

Volume 1 Issue 8 July 2017

# FIRST HEAVY LIFT JOURNAL OF INDIA







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#### **Message**

I congratulate HTOA on publication of "Heavy Haulers" which has established itself as a platform for regular communication of policy issues on movement of over dimensional/over weight consignment.

HTOA's regular publication "Heavy Haulers" has added a feather to their efforts and help stakeholders understand and feel the changing scenario in ODC movements.

I feel pleasure to share that smooth opreation of Hydraulic Trailers has acted as a real tool in curbing overloading menace in equipment transportation in our Country.

The awareness for bridge structures amongst hydraulic trailer operators is also good to notice.

I wish HTOA all success in future and expect that it will continue regular interaction with Ministry for overcoming hurdles, if any in OD/OWC movements in India and also promote transparency through wide circulation of Government Policies through HEAVY HAULERS.

floadko

(Nitin Gadkari)





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16.03.2017

#### MESSAGE

The transparency in system by grant of online movement permission through Ministry's online web portal has grown confidence in hydraulic trailer operators over Government's vision of ease of doing business.

It has also been an eye opener to understand infrastructural requirement in our Country.

I feel proud to share that HTOA's initiatives on OD/OWC movement procedures has played a key role in development and implementation of Indian Bridge management System in India. Ministry was also conferred Best digital project award for IBMS in the recent past by a leading media group.

Panayert (B. K SINHA)



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Lt Col Govind Tahil Head Logistics

#### MESSAGE

Heavy Haulers magazine, an initiative of the Hydraulic Trailers Owners Association (HTOA) was first introduced in Jan 2015, when the First HTOA summit Meeting was held and inaugurated by The Hon'ble Misnister, Shri Nitin Gadkari.

#### Why is this magazine unique?

First, because it combines the skill, experience and new ideas of all Heavy Transport experts which are disseminated through the magazine for everyone's benefits.

Second, it gives latest initiatives and programs being undertaken by the HTOA for increasing the efficiency and response time between the Logistics players and the Govt functionaries through digitization and procedure simplification which will benefit not only the Logistics Industry as a whole but will also bring in greater efficiency and transparency in the system.

Finally, it gives a ready interactive platform to the customers and the LSP for ease of business.

The magazine has had a judicious coverage of all types of Logistics moves to include Air, Sea, IWT, and has not limited itself to the Road Sector. It has dwelt upon various technical articles concerning lashing, buoyancy of tugs and barges while loading and unloading and numerous other subjects which are so very vital to mitigate accidents and risks.

I wish to congratulate the Chairman ( both current and the previous) and the team of office bearers, for this great initiative in unifying the neglected but so very critical aspect of **PROJECT LOGISTICS** under one umbrella for the benefit of all.

Best Wishes. G.T. TALil

Lt Col Govind Tahil (Veteran) Head Logistics Wind World India Ltd.

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## TRANSFORMING ENERGY GENERATION IN INDIA



**Bharat C Gandhi** Chairman Hydraulic Trailer Owners Assocation

## From The Desk Of Chairman

#### RIENDS,

We have been witnessing a change in the policy by the Central government and their thrust on renewable energy, be it Solar or wind.

Due to this many wind mill companies are looking for expansion and

growth.

Mankind has been deriving energy from many natural resources and today in the world of modern Era, energy has become primary needs of our society, be it villages, towns or Cities, and metro cities, there is a growing concern worldwide of extensive usage of natural resources, for producing energy which is also cause of concern for depleting of these natural resources.

Mankind has been using coal, and wood, and water as primary sources of energy but now, mankind has started using renewable energy as prime source of energy.

#### There are five types of renewable energy:

- 1. Bio-mass wood and wood waste, landfill gas, biogas, bio diesel
- 2. Hydro power
- 3. Geo thermal
- 4. Wind
- 5. Solar

Today we will concentrate on solar and wind energy,

Our country is largely populated in villages and today even after near 70 years of Independence yet there are many villages without electricity. Our present government has made conscious efforts to provide solar energy, and every village gram panchayats are given incentives to go for solar energy, they have been provided with concessional solar panels to produce energy for their villages. Thus every village will become self sufficient by producing and using solar energy.

