



Confederation of Indian Industry



GLOBAL PLATFORM FOR RAILWAY TECHNOLOGY & SERVICES

16-18 December, 2021

Pragati Maidan, New Delhi, India

SHOW REPORT



Total Visitors **4500**

40 Speakers

Participation by **200** Exhibitors

Big boost to Indian Railways modernisation by 2030

Country Pavilions of Germany, Russia, Japan, USA and many more

Conference Delegates 500

Buying Delegations from over **10** Countries – African Region, Senegal, Russia, Sri Lanka, Nepal, Bangladesh and Egypt.



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KEY HIGHLIGHTS

The 14th International Railway Equipment Exhibition and concurrently held International Rail Conference from 16th to 18th December 2021 at New Delhi showcased Indian Railways' strengths, capabilities and future requirements, besides giving useful insights into its expansion and modernization programmes

- The first physical event organised successfully by the Confederation of Indian Industry (CII) in association with Indian Railways, Government of India, after a long gap induced by the COVID-19 pandemic
- The exhibition, covering an area of over 10,000 square meters, showcased advanced technologies by around 200 Indian and global players from the rail transportation sector
- Key global companies, showcasing advanced technologies and services for the railway sector, participated from different countries primarily from Austria, Czech Republic, France, Germany, Japan, Russia, and USA
- Germany put up a Country Pavilion exhibiting state-of-the-art technologies and services
- The Indian Railways pavilion showcased theme-based stalls focussing on Coach and Interiors, Locomotives, Electricals, and Rail Heritage through the National Rail Museum stand, amongst others
- International Rail Conference 2021 had aptly adopted the theme “Indian Railways – An Engine of Growth for Aatmanirbhar Bharat”, where thought leaders, industry captains and stakeholders brainstormed on the direction the world's 4th largest rail network should take to trailblaze the India growth story
- The three-day mega event was inaugurated by DarshanaJardosh, Minister of State for Railways and Textile
- IREE 2021 emerged as a unique platform where all the Indian Railways organisations, including Zonal Railways, Production Units, and Research Organisation put up a unified face to build new partnerships
- Various indigenously developed technologies were on display to help India become self-sufficient in component and locomotive manufacturing, besides global innovations in areas like brake systems, traction systems, suspension arrangement, etc.
- The Asia's mega rail transportation event emerged as a platform for building new synergies and business collaborations to achieve the goals set in the National Rail Plan (NRP) and National Infrastructure Pipeline (NIP) to make the Indian Railways future-ready by 2030
- IREE also proved to be an excellent platform for Business to Business meetings between Indian Railways companies, vendors and global business delegations. A number of MoUs were signed during the three-day event
- Safety and security along with passenger amenities were among the prominent themes at IREE-2021 with a number of companies showcasing innovative products and services to make railway journeys safer and comfortable in the country





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CREATING NEW SYNERGIES FOR GROWTH



IREE 2021 saw the release of Coffee Table Books—Indian Railways: A Green Champion and Green Railway Stations. Many new hitech solutions and safety products were dominantly on display at the exhibition



LEADERS SPEAK

IREE 2021 saw thought leaders and policymakers deliberate on the strengths and weaknesses of the Indian Railways to present a clear roadmap of making it future ready and a truly global organisation



Ashwini Vaishnav

Minister of Railways Communications & Electronics and Information Technology, Government of India

Indian Railways is undergoing transformation in the last few years. Focus on safety, cleanliness, and improving passenger amenities is widely acknowledged. Railway is aiming to become net zero by 2030. I urge the industry to become partners of Indian Railways in the transformation.

Indian Railways is not only generating formal employment, but also a large number of informal employment through its forward and background linkages. Under the leadership of honorable Prime Minister Narendra Modiji, Railway is playing an important role in the socio-economic growth of the country. It is high time Indian Railways become the engine of growth and be in the forefront to make India Atmanirbhar.



Darshana Jardosh

Minister of State for Railways and Textile, Government of India

The Indian Railways is already doing 20% more traffic than last year and 10% more than even the pre COVID levels. It is a tribute to India's economy which is now growing and Railways is putting its best efforts to see that we are able to carry forth this rich legacy and fulfil our Prime Minister's vision that Railways is the engine of India's economic growth.



Suneet Sharma

Chairman & CEO Railway Board and Ex-Officio Principal Secretary, Ministry of Railways



Chandrajit Banerjee

Director General
Confederation of Indian Industry

I thank the Ministry of Railways and Indian Railways for associating with the IREE. This endeavour of CII will positively contribute to the efforts of Indian Railways in making India's rail infrastructure truly world class. I wish all the exhibitors and delegates a productive participation at IREE.



Vikram Kirloskar

Chairman,
CII Trade Fairs Council

Organising Trade Fairs are one of the major activities of CII, and are aimed at promoting business connectivity and showcasing advanced technology and services. We believe that, in addition to showcasing the best of the industry, it also assists in dialogue on matters of mutual interest. Trade fairs help evolve solutions to challenges and act as a facilitator for economic growth.

The government focus on infrastructure growth, emphasis on improving the passenger experience through World Class railway stations with ultra-modern facilities, focus on the urban infrastructure through different Metro projects, high speed rail corridors and the ambitious plan of almost 100% electrification by 2024 is going to reform the whole transport ecosystem of the country.



