

e-FTS

Revolutionising Freight Transportation Infrastructure



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Transportation & Logistics are the key enablers for rapid economic growth. In this era of highly competitive trade, an efficient transportation and logistics & infrastructure can unleash large scale industrial investment in a region or country. As per one study, e.g. a reduction of 0.5% in logistics cost can lead to a 2.0% increase in exports.

Current Situation

Surface Transportation & Logistics with Rail & Road

- Suffers from poor assets utilization, fuel wastage & congestion
- Depends on government for funding
- Demand for capacity & performance is rapidly increasing

Rail & road for freight transportation & logistics are inefficient & unsustainable

*6.5 Bn hours lost due to congestion in US in 2014
(Mckinsey and company).*

*USD 1 Trillion is estimated loss due to air pollution caused by road transportation in OECD countries
(Navigant research)*

USD 250 B is the cost impact on India's GDP due to freight transportation by road

Currently, Transportation & Logistics based on rail and road has remained the same for decades. There are incremental improvements in various components of rail and road. However, challenges of capacity, land acquisition and performance remain major hindrances to support rising demands of growth, environment and safety. Current technologies of rail and road have failed in attracting large scale private investment in infrastructure due to commercial unviability and challenges in land acquisition which have led to major delays and cost escalations.

This presents an opportunity for a technology to transform transportation & logistics infrastructure with next-gen performance and which also address the issues of pollution, congestion, fuel wastage, safety, asset utilization but simultaneously ensuring commercial viability & affordability.

e-FTS based freight Transportation & Logistics infrastructure utilizes cutting edge IT, Telecom, Signalling, control technologies to address these issues.

Key disruptions of e-FTS

- Enables private funding due to attractive Business Case
- Deployable in any terrain, geography and demography
- Land Acquisition dependency is eliminated
- Accelerates development with climate protection and GHG reductions

In summary, e-FTS creates new definition of surface transportation & logistics infrastructure by transforming capacities, performance with commercial viability and affordability. e-FTS reduces logistics cost and gives major lever for GDP growth. e-FTS enables creation of infrastructure for freight transportation & logistics, which is affordable, viable, equitable while commercial, economical & environmental sustainability.

About e-FTS

e-FTS is an innovative rail-based technology that transforms transportation & logistics by leveraging cutting edge technologies of block chain, machine learning, Artificial Intelligence, IOT, IT and telecommunication. e-FTS revolutionises the basics by reducing energy intensity up to 90% & increasing assets utilization up to 5X by centralized control, automation, aggregation and monitoring. This results into reduction in logistics cost up to 80%. The innovation is also capable of reducing capital cost of the infrastructure by 30-60% along with elimination of constrains of land & environment.

Features

- **500million Ton** of freight transfer capacity
- **35m PCU** or **20m TEU** capacity without land acquisition (equivalent to an 8-lane access control highway for trucks only or 16-lanes highway for mixed vehicles)
- **80 kmph average speed** for point to point or multipoint to multipoint.
- **Zero PM** (Particulate Matter pollution)
- **90% reduction** in energy intensity and GHG compared to road

Highlights

- Commercial, economic and environmental viability & sustainability
- Land Acquisition dependency is eliminated
- On-Demand capacity & performance with sustainability
- Enables private funding as an alternate to government funding

Use Cases

1. Port Evacuation & Logistics with Elimination of Yard & Warehouses
2. Freight Transportation & Logistics in hazardous & polluted environment.
3. High capacity & efficient connectivity between multimodal Logistics parks, production, consumption & distribution centres
4. Cross-border Transportation & Logistics

Key Benefits

1. On-demand Capacity & high Performance
2. Multiplied Productivity of existing infrastructure
3. Improved Environment, Safety & Security
4. Automation to reduce Land, Space & Warehousing
5. Real Time visibility of cargo to all stakeholders
5. Unique Business & operation models to de-risk and Quick payback
6. High Economic & commercial Returns
7. World class & efficient infrastructure for all

Estimated Impact of e-FTS on global environment

- 15% -20% Reduction in Fossil fuel consumption
- 25% Reduction in CO2

About Us

Umeandus Technologies is working to develop innovative technologies, systems, solutions and business models to bring next generation performance, capabilities & private funding in infrastructure building. Given the global urgency to accelerate climate, environment protection and sustainability, UTIPL is determined to transform transportation & logistics infrastructure with commercial, economic and environmental viability.

e-FTS is a vision for an efficient & sustainable world.