Use of solar energy which is abundance in country like ours, which can change the scenario in rural India and our Power Minister Mr. Piyush Goyal is doing right things by prodding CFL bulbs at affordable prices and distributing in villages across Pan India, in past these CFL bulbs (low voltage) used to cost more than Rs.300 hundreds today it is available at price less than Rs.50/- and thus implementing the vision of our Prime Minister Shri Narendara Modiji, also solar energy is affordable and eco friendly, By extensive usage of solar energy it does not damage our environment. This is part of GO-GREEN in saving envienment.

#### Wind Energy:

Wind energy is a form of solar energy. Wind energy (or wind power) describes the process by which wind is used to generate electricity. Wind turbines convert the kinetic energy in the wind into mechanical power. A generator can convert mechanical power into electricity. A modern wind turbine produces electricity 70-85% of the time, but it generates different outputs depending on the wind speed. Over the course of a year, it will typically generate about 30% of the theoretical maximum output (higher offshore). This is known as its capacity factor.

Today In India, there are many players who are producing wind energy, such as. Suzlon energy ltd, Gamesa renewable Pvt ltd, Inox wind Ltd, Wind world India pvt ltd. Etc. today each company is expanding through their many wind farm situated across many states of India. **wind farm** is a group of wind turbines in the same location used to produce electricity. A large wind farm may consist of several hundred individual wind turbines and cover an extended area of hundreds of square miles, but the land between the turbines may be used for agricultural or other purposes. A wind farm can also be located offshore.

Many of the largest operational onshore wind farms are located in Germany, China and the United States. For example, the largest wind farm in the world, Gansu Wind Farm in China has a capacity of over 6,000 MW of power in 2012[1] with a goal of 20,000 MW by 2020. The Muppandal Wind farm in Tamil Nadu, India is the largest onshore wind farm outside of China, with a capacity of 1,500 MW. As of April 2013, the 630 MW London Array in the UK is the largest offshore wind farm in the world, followed by the 504 MW Greater Gabbard wind farm in the UK.

There are many large wind farms under construction In India also; we have made notable contribution today in renewable energy as an alternative source of energy to meet the ever growing demand for electricity of the nation,

Our members also has made significant contribution by taking initiative in procuring specialized vehicles such as costly imported extendable trailers and providing logistics services to these wind mill companies in transporting their lengthy wind mill blades from factory to site.

We feel proud that we are also responsible by transporting their windmill blades and accessories to the difficult terrains across pan India. Thus contributing in the growth and development renewable energy a vision of our prime minister.

ASIA

JAI HIND

**Bharat C Gandhi** 

Chairman-HTOA





# भारत में ऊर्जा उत्पादन का बद्दलाव



भरत सी गाँधी अध्यक्ष हाइड्रौलिक ट्रेलर ओनर्स एसोसिएशन

## अध्यक्ष की कलम से

## श्रियों,

हम केंद्र सरकार की नीति में हो रहे परिवर्तनों के साक्षी हैं, जो अब सौर अथवा पवन ऊर्जा, जैसी अक्षय ऊर्जा के उपयोग पर बल दे रही है।

यही कारण है कि पवन चक्की से जुड़ी कई कंपनियां विस्तार और विकास के लिए नए रास्ते तलाश रही हैं।

मानव जाति अनेक प्राकृतिक संसाधनों से ऊर्जा प्राप्त करती आ रही है और आज के आधुनिक युग में, ऊर्जा हमारे समाज की मूलभूत आवश्यकता बन चुकी है, फिर चाहे वह गाँव हो, नगर या शहर हो या महानगर हो। ऊर्जा के उत्पादन हेतु प्राकृतिक संसाधनों का व्यापक उपयोग होना, तथा इसके फलस्वरूप इन प्राकृतिक संसाधनों का ह्रास होना विश्वभर में एक चिंता का विषय बन रहा है।

मानव जाति कोयला तथा लकड़ी और जल का उपयोग ऊर्जा के प्राथमिक स्रोत के रूप में कर रही हैं, लेकिन अब, मानव जाति ने ऊर्जा के प्रमुख स्रोत के रूप में अक्षय ऊर्जा का उपयोग करना शुरू कर दिया है