Dipankar Ghosh

Chairman, CII Railway Equipment Division and Managing Director, Knorr-Bremse





Dr Sujatha Narayan

Senior Vice President and Regional Leader, India Region, Wabtec Corporation

In the last quarter of 2020, we saw the publication of a document called the National Rail Plan 2030. This humongous 1,000 plus page document is truly fantastic. There was a complete transparency on the full data related to Indian railways network, whether it was the rails, the stations or the rolling stock. There was a candid discussion of the problems being faced, especially in terms of congestion of the high density networks on the high utilization networks, and some of the safety and sustainability aspects.

The distinct characteristic of Japanese assistance is that we aim to make sure that whatever technology and know-how we provide is internalized by India over time, so that it will become their own. It is evident in the shining example of cooperation namely the Delhi Metro.



Seiichiro Taguchi

Minister (Political Affairs), Embassy of Japan

The railway sector will monetize assets having an indicative value of almost little over 20 billion US dollars over the next four years alone. And key rail assets identified include 400 railway stations, 90 passenger trains, 1400 kilometres of railway track, 15 railway stadiums, selected railway colonies, over 200 railway owned good sheds, and hill railways.



Bharat Joshi

Co-Chairman, CII National Committee on Railways (Transport) and Director, Associated Container Terminals Ltd



Rajeev Kumar Gupta

General Manager (Head Transportation Business Systems Group), BHEL

Railways as an engine of growth for Atmanirbhar Bharat carries a large onus on its shoulder to make this dream come true of Make in India for the World. So, let us think about it seriously and look into why pharmaceutical and software industries are always cited as good examples of India's strength in the global market. We have to do introspection.



Amit Banerjee

Chairman & Managing Director BEML Limited

For an industry like us, it is not possible to invest a lot of money in R&D or the testing facilities. We are doing our bit, but still it is not sufficient. We are dependent on foreign sources for many testing facilities like the climatic chamber test for the car.

One of the issues which Indian railway has been plagued with is that it has been a network which is constrained on account of excessive capacity utilization. It's both good news as well as bad news. Good news is that it means there is a huge demand, and bad news is that you're not able to meet that demand.



