the primary point of contact, the support team strengthens relationships with vendors and industries, ensuring their concerns and queries are resolved swiftly.
- Compliance Facilitation
  - The team plays a pivotal role in disseminating new compliance requirements, keeping all stakeholders informed and aligned with SPCB regulations.
- Operational Reliability
  - Their proactive monitoring and troubleshooting ensure that the CTM operates at peak efficiency, minimizing downtime or disruptions.



## Daily Tasks of the Support Team

- Data Monitoring
  - Continuously oversee data flows to ensure uninterrupted transmission from vendors to the SPCB.
  - Identify and resolve any issues in data submission promptly.
- Query Resolution
  - Address and resolve all technical and operational queries from vendors and industries in a timely and professional manner.
- Compliance Communication
  - Broadcast updates about new or modified SPCB compliance requirements to vendors and polluting entities.
- System Maintenance
  - Perform routine checks to ensure the platform is functioning optimally.
  - Report any software issues to the technical team for resolution.
- Reporting and Feedback
  - Provide regular updates to senior management about operational challenges, user feedback, and areas for improvement.

# RUNNING COST

Period	Vendor	Industry	AWS Cost			Support Team	Total
			Count	Storage	Total (Including Storage)		
In Months	Count	Count				Salaries	Monthly Expense
Month 1	4	221	60 k		1.5 lacs	80 k	2.30 lacs
Month 2	7	634	2.2 lacs		4.5 lacs	1.5 lacs	6 lacs
Month 3	10	983	5 lacs		11.7 lacs	2 lacs	13.8 lacs

\*K represents 1000, \*lac represents 100000, \*The costs shown are in INR and are merely projections.