अक्षय ऊर्जा पांच प्रकार की हैं:

- 1. जैव ईंधन– लकड़ी और लकड़ी का कचरा, लैंडफिल गैस, बायोगैस, बायो डीजल
- 2. हाइड्रो पावर
- 3. जीओ थर्मल
- 4. पवन
- 5. सौर ऊर्जा

#### आज हम सौर तथा पवन ऊर्जा पर ध्यान केंद्रित करेंगे।

हमारे देश की अधिकांश जनसंख्या गांवों में रहती है और आज, आजादी के 70 वर्ष बाद भी कई गांव ऐसे हैं जहां बिजली नहीं पहुंची है। हमारी मौजूदा सरकार ने सौर ऊर्जा उपलब्ध कराने के प्रबुद्ध प्रयास किए हैं तथा प्रत्येक ग्राम पंचायत को सौर ऊर्जा अपनाने के लिए प्रोत्साहन भी दिए जाते हैं, ऊर्जा के उत्पादन के लिए उनके गांवों में रियायती दरों पर सौर पैनल उपलब्ध कराए जा रहे हैं। इस प्रकार, प्रत्येक गांव सौर ऊर्जा का उत्पादन करके और उसका उपयोग करेगा आत्म–निर्भर हो पाएगा।

हमारे देश में प्रचुर मात्र में मौजूद सौर ऊर्जा, का उपयोग ग्रामीण भारत का परिद्दश्य बदल सकता है और हमारे विद्युत मंत्रे श्री पीयूष गोयल ने सस्ती कीमतों पर सीएफएल ब्लब उपलब्ध कराकर तथा समूचे देश के गांवों में उनका वितरण करके इस दिशा में उचित कदम उठाए हैं। पहले इन सीएफएल बल्बों (कम बोल्टेज वाले) की कीमत 300 रूपए से अधिक थी किंतु आज इन्हें 50/– रूपए से भी कम में खरीदाजा सकता है और इस प्रकार हम हमारे प्रधान मंत्रे श्री नरेन्द्र मोदी जी की परिकल्पना को साकार कर रहे हैं। साथ ही, सौर ऊर्जा सस्ती और पर्यावरण अनुकूल है। इसके व्यापक उपयोग से भी पर्यावरण को कोई क्षति नहीं होती। पर्यावरण को बचाने में यह 'गो–ग्रीन'अभियान का एक हिस्सा है।

पवन ऊर्जा सौर ऊर्जा का एक रूप है पवन ऊर्जा (या पवन ऊर्जा वह है जिसके द्वारा बिजली उत्पन्न करने के लिए पवन या हवा का उपयोग किया जाता है। पवन टरबाइन हवा में गति ऊर्जा को यांत्रिक शक्ति में परिवर्तित करते हैं। एक जनरेटर यांत्रिक शक्ति को बिजली में परिवर्तित कर सकता है। एक आधुनिक पवन टरबाइन एक समय में 85% बिजली का उत्पादन करती है, हवा की गति के आधार पर विभिन्न परिणाम सामने आते हैं एक वर्ष के दौरान, यह आमतौर पर सैद्धांतिक अधिकतम उत्पादन (उच्चतर अपतटीय का लगभग 30% उत्पन्न करेगा इसे इसके क्षमता कारक के रूप में जाना जाता है।

आज भारत में, ऐसी अनेक कंपनियां हैं, जो पवन ऊर्जा का उत्पादन कर रही हैं, यथा सुजलॉन एनर्जी लि. गेम्सिया रिन्यूवेबल प्राइवेट लिमिटेड, इनॉक्स विंड लिमिटेड, विंड वर्लड इंडिया प्राइवेट लिमिटेड आदि। आज हर कंपनी भारत के कई राज्यों में स्थित विंड फार्मो के माध्यम से विस्तार कर रही है।