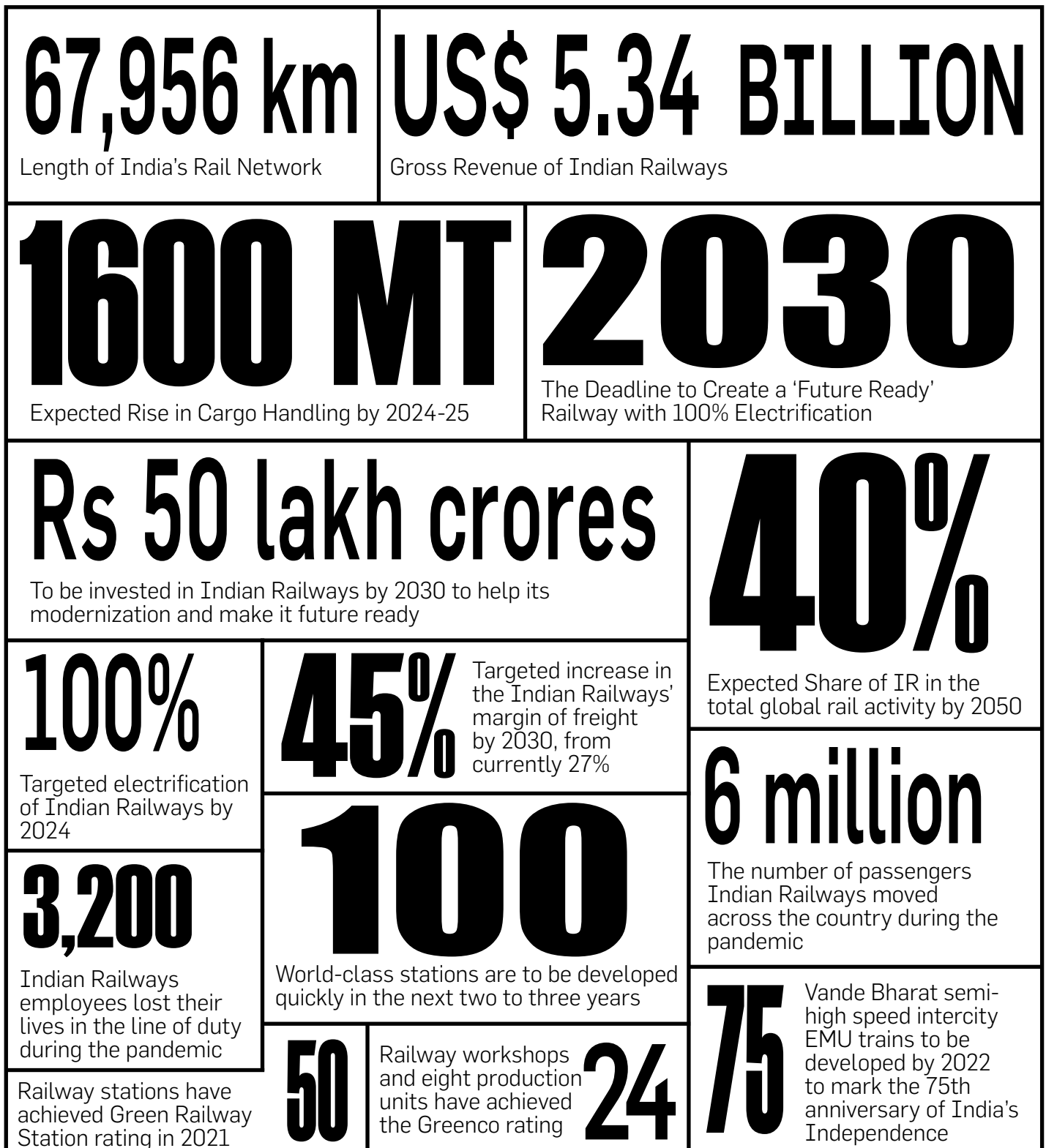
Sachin Bhanushali

Chairman, CII National Committee on Railways (Transport) and CEO & Whole Time Director, Gateway Rail Freight Ltd



NUMBERS

With over 13,000 passenger trains, and over 1,000 freight trains, taking some 23 million travellers and 3 million tonnes of freight daily from over 7,000 railway stations, Indian Railways is set for a major upgrade by 2030. Here are some numbers that show the scale of its growth and opportunity it presents as India's engine of growth

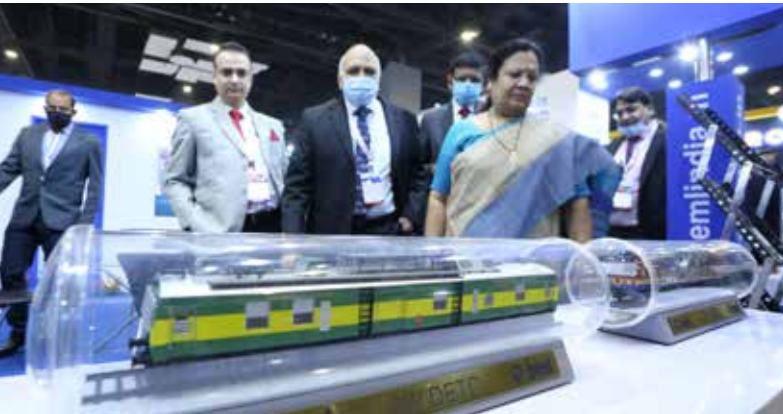




Confederation of Indian Industry



IREE: A Grand Show of Innovation



ENABLING RAILWAYS

IREE 2021 HAS EMERGED AS A DEDICATED MEGA PLATFORM

DEVELOPING PARTNERSHIPS AMONG VENDORS, BUSINESS



EXHIBITION



S' TRANSFORMATION

FROM FACILITATING BUSINESS MEETINGS AND
COMMUNITY AND TECH SOLUTION COMPANIES



Building a Future Ready Indian Railways

Being a unique platform where a large variety of products and technologies were showcased by global and Indian players under one roof, the 14th edition of IREE, organised jointly by Indian Railways and CII, would go a long way in helping the Indian Railways identifying latest technology and services available for adoption and go ahead with its expansion and modernization program

EXHIBITION HIGHLIGHTS

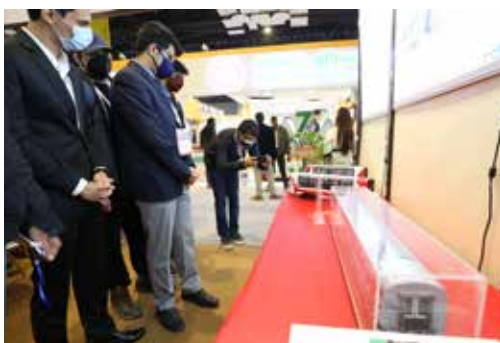
- The International Railway Equipment Exhibition (IREE) brought together vendors, suppliers, and all the Indian Railways organisations, including Zonal Railways, Production Units, and Research Organisations under one roof to conduct business in person after a long gap.
- Building partnership being a recurrent theme at IREE, MoUs were signed between various stakeholders to give a major boost to Make in India and Atmanirbhar Bharat initiatives.
- Showcasing the best available technologies for India's future requirements and global markets, business opportunities were created for vendors to procure innovative products and services.
- The Indian Railways pavilion at the exhibition showcased several theme-based stalls focussing on Coach and Interiors, Locomotives, Electricals, Passenger amenities, safety and security products, amongst others.
- With India's focus fixed on attaining self-reliance, Indian Railways is well on its way to fulfill that promise in terms of sourcing 100% Made in India components till 2022. This was reflected at the 14th edition of IREE, where Indian component manufacturers participated in good numbers.
- Companies focusing on Research and Designing along with skill development were also present in good numbers at IREE 2021, invoking interest among thousands of visitors and delegates at the exhibition.



EXHIBITION



IREE: A Grand Show of Innovation



BIG BOOST TO BUSINESS

Asia's largest event on rail transportation saw a good number of international participation from countries like Austria, Czech Republic, France, Germany, Japan, Russia, and USA, underscoring the huge potential of India's rail transport sector, which will see infusion of Rs 50 lakhs crores over the next decade to make it future ready



Seeking partnership to help Indian Railways unlock its huge potential, global players used the IREE 2021 platform to understand its future requirements, offer innovative products and strengthen ties by building new synergies.

