In the past couple of years, the port sector has witnessed a surge in activity in terms of policies and regulations, incentives and schemes, and project uptake. A major boost to the sector came in January 2018, when the central government approved the long-awaited demand for amendments to the model concession agreement (MCA) for PPP projects at major ports. Traffic at Indian ports also witnessed a much higher year-on-year growth of 6.7 per cent in 2017-18, compared to 5.7 per cent in the previous fiscal. The launch of the Sagarmala programme generated the much-needed optimism in the sector. Promoting ease-of-doing business has become a key focus area for the government. Areas such as shipbuilding, cruise shipping, ro-ro ferry services and port connectivity have also witnessed increased interest in the past one year. Going forward, the port sector offers a strong pipeline of projects with many ports announcing ambitious infrastructure projects and capacity expansion plans. Going forward, the challenge will be to address issues such as lack of dedicated berths, supportive infrastructure and adequate connectivity to handle the increasing traffic volumes.

### EXECUTIVE SUMMARY

#### SECTION I: MARKET ANALYSIS, OPPORTUNITIES AND OUTLOOK

1. **Sector Overview**
   - Size and Growth
   - Traffic Analysis
   - Commodity Composition
   - Capacity Analysis
   - Financial Performance
   - Efficiency Performance
   - Key Sector Trends
   - Project Award and Completion: Achievements & Targets
   - Budget 2019-20: Key Announcements and Expected Impact
   - Impact of GST
   - Investment Projections (till 2023-24)
   - Issues and Challenges
   - Sector Outlook

2. **Recent Developments (past 15-18 months)**
   - Policy Developments
   - Recent Government Initiatives
   - Ease of Doing Business Initiatives
   - Technology Initiatives
   - Recent Funding Initiatives
   - Key Project Announcements
   - Other Key Developments

3. **Traffic and Capacity Projections (till 2023-24)**
   - Growth Drivers
   - Traffic Outlook
   - Major Ports
   - Non-major Ports
   - Capacity Addition Plans
   - Major Ports
   - Non-major Ports

4. **Project Pipeline Analysis**
   - Overall Project Pipeline
   - Project Pipeline Analysis
     - By Sector
     - By Coast
     - By State
     - By Port
     - By Type (Container terminals, berths, road & rail connectivity, dredging, etc.)
     - By Stage of Development
     - By Completion Period
   - Projects Awaiting Clearances/Land Acquisition
   - Top 50 Upcoming Projects

5. **Market Opportunities (till 2023-24)**
   - For Developers
   - For EPC Contractors
   - For Financiers/Long-term Investors
   - For Technology and Equipment Providers
   - For Consultants & Survey Firms
   - Other Stakeholders

6. **Financing and PPP Experience**
   - Key Funding Sources
     - Budgetary Allocations
     - Bank Lending
     - Multilateral Funding
     - Private equity
     - Etc.
   - Recent IPOs (Cochin Shipyard & Garden Reach Shipbuilders)
   - New Funding Options (NIIF, infrastructure bonds, etc.)
   - Investment Projections
   - Private Sector Participation
     - Experience So Far
     - PPP Formats and Models
     - MCA for PPP Port Projects, 2018: Impact and Challenges
     - Key PPP Projects: Completed and Ongoing
     - Lessons Learnt from Past Projects
   - Upcoming PPP Projects
   - Issues and Challenges

### SECTION II: PERFORMANCE ANALYSIS OF OPERATIONAL PORTS

   - Trends for both Major and Non-major Ports
     - Overall Traffic
     - Overseas versus Coastal Traffic
     - Monthly Traffic Trends in 2018-19
     - Major Ports
     - Non-Major Ports
   - Category-wise Analysis
   - Commodity-wise Analysis
   - Port-wise Analysis
   - Growth in the Last Five Years
   - Monthly Traffic Trends in 2018-19
   - State-wise Analysis
   - Growth in the Last Five Years
   - Monthly Traffic Trends in 2018-19

8. **Capacity Trends (2013-14 to 2017-18)**
   - Growth in Cargo Handling Capacity
     - Major Ports
     - Non-Major Ports
   - Port-wise Analysis
   - State-wise Analysis
   - Commodity-wise Analysis

### SECTION III: KEY PROGRAMMES/PROJECTS: TARGETS, ACHIEVEMENTS AND OPPORTUNITIES

   - Financial Performance of Major Ports
     - Total Income
     - Total Expenditure
     - Net Surplus
     - Operating Surplus
     - Operating Ratio
   - Analysis of Key Efficiency Indicators
     - Average Turn Round Time
       - Category-wise
     - Commodity-wise
     - Average Pre-Berthing Time
       - Category-wise
       - Commodity-wise
     - Average Output Per Ship Berthday
       - Category-wise
       - Commodity-wise
   - Per Tonnage Handling Cost
   - Issues and Challenges

10. **Sagarmala Programme**
    - Programme Scope
    - Progress So Far
    - Project Funding
    - Targets & Timelines
    - Recent Contracts
    - Key Completed Projects
    - Key Ongoing Projects
    - Investment Requirements
    - Upcoming Opportunities

11. **Jal Marg Vikas**
    - Project Scope
    - Progress So Far
    - Project Funding
    - Targets & Timelines
    - Key Completed Projects
    - Key Ongoing Projects
    - Investment Requirements
    - Upcoming Opportunities

12. **Development of New National Waterways**
    - Key Features of 106 Declared NWs
    - Progress So Far
    - Funding Requirements
    - Targets & Timelines
    - Recent Contracts
    - Key Completed Projects
    - Key Ongoing Projects
    - Upcoming Opportunities
This chapter will cover details on upcoming cargo handling capacity, investment requirements, current status, key milestones achieved, contractor/developer, recent contracts, expected date of completion, etc.