विंड फार्म, बिजली के उत्पादन के लिए एक ही स्थान पर लगी विंड टरबाइनों का एक समूह है। एक विशाल विंड फार्म में अनेकों अलग—अलग विंड टरबाइन हो सकती हैं, जो कई एकड़ क्षेत्र में फैला होता है। किन्तु टरबाइनों के बीच खाली पड़ी भूमि का उपयोग कृषि अथवा अन्य प्रयोजनों के लिए किया जा सकता है। विंड फार्म ऑफशोर भी स्थापित किया जा सकता है।

विश्व के विशालतम ऑनशोर विंड फार्मो में से अनेक विंड फार्म जर्मनी, चीन और संयुक्त राज्य अमरीका में स्थित है। उदाहणार्थ गांसू विंड फार्म जो विश्व का सबसे बड़ा विंड फार्म है, चीन में स्थित है और 2012 में इसकी क्षमता 6,000 मेगावाट से अधिक ऊर्जा उत्पादन करने की थी और इसका लक्ष्य 2020 में 20,000 मेगावाट ऊर्जा उत्पादन का है तमिलनाडू में स्थित मुप्पनडल विंड फार्म, चीन से बाहर स्थित सबसे बड़ा ऑनशोर विंड फार्म है, जसकी क्षमता 1,500 मेगावाट उत्पादन करने की है। अप्रैल 2013 तक यू.के. में स्थित 630 मेगावाट का लंदन ऐसे विश्व का सबसे बड़ा ऑफशोर विंड फार्म था, जिसके बाद यू.के. में ही स्थित 504 मेगावाट ग्रेटर गब्बार्डविंड फार्म का स्थान है।

भारत में भी कई बड़ेविंड फार्म निर्माणाधीन हैं। हमने देश की बिजली की बढ़ी मांग को पूरा करने के लिए ऊर्जा के एक वैकल्पिक स्रोत के रूप में आज अक्षय ऊर्जा में उल्लनेखनीय योगदान दिया है।

हमें गर्व है कि हम देश के दुर्गम क्षेत्रें में भी विंड मिल ब्लेड्स और सहायक उपकरणों को पहुंचाने के लिए जिम्मेदार हैं और इस प्रकार हम नवीकरणीय ऊर्जा के विकास एवं विस्तार' संबंधी मानीय प्रधान मंत्री की परिकल्पना में अपना योगदान करते हैं।

जय हिन्द

भरत सी गाँधी

अध्यक्ष, एचटीओए

## **HTOA Meetings During**

### December 2016 To July 2017

Date	Dignitaries	HTOA Officials Present	Issues Discussed	Venue
26.12.16	<b>Mr. Bala Patil</b> SP. Highway Traffic Maharashtra	Mr. Bharat C Gandhi	Detention of Axles on Khandala Pune Section	Police Chowkie At Khandala Ghat, Poona Road Mumbai
5.01.17	<b>Mr. Padmanabhan</b> ADG <b>Mr. Bala Patil</b> SP. Traffic	Mr. Bharat C Gandhi Mr. Rajkumar Agarwal Mr. Madanlal Sharma Mr. Sharad Bhatt	Detention of Axles on Khandala Pune Section	Office of ADG Police (Traffic) Old Custom House, S. B. Road Mumbai-400 001
28.2.2017	2nd Executive Board Meeting at Mumbai	All Board Members	Discussed as per Agenda	Hotel Marine Plaza, Churchgate
4.3.2107	<b>Mr. Diwakar Rawte</b> Minister for Tranport, Maharashstra	Mr. Bharat C Gandhi Mr. Sharad Bhatt	Implementation of Fitness Gazette in State online Payment of Fees/ Penalty	Office of Tranport Minister, Mantralaya, Churchgate, Mumbai
15.3.2017	<b>Dr. (Mrs) Suprabha Dahiya</b> T.C. Haryana <b>Mr. Virendra Lather</b> ADDL. T. C.	Mr. Bharat C Gandhi Mr. Manish Kataria Mr. Pardeep Bansal Mr. Atul Loomba	Implementation of Morth Fitness Gaz. Updation of NIC of Age Limit for Puller Tractor & Modular Hydraulic Trailer	Offce of T. C. Haryana
15.3.2017	<b>Mr. Mukesh Gupta</b> DGM HSIIDC - Haryana	Mr. Bharat C Gandhi Mr. Manish Kataria Mr. Pardeep Bansal Mr. Atul Loomba	Harassment by Toll operator on Kunkli Palwal Highway	HSIIDC Head Quarter Chandigarh
16.3.2107	Ms. Dharkat Luikang Under Secretary- MoRTH B. K. Sinha C.E. MoRTH K. C. Sharma S E MoRTH D. P. Saste Advisor MoRTH	Mr. Bharat C Gandhi Mr. Manish Kataria	Rlw of Puller Tractor 36 MT for Old Puller also Revision in Axle Load Limits Overloading done by Articulated Vehicles	Parivahan Bhavan , MoRTH New Delhi