Japan highlighted the distinct characteristic of its assistance in developing high frequency, safe and reliable mass transportation and logistics systems by using Japanese technologies and experiences, and contributing towards Prime Minister Narendra Modi's Make in India policy. Among the shining examples of Japan-led projects are Delhi Metro, East-West Dedicated Freight Corridor and the ongoing high speed railway project connecting Mumbai and Ahmedabad.

Similarly, Russian companies offered to help India implement projects to modernize existing infrastructure on the running track without closing the section. Having experience in developing semi-high speed corridors to run passenger and freight trains with speed up to 200 kph, Russia also highlighted some of the similarities in Russian and India Railways with the exception of India having much bigger passenger transportation.

Germany and other countries too expressed their desire to offer high-end technologies to Indian Railways that could catapult its efficiency and safety.



B2B MEETINGS

IREE 2021 felt like a breeze of fresh air for the industry stakeholders as they met in person to network and exchange ideas after fatigue had set in from months of online meetings due to pandemic-induced restrictions



Meeting in a physical environment after nearly 18 months, business optimism ran high at the 14th International Railway Equipment Exhibition 2021. The Asia's mega rail transportation event emerged as a unique platform for building new synergies and business collaborations to achieve the goals set in the National Rail Plan (NRP) and National Infrastructure Pipeline (NIP) to make the Indian Railways future-ready by 2030.

With high footfall witnessed at IREE-2021, a large number of Business to Business (B2B) meetings kept the exhibitors busy at venue. RITES and Bharat Earth Movers Limited (BEM) signed a memorandum of understanding (MoU) to collaborate in areas like design, marketing, engineering after-sales service, operations and

maintenance, for not only meeting the Indian Railways requirements but also the requirement of railway systems at the global scale.

A business delegation from Senegal visited IREE-2021 to discuss business collaboration with RITES.

Various companies and vendors at IREE-2021 believed that the demand for transportation was expected to rise post-pandemic, and railways as a green transportation will be the best option given the world's shifting focus towards sustainable mobility.



Next Big Steps for Indian Railways

With sights set on future and policy reforms driving the Indian Railways into a new phase of expansion, the following steps as suggested by the industry experts would go a long way in ascertaining success and growth



- Indian Railways need to shift to the lifecycle cost base production procurement model, which is already done all over the world.
- Long-term strategy from the Railways covering the next 10-20 years will help the industry to commit for CAPEX and R&D investment, which will go a long way to propel the growth for the rail transport industry.
- Indian Railways need to gear up to meet new challenges. The foremost being development of world-class stations and providing good facilities

The biggest potential that exists for the railways is in the transportation of manufactured goods

to the passenger, making their travel safe and reliable.

- Metro Rail networks and the rapid rail transit systems need to be well integrated with the Indian Railways network to make it more holistic.
- Presently, Indian Railways freight is predominantly limited to a couple of commodities like coal, steel and iron ore, etc. To increase its modal share from 27% at present to 45% by the end of this decade would require it to create a lot of capacity in terms of the track, and rolling stock suiting every segment of the industry.



NEXT STEPS

- Track related projects are going to present a big funding challenge for the Indian Railways, as it will require almost 60 to 65% of all funding. And that's where PPP is trickier. However, if IR is able to put the right policy frameworks and the right risk evaluations into the projects, there is potential for a lot more investment coming in.
- The biggest potential that exists for the railways is in the transportation of manufactured goods. And that is one sector where the railways do not even have a formal classification. If the right product, right pricing and the right terminal network is established, Indian Railways can gain a share of 15 to 20% in this segment over the next five to six years.
- Manufacturing goods require end to end solutions. Thus, designing different types of containers based on industry needs, and customized services like export transit guarantee schemes would find a lot of resonance in the industry.

Railways need to focus on bringing in terminal developers who are logistics service providers, people who bring cargo to the system, and create an incentive mechanism around that

- Railways need to focus on bringing in terminal developers who are logistics service providers, people who bring cargo to the system, and create an incentive mechanism around that.
- The approach to pricing needs to change, at least for the manufacturing sector. The sector needs to be given the flexibility of being able to carry whatever mix of cargo that is required. Pricing on a per train basis rather than on per box, per turn, per slot basis is the need of the hour.
- For investing in an asset, a framework that is available to the users in a fairly equitable manner needs to be created.
- Over almost 50 to 90% of the rolling stock is privately owned, compared to less than 5% in India. That's the kind of gap that we have to fill in in terms of asset monetization.



Next Big Steps for Industry

As the Indian Railways is gearing up to enhance its capacity and improve efficiency keeping future needs in mind, the Indian rail transport industry needs to focus on the following aspects to ascertain growth of business and the sector alike



- Indian Railways has time and again demonstrated leadership in complex technology adaptation and assimilation and trickle down benefits to the Indian industry. As Indian Railways is undergoing a huge transformation all over again with plans afoot to develop World Class railway stations with ultra-modern facilities, New Metro projects, and high speed rail corridors, there is no dearth of business opportunities, especially when long-term strategic Rail Plan 2030 clearly underlines the goals to make Indian Railways future ready.
- There is a need for huge technology infusion for the network and capacity

**Railway
is eagerly
promoting and
accommodating
private
investment in
several areas of
operation and
management
systems**

augmentation, implementation of signaling and security systems to improve the efficiency of the operations. This is where participation from the industry becomes much more critical.