SECTION IV: KEY FOCUS AREAS

14. Inland Water Transport
   - Traffic Trends (2013-14 to 2017-18)
   - Overall Traffic
   - NW-wise Traffic
   - Commodity Composition
   - Recent Initiatives
   - Growth Drivers
   - Upcoming Projects
   - Issues and Challenges
   - Future Outlook

15. Coastal Shipping
   - Traffic Trends (2013-14 to 2017-18)
   - Overall Traffic
   - Major Ports
   - Non-Major Ports
   - Commodity Composition
   - Fleet Size of the Indian Shipping Industry (2013-14 to 2017-18)
   - No. of Vessels
   - Total Tonnage
   - Government Schemes/Initiatives
   - Key Trends
   - Growth Drivers
   - Key Issues and Challenges
   - Future Outlook and Opportunities

16. Port Connectivity
   - Analysis of Mode of Evacuation of Cargo (2013-14 to 2017-18)
   - By Rail
   - By Road
   - By Pipeline
   - By Conveyor
   - By Inland Waterways
   - Modal Split of Inbound and Outbound Cargo (2013-14 to 2017-18)
   - Key Completed Projects
   - Port-Rail Connectivity
   - Port-Road Connectivity
   - Key Ongoing Projects
   - Port-Rail Connectivity
   - Port-Road Connectivity
   - Key Upcoming Projects
   - Key Issues and Challenges
   - Investment Requirements

17. Modernisation and Mechanisation
   - Mechanised versus Conventional Handling at Major Ports
   - Current Practices - Major & Non-Major Ports
   - New Technology Trends & Advancements
   - Government Initiatives
   - Noteworthy Projects
   - Upcoming Opportunities
   - Key Issues and Challenges

18. Other Focus Areas
   - Roll-on, Roll-off & Ro-pax
   - Cruise Tourism
   - Shipbuilding/Ship-Repair/Dry Docks at Ports
   - Smart Industrial Port Cities
   - Ports as Industrial Hubs
   - Renewable Energy
   - Port-based SEZs/Coastal Economic Zones
   - CFSs/ICDs
   - LNG Terminals
   - Others (Warehouses, FTWZs, Logistic Parks, etc.)

SECTION V: KEY COMMODITIES: TRAFFIC ANALYSIS, EXISTING INFRASTRUCTURE AND CAPACITY ADDITION PLANS

19. Coal
20. Iron ore
21. Fertilisers
22. Pol
23. Container
   - Each chapter will cover:
     - Traffic Trends (2013-14 to 2017-18)
     - Major and Non-Major Ports
     - East Coast versus West Coast
     - Loaded versus Unloaded
     - By Type
     - Monthly Traffic Trends in 2018-19
     - Cargo Handling Capacity (2013-14 to 2017-18)
     - Existing Infrastructure
     - Capacity Utilisation Trends (2013-14 to 2017-18)
     - Technology Trends & Advancements
     - Planned Capacity Addition
     - Ongoing Projects
     - Key Issues and Challenges
     - Outlook & Projections

SECTION VI: OPERATIONAL PORT PROFILES

24. MAJOR PORTS
   - Kollam Port
   - Paradip Port
   - Visakhapatnam Port
   - Kamarajar Port
   - Chennai Port
   - V.O. Chidambaranar
   - Cochin Port
   - New Mangalore Port
   - Mormugao Port
   - Mumbai Port
   - J NPT
   - Deendayal Port
   - Each profile will cover information on traffic, capacity, financial and efficiency performance, existing infrastructure, ongoing and upcoming projects, and future expansion plans.

25. Key Non-Major Ports
   - Dahej Port
   - Dhamra Port
   - Dighi Port
   - Gangavaram Port
   - Gopalpur Port
   - Hazira Port
   - J SW Jaigarh Port
   - Kakinada Seaports
   - Karikal Port
   - Kattupalli Port
   - Krishnapatnam Port
   - Mundra Port
   - Port of Pipavav
   - Each profile will cover information on traffic, capacity, existing infrastructure, ongoing and upcoming projects, and future expansion plans.

Monthly Updates
The 11 monthly updates will comprise 16-24 pages on:
- Analysis of Traffic at Major Ports
- Commodity-wise Traffic at Major Ports
- Fleet Size of the Indian Shipping Industry (No. of vessels and tonnage)
- Project Update (Major & Non-Major Ports)
- Upcoming Tenders (Major & Non-Major Ports)
- New Project Announcements (Container terminals, berths, road & rail connectivity, inland waterways, dredging, etc.) (Major & Non-Major Ports)
- Key Data and Statistics

Weekly Newsletters
The 52 weekly newsletters will comprise 4-6 pages. It will cover new developments in the port sector relating to:
- Policy Announcements
- Government Initiatives
- Project Completions/Awards/Announcements
- Update on Key Programmes
- Key Financings
- Technology Initiatives
- Etc.
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