16.3.2107	<b>Dr. Vijay M Pingale</b> P.S. To Railway Minister	Mr. Bharat C Gandhi Mr. Manish Kataria	Online Permssion for electrified Railway Crossings	Rail Bhavan, New Delhi
14.6.2017	<b>Mr. Praveen Gedam</b> Transport Commissioner Maharashtra	Mr. Bharat C Gandhi Mr. Sharad Bhatt	For ODC Penalty and Online Payment	New Administrative Building Kalanagar, Bandra East.
26.4.2017	India - Cyprus Business forum hosted by Bombay chamber of Commerce and Industry	Mr. Bharat C Gandhi Mr. Sharad Bhatt	Investment Oppertunites in Cyprus.	Hotel Taj, Colaba, Mumbai
22.6.2017	Mr. Abhay Damle Jt. Secretary, MoRTH Mr. B.K. Sinha C.E. Bridges, MoRTH Mr. Priyank Bharti Director MVL, MoRTH	Mr. Bharat C Gandhi Mr. Manish Kataria Mr. Jignesh Patel Mr. Ramratan Agarwal	Non Implimentation of Vehicle Fitness Gazette by the States.	Parivahan Bhavan New Delhi.
22.6.2017	Mr. Vijay M Pingale P.S. To Railway Minister Mr. Sudhir Garg Executive Director-EEM Railway Board	Mr. Bharat C Gandhi Mr. Manish Kataria Mr. Jignesh Patel Mr. Ramratan Agarwal	Online Permssion and JPO Dated 16.6.2017	Rail Bhavan, New Delhi
11.7.2017	Mr. Vijay M Pingale P.S. To Railway Minister Mr. Sudhir Garg Executive Director-EEM Railway Board	Mr. Manish Kataria Mr. Ramratan Agarwal Mr. Jignesh Patel Mr. Pradip Bansal	Online Permssion and JPO Dated 16.6.2017	Rail Bhavan, New Delhi

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# Wind Energy Logistics in India Opportunities & Challenges



**Jignesh Patel** General Secretary, HTOA



ndia is firmly chasing its aspiration of doubling the installed wind power capacity by 2022, the ministry of new and renewable energy (MNRE) has revised guidelines for onshore wind power projects a few months ago which is expected to add to the momentum.

India ranks 5th in the world with an installed capacity of 32.4 GW (as on March 31, 2017) with a target of 60GW by 2022 which is indicative of the untapped potential for not only equipment suppliers but also the EPC companies and logistics sector. Indian Wind Energy Association has estimated that with the current level of technology, the 'on-shore' potential for utilization of wind energy for electricity generation is of the order of 102 GW.

#### Transportation and logistics impact wind project costs, turbine engineering

Transportation is a critical part of the logistics and cost structure of a wind project, and is one of the reasons most countries prefer moving towards domestic manufacturing. The costs associated with transportation and logistics of the large, heavy components of wind turbines make it desirable for turbine and component manufacturers to set up shop as close as possible to the ultimate point of turbine delivery to improve competitiveness. In addition to other factors, transportation and logistics is one of the main reasons ancillary supplier industry also loves to work as a cluster close to the turbine manufacturing facilities.

## Increasing size of components (blades, nacelles, tower sections) need for collaborative working:

Longer blades, heavier nacelles, and tower sections of greater diameter require advanced planning on a project-by-project basis, and close cooperation between transportation and logistics providers, turbine manufacturers, and the customer. Transportation and third party logistics providers worldwide work closely with manufacturers to ensure that efficient and cost-effective solutions are available. This is creating a collaborative network whereby efficiencies on both sides are seeing the bar raised every single day.