- The National Rail Plan 2030, which offers a complete transparency on the data related to the Indian railways network, can be leveraged by the industry as a true blueprint and a roadmap to know what solutions can be developed for the Indian rail transportation market.
- India is moving ahead on the path of achieving 100% indigenization of the components used in manufacturing



NEXT STEPS

of rail coaches by the end of 2022, which presents a big opportunity for the industry to tap emerging opportunities.

- Railway is eagerly promoting and accommodating private investment in several areas of operation and management systems. Thus, the organization is actively seeking partnerships in the journey to make its future ready and help contribute to making India an economy of US\$ 10 trillion by 2030.
- National Monetization Program (NMP) and National Infrastructure Pipeline have been launched to promote private sector participation. The monetization of core assets under the NMP is expected to be carried through PPPs. Structured and

As the railway sector will monetize assets having an indicative value of little over US\$20 billion over the next four years, there is a huge scope for the industry participation

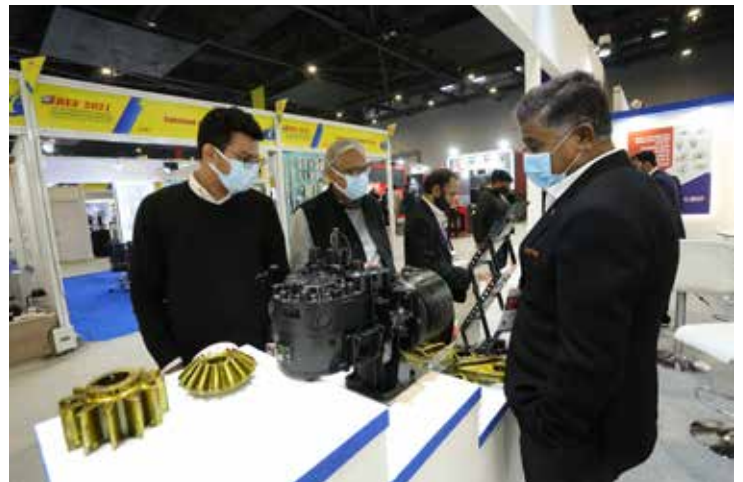
innovative financing mechanisms have also been introduced, which can be utilized as business opportunities by private players.

- As the railway sector will monetize assets having an indicative value of little over US\$20 billion over the next four years, there is a huge scope for industry participation. There is also change in approach and infusion of fresh thinking in the Railways to achieve its goals through partnership.
- As part of its capacity creation, Indian Railways would require large and cleaner terminals which are capable of handling various types of traffic. Private partnership and public-private investment will be very desirable in this sector for several regions.



Fueling India's Growth Engine

The Indian Railways has very ambitious plan for modernization and expansion of its existing network and systems to provide cost-effective logistics solutions and reliable mode of transport to the country. At IREE 2021, several dominant themes emerged as ideas were exchanged to provide a future roadmap for a prosperous and peaceful India.



Making a Self-Reliant India

Aatmanirbhar Bharat programme was launched recently to fulfill India's dream to become self-reliant and yet care for the whole world's happiness, cooperation and peace. IREE 2021 underscored Indian Railways' commitment towards the Prime Minister's vision of a self-reliant India. While thought leaders put their heads together to know what needs to be done and came up with Win-Win solutions for the industry, the railways and the country, there were various indigenously developed technologies that were put on display

Indian Railways is already moving ahead on the path of achieving 100% indigenization of the components used in manufacturing of the rail coaches by the end of 2022

at the exhibition to help India become self-sufficient in component and locomotive manufacturing besides brake systems, traction systems, suspension arrangement, etc.

Many projects of national importance like the high speed rail corridors as well as the dedicated freight corridors will soon be taken to other parts of the country. To reduce India's dependency on other countries for components required in the coach production, Indian Railways is already moving ahead on the path of achieving 100% indigenization of the components used in manufacturing of the rail coaches by the end of 2022.



IREE FOR EMERGING INDIA



Similarly, technology innovation is the key to keep up with the pace of national development. In order to make Indian railways a global leader, creator and innovator of railway technologies and system, a new way of thinking and creative culture is being ingrained through policies and system enablement. The PM Gati Shakti program will be implemented by the railways to reduce the cost of logistics as a share of GDP, which has long been plaguing the economy. To promote domestic manufacturing, it has been made mandatory to prioritize indigenous manufacturers for anything being procured for less than Rs. 200 crores.

Indian Railways companies like BEML is now designing and manufacturing Metro coaches in their factories. So far, BEML has supplied Metro coaches to Jaipur, Kolkata, Bangalore, and Mumbai. So far as Make in India for the World is concerned, Alstom as well Bombardier have been manufacturing coaches in

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India and then exporting them to global markets.

To make India self-reliant, railways have created a very competitive ecosystem, which will go a long way in boosting growth of India's economy.