#### **Challenges of Transportation of wind turbines**

Transportation and logistics for wind energy projects is a complicated process due to the massive size of turbines, blades, generators and nacelles. Moving a 100,000kg generator or a 50-meter blade is no easy feat, no matter the distance you need it to travel. Transporting such massive pieces of equipment requires coordination with



local transportation authorities and permits to transport oversized loads. Another challenge is finding drivers that have the qualifications to pilot vehicles that can transport wind energy equipment. When importing or exporting wind energy parts and machinery, strict coordination between suppliers, project managers, freight forwarders and local authorities is imperative so that parts don't sit at ports, wasting time and money.

#### **Road Infrastructure**

India's patchy and incomplete road network is proving a challenge for the developers of wind farms, threatening the national vision and plans for green energy. Even under the best conditions, moving the enormous towers and blades found in wind farms requires intricate planning and expense. Individual blades on even modest turbines can exceed more than 100 feet each, while transporting the equipment and cranes needed for assembly can sometimes mean roads must be widened or straightened.

In one of the recent interviews Mr Tulsi Tanti, Chairman Suzlon Energy said "I'm still not able to access 40% of the area irrespective of my plant being in that state where I'm transporting, say, a 128-metre rotor,". His experience reflects the challenge faced by many wind energy developers in India, a \$2 trillion economy in which only 60% of roads are paved, according to Bloomberg Intelligence. By comparison, wind developers in China have a much easier task, with almost 90% of that nation's roads paved.

#### **Additional costs**

Transportation adds nearly 8% to a project's cost in India, according to the Wind Independent Power Producers Association. The cost per installation of 1 megawatt of wind is nearly Rs.7 crore, Bloomberg New Energy Finance estimates.

Right-of-way cost has gone up so tremendously that one spends Rs.50 lakh per megawatt just for the transport of equipment. Most wind turbines are typically comprised of a tower, two or three blades and a nacelle, which holds the turbine machinery. The blades and towers come in a variety of sizes, though most in use on land today generally range from 2 megawatts (MW) to 3MW. Blade lengths can be anywhere from 40m to as much as 57m, or slightly longer than an Olympic-sized swimming pool. The blades on the biggest wind turbines, which are built for offshore floating farms, can be as long as 80m.

#### 'Nightmare' logistics

In India, developers have been opting for 2-MW turbines with rotor diameters ranging from 80m to 114m. Transport trucks, sometimes requiring a 25-m turning radius, can often find themselves stuck on highways or squeezing through small towns marked by residential areas on either side of narrow roads.

#### **Project access**

Every project faces extra costs to fix roads, build bridges or make turns easier to navigate. If the access to project site is good it is possible to see a reduction of nearly 5% in the total project cost, leading to lower tariffs.

#### Rural roads

The poor quality or the absence of rural roads is another big challenge that the transporters face. The shortage is so acute that ReNew Power Ventures, an independent power producer with a portfolio of wind projects in India across several states, has built close to 1,000km of roads in rural areas since its inception in 2012 to support its projects.

#### **Opportunity outweighs the challenges**

The sheer size of opportunity that the jump from 30GW installed capacity to 60GW will provide is attractive enough for the logistics players to discuss, deliberate and innovate on the strategies that could help them make the most of this opportunity in an effortless manner. Collaborative working with equipment manufacturers and wind farm owners could be the starting point for the same.

# WIND ENERGY ON THE GO



**By Marco J van Daal** Lecturer/Author/Speaker

A

s the wind generator components are becoming every bigger, the challenges for the transport contractor are also becoming ever bigger. Where the blades used to measure

60 – 80 ft (18 – 24 mtr) and could be transported on extendible trailers, they can now measure up to 80 mtr (260 ft) and require some serious engineering and logistics involvement. The Vestas V164, an 8 MW wind generator is equipped with 80 mtr long blades.

Not all blades are this long and some are even suitable to be transported in pairs, see Figure 1.