Dedicated Corridors of India's Growth

The Indian Railways' quadrilateral linking the four metropolitan cities of Delhi, Mumbai, Chennai, and Howrah, is commonly known as the Golden Quadrilateral. Its two diagonals (Delhi-Chennai and Mumbai-Howrah), add up to a total route length of 10,122 km comprising 16% of the route carrying more than 52% of the passenger traffic and 58% of revenue earning freight traffic of IR.

The dedicated freight corridors currently cover an area of 3381 route kms and pass through 9 states. This mega project is aimed at increasing rail share in the freight segment and solving logistics



Building a Future Ready Indian Railways



problems of the country. It will also help Indian Railways to regain its market share of freight transport by creating additional capacity and guaranteeing efficient, safe and cheaper options. It is also an initiative to facilitate the government's initiative on the environment-friendly mode of transport. The total sanctioned cost of the project is Rs 81,459 crores and a loan of 550 billion Yen has been arranged through JICA and \$1.75 billion through World Bank.

Innovation for Safety

The Indian Railways have taken up a very ambitious project of fitting its network with an Automatic Train Protection System, India's own version of Train Collision Avoidance System (ACAS). As the work is in progress on installing the system, it is expected that in 2022 at least 3000 to 4000 kilometres of coverage can be achieved, which would definitely enable India to join the exclusive group of countries which have implemented this type of system.

The indigenously developed ACAS, or KAVACH, which is meant to provide protection to trains against excess speed and collision, will definitely fulfil the commitment of the Indian Railways to provide a safe and secure travel for

both passengers and cargo freight. The rollout of this technology has already begun and will soon be expanded across the network.

The system, which comes with features like a continuous update of train movement, automatic brake application in dangerous situations, display information like speed, location, distance to signal ahead, etc, can be a gamechanger for the Indian Railways ensuring the safety and security of passengers. KAVACH uses innovative radio communication designed by RDSO.

The system is also one of the best examples of Making in India for the World owing to its export potential. It consists of a trackside sub-system to provide trackside information to LOCO KAVACH unit installed in the locomotive, and a stationary KAVACH unit installed at the station with radio tower to communicate with locomotives. It also has a separate stationary KAVACH unit at mid-section and a remote interface unit.

The system is all set to play a critical role, given the Railway's ambitious plans to raise the speed limits of trains on certain routes in the range of 130km/hr to 160km/hr.

Safety Comes First

Committed to ensuring that all its activities are managed to the highest level of safety which is pragmatic and reasonably practicable to achieve, the Indian Railways has assigned a high priority to the safety and security of its trains. IREE is expected to provide innovative solutions in areas like passenger safety, road users safety, reduction in accidents, improving asset reliability, etc.

Some of the recent initiatives include escorting service on vulnerable routes, the introduction of active 24x7 helpline, active use of social media platforms to address the security concerns of travellers, and installation of CCTV and multi-layered security systems in railway premises, etc.



IREE FOR EMERGING INDIA



Building a Future Ready Indian Railways

International Rail Conference (IRC 2021), which was held concurrently with IREE, attracted participation of key stakeholders from Industry & Government, and experts of Indian Railways and global Industry, as speakers. IRC was attended by around 400 delegates over two days. It provided an ideal platform to get updated and network with experts on latest technologies and product developments. Here are the key highlights at the seven knowledge sessions that were held across two days:

- Indian Railways plays a pivotal role in running the fourth largest rail network in the world across 64,000 route km fairing nearly 23 million passengers per day in over 13,000 passenger trains. Railways being the lifeline of our socio-economic growth, it continues to play an integral role in the growth of our economy.
- Recognising the importance of long-term planning in developing a future ready Railways, the government has come up with the National Rail Plan 2030. The objective is to create capacity in advance to cater to demand up to 2050 and increase Railways modal share in freight to 45% by 2030.
- Under the plan, an investment of Rs 50 lakhs crores by 2030 has been envisaged which will not only help railway modernization but also have a huge positive multiplier impact on the Indian economy and employment.
- India is moving ahead on the path of achieving 100% indigenisation of the components used in manufacturing of the rail coaches by the end of 2022, which will help the Railways in being no longer dependent on other countries for the components required in the coach production.
- The development and enhancement of the railway infrastructure continue to be an important aspect along with the upgradation of the existing infrastructure. The development of eastern and western dedicated freight corridor is being looked at as we move toward reducing the logistic costs and in turn give a boost to the Make in India campaign.
- Under the National Monetization Pipeline, 400 stations will be developed through the PPP model under the model concession agreement.
- Rail Land Development Authority has the mandate to develop and manage and monetize surplus railway colony.



IREE CONFERENCE



It is presently working on 84 colonies and over 100 Greenfield commercial sites for the development and monetization.

- Solar energy, water wastewater treatment is the prime consideration of Indian Railways. The National Rail Plan also envisages many initiatives such as capacity building, utilization of existing railway assets, long term development plans to meet new demands for doubling of lines, signalling, electrification of the entire network passenger stations, freight terminals rolling stock, dedicated freight and high speed rail corridor, beside 100% electrification of the Indian Railways by 2024, which is on the verge of being fulfilled.
- Railways is in the process of identifying new dedicated freight corridors, new high speed rail corridors, and assessing rolling stock and locomotive requirements. Adopting technology innovation is the key to keep up with the pace of national development which translates to the design of Indian railways as global leader by leaping ahead.
- Indian Railways is seeking to become creator and innovator of technologies and system through a new way of thinking and ingraining creative culture through policies and system enablement.
- Improving the freight service and the passenger experience are at the forefront. With the mission to protect and safeguard railway passengers and railway property, the Railway Ministry is focused on ensuring safety, security and boosting the confidence in railway travel. It is also working to make the customer interface simple.



Building a Future Ready Indian Railways



- The focus of Indian Railways is to create capacity to synergize with other modes of transport. The National Rail Plan has been further divided into another document called the Vision Document 2024, which is a very specific document highlighting the works and the projects which are essential for creating capacities and increasing the output of the Railways till 2024. The projects have been identified where the resources would be focused. And completion of these projects would lead the Railways to carry and increase their margin of freight from about 27% today to about 45% by 2030.
- Railways is gearing up to meet new challenges. The foremost challenge is to develop world class stations. A beginning has been already been made in Bhopal and Gandhi Nagar. Another six-seven stations are getting ready and are in the final stages. There is an ambitious plan to ensure that at least 100 stations are developed very quickly in the next two to three years. And then to take up another 400 stations later on.
- Along with business, economic reforms are equally important. If we have to forge ahead on the path of self-reliance and make India a USD 10 trillion economy by 2030, Public Private Partnership is the key to achieve the economic growth of that magnitude.
- The modal share of India Railways despite its enormous size is not quite as large as what the road transport accounts for. Still, freight within the railways remains the key revenue earning segment. And it's inordinately high. It accounted for almost 80% of total revenue until FY 2022. And then of

course, next is passenger.

- The Vision 2024 envisages targets of 2024 metric tons freight loading by the year 2024.
- Effort to revive Public-Private Partnership in infrastructure sector is underway. The important initiatives worth noting include the National Monetization Program for the private sector participants, National Infrastructure Pipeline to create a shell for ready projects and the recently finance institutions for access to long term finance have been announced by the government.
- Both in the scope and the approach, there is a lot of fresh thinking which has come to the fore. Even a book value approach for some cases like the railway colonies is being discussed significantly.
- The PM Gati Shakti program, a Rs. 100-trillion or US dollar 1.3 trillion National Master Plan for logistics seeks multimodal connectivity, which is sort of a super program for economic zones across the country, and has equally both physical and digital connectivity aspects.
- Indian Railways for the last 13 months has clocked the highest ever loading capacity. And right now the growth rate is almost about 22%.
- The economic growth of India has never been more dependent on the growth of the rail sector as it is today, when you talk about Make in India you talk of reducing the logistics costs. Having a high double digit GDP growth to make the country a \$5 trillion economy is not going to happen until our rail system improves and we have an efficient rail system.



IREE CONFERENCE



- While improving the commercial operational efficiency of the rail sector from medium to long distance transportation has been established, there's a new dimension that has got added to rail transportation, which is the environmental front.
- When we talk of Indian Railways, there is multiplicity of assets that you are looking to finance and therefore, each of them requires a very unique and customized framework rather than a generic one.
- Indian Railways have to focus on global market and not only on India. We should have PSUs and even private players who become OEMs of rolling stock and some portion of their manufacture should be supplied to the global market. This will give us competitiveness. Large suppliers and medium suppliers can also supply directly in the global market to become large and strong.
- Railways have a massive procurement programme. It is somewhere in the range of Rs 35,000 to 40,000 crores annually. With such a huge amount of annual procurement, Railways do provide the nation a huge platform for both innovation and also indigenisation or in a way a boost to 'Make in India'.
- Indian Railways will require about 1000-1200 locomotives, about 13000-14,000 of wagons and about 8,000 odd coaches every year for at least next five years, which presents a big opportunity for PPP.
- Indian companies building world class facilities, especially in the rail sector, face a lot of restrictions to access the global rail market. This is because certain rail markets are very restricted. When the global rail market has access to Indian rail market, why cannot Indian companies have access to the global rail market? Thus, the government needs to look into such impediments to help them grow globally.

Developing a Future Ready Railways

Friday, 17 December 2021

- Opening Session of IRC 2021
- Plenary Session I: Rail Infrastructure Financing & Asset Monetization – Emerging Scope for Public Private Partnership
- Plenary Session II: Make in India, Make for the World - Key Imperatives for Building Competitive Railways Manufacturing Ecosystem
- Plenary Session III (over Digital Platform): Building World Class Rail Infrastructure – Emerging Partnership Opportunities

Saturday, 18 December 2021

- Plenary Session IV: High Speed Rail Corridors in India
- Plenary Session V: New & Emerging Technologies
- Plenary Session VI: Dedicated Freight Corridors – Providing Integrated Logistics Solutions for Aatmanirbhar India





Confederation of Indian Industry



The industry stakeholders at IREE 2021 came up with many useful insights to help Indian Railways achieve its set objectives. Here are some of the key areas, where action can be initiated to make it a truly world-class network

IREE 2021
14th INTERNATIONAL RAILWAY
EQUIPMENT EXHIBITION
Global Platform for Railway Technology & Services

16-18 December, 2021: Pragati Maidan, New Delhi, India



IREE OUTCOMES

01

For Make in India to be successful, there is a need for a very strong Made in India forum, which means having a very strong supplier or vendor ecosystem.

Time-bound approval process for new products and services will go a long way in reducing the usual red tapism. And that way, many of the manufacturing companies who really want to come to the sector would actually start contributing.

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A robust industry-academia connect much like in countries like South Korea, Japan, China and Germany can facilitate product developments, which can enormously help the Make in India initiative.

India has a very strong upcoming tech ecosystem. Thus Indian Railways need to have a framework to leverage this tech startup ecosystem.

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Establishment of government-funded testing and validation labs is the need of the hour. The government-funded labs can help the industry to try out their innovations and new products to ensure that they meet the highest levels of safety standards and the international quality standards.

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Under the Make in India initiative and the public procurement policy, the indigenisation levels have been kept higher and all foreign direct investments have been increased.

To increase India's exports in the rail transportation sector, the industry needs to come together to prepare some kind of holistic solution which can be given to a country. This could be a USP of India in the global export market.

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The creation of a strong ecosystem for railways rests on four pillars of policy, customer hand holding, favorable financial environment and collaborative approach. However, the collaborative approach is still missing to make the Indian industry more competitive.

There is the need to formulate strategies based on both operational capacities and commercial policy initiatives to increase modal share of the Railways in freight to 45% by 2030.

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Steps must be taken to reduce transit time of freight substantially by increasing average speed of freight trains from the current 46.7 kmph to 50 kmph.

Assessing rolling stock requirements in advance for passenger traffic as well as wagon requirements for freight can go a long way in creating a clear roadmap for growth.

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Indian Railways need sustained involvement of the private sector in areas like operations and ownership of rolling stock, development of freight and passenger terminals, development/operations of track infrastructure, etc.



VISITORS' FEEDBACK

IREE 2021 showcasing the Railway equipment and technology growth in India is a very impressive event – making an important contribution towards Atmanirbhar Bharat and net-zero India for sustainability.
-Sanjay Mukherjee, EIL

Organising such a wonderful event against a backdrop of COVID, poorly performing industry, travel restrictions is indeed a great effort – kudos to CII and the team! Looking forward to participating in more such events.

-AK Chandra, Ex-director, Workshops and Transportation, Railway Board

Thanks to IRCON, we had the opportunity to attend the exhibition. We had a chance to see new products used in the railway industry. We also saw the huge contribution extended by many related industries to improve the Railway system in India.
-RC Mclagoda, Director Technical, Ministry of Transport, Sri Lanka

IREE 2021 shows how Industry is focused on railway requirements for a better railway transport not only in India, but also internationally.

-KGS Bandara, Sri Lanka Railways Motive Power Department

IREE 2021 & IRC 2021 are showcasing Indian Industries and Railways' determination for growth in most challenging times – working on modernisation & sustainability as the way to provide growth to the economy.

-Tilak Raj Seth, Siemens Ltd (Gurgaon)

BLOCK YOUR DATES



The 15th International Railway Equipment Exhibition (IREE) will take place from 12-14 October 2023

Venue: Pragati Maidan, New Delhi, India



RETROSPECTIVE



Major milestones in IREE's 32 years journey

■ The first and second editions were held in the year 1990 and 1994 in Kolkata with participation from 55 and 100 exhibitors, respectively. The focus was Indian Railways' upgradation, modernization, electrification and computerization.

■ To facilitate more international participation and larger presence of Railway Board Officials, IREE shifted its base to Delhi in 1997. From the third edition onwards IREE is being held in Pragati Maidan, New Delhi. The 4th edition of IREE was also held in New Delhi in the year 2000.

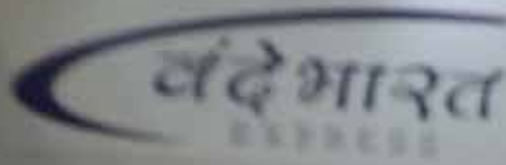
■ 5th edition onwards, IREE has been institutionalized as a biennial show, being held concurrently with CII's flagship event - International Engineering & Technology Fair (IETF) - held every alternate year in the month of February, at India's prime exhibition facility at Pragati Maidan, New Delhi.

■ After the 7th edition held in 2007 concurrently with IETF 2007, the show was separated to be held as an independent event.





Confederation of Indian Industry



Innovation Co

On Fast Track Route

Upping its game to meet the demands of aspirational India, Indian Railways is enroute to a fast paced transformation by adopting world-class technologies, passenger amenities and developing infrastructure that is global in its appeal



GOING FORWARD





Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, with over 9000 members from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from 294 national and regional sectoral industry bodies.

For more than 125 years, CII has been engaged in shaping India's development journey and works proactively on transforming Indian Industry's engagement in national development. CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, livelihoods, diversity management, skill development, empowerment of women, and sustainable development, to name a few.

As India marches towards its 75th year of Independence in 2022, CII, with the Theme for 2021-22 as **Building India for a New World: Competitiveness, Growth, Sustainability, Technology**, rededicates itself to meeting the aspirations of citizens for a morally, economically and technologically advanced country in partnership with the Government, Industry and all stakeholders.

With 62 offices, including 10 Centres of Excellence, in India, and 8 overseas offices in Australia, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 394 counterpart organizations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

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