Figure 1

When the blades become too long to be transported from origin to destination, or the surrounding infrastructure simply does not allow for such a long load, there is an alternative transport method available in the market. Various hydraulic platform manufacturers have developed a so-called "wind blade adapter". Rather than placing the blade flat on a trailer, the blade is now "stabbed" into an adapter similar to the way it is "stabbed" on the hub during erection.

During transportation, the blade can be kept horizontal as if it were transported on an extendible trailer. When corners are getting tight or obstructions are in the way, the blade can be tilted up some 25 degrees. This allows the tip of the blade, or the tail swing of the transport combination, to move over street furniture, or trees, or buildingas. See Figure 2 showing a medium length blade raised so that the tip of the blade raises and swings over a 3 story office building.



Figure 2

As this adapter is placed at the end of the transporter, it is possible that a counterweight is required to warrant transporter stability. This however depends on the weight and CoG of the individual blade.

The challenge with transporting tower section is twofold. They are long, although generally not as long as the blades, and for the tall towers the diameter (read height) can become an issue during transport. Diameters of 4.5 – 6.5 mtr (15 – 22 ft) are not uncommon and with the height of the trailer or transporter the overall transport height reaches close to 7.5 - 8.0 mtr (25 – 26 ft). This can become problematic when transporting on the public road.





Figure 3a

Here also the manufacturers have recognized the opportunity and need for specialized equipment to aid in the ease of transporting tower section. Tower sections vary in diameter depending on the height of the entire tower. In addition, each section tapers. Meaning that the diameter on each end is different. The tower adapter can cope with all of these variables, and more. Transporting a tower section with a tower adapter is similar to transporting with turn tables or bolsters. The front and rear transporter can pivot under the adapter support point. The tower adapter allows the tower to be kept close to the ground as in hangs in between the front and rear transporter, herewith reducing the overall transport height to the largest tower diameter plus the bolted rim of the adapter. When needed, the tower section can be raised, the tower adapter allows pivoting of the adapter arms by means of a hydraulic cylinder. See Figure 3a and 3b.



Figure 4

The tower adapters come with two more advantages. First, no crane is required for the loading of the tower section, this is obviously a huge cost savings. When they are properly laid out the truck with adapter can simply back-up against the tower section and the securing by means of bolt connection and/or hydraulic clamping can be done. Secondly, once the tower section is delivered to



Figure 3b

site, the front and read adapter can be connected and can be returned to the loading facility as one transport combination. There is no need for a second truck to return the rear transporter. See figure 4.

Nacelles, specially the bigger ones, have three drawbacks. They are oversized, heavy and awkward shaped. The oversize aspect can create a situation where, when the nacelle is positioned on a trailer, the overall height becomes too much for the route. The solution here is, similar to the tower sections, to hang the nacelle between a front and a rear transporter and keep it as close to the ground as possible. The awkward shape of the nacelle,



Figure 5

which is different for each manufacturer and often for each model, makes a nacelle adapter a tricky design.

This is worked out between the manufacturer of the nacelle and of the transporters by a template design that fits, on the one side, to the tower adapter. On the other side this template fits the nacelle. The adapters are designed for a certain maximum weight and as the tower sections are generally lighter in weight than the nacelle, not all nacelles can be transported in this manner. See figure 5.

is important to understand what forces are imposed onto these roads.

The transport equipment manufacturers have designed some clever adapters and features as described above to aid the ease of project execution. The crane manufacturers have not stayed behind. We all know that crawler cranes are a common appearance on windmill erection jobs due to the ease of moving them from one lift pad to the next while (near) fully assembled. One of the drawbacks of crawler cranes are the wide tracks, 12 - 15 mtr (40 - 50

Furthermore, loading of the nacelle does not require a crane and both transporters can be pulled back to the loading facility by one truck.

The transport starting point is often, similar to other heavy and oversized cargo, a port facility of a factory. At some point, the transport leaves the public road and continues on temporary (often make shift) roads that are solely constructed for the purpose of mobilizing the wind generator components and the crane to lift these components. A well compacted dirt road may be just fine for the job. However it



Figure 6

ft) is common for the large capacity crawler that are used for windmill jobs. Hence the approach road to the lift pad needs to be this wide as well. Knowing that the transport of the wind generator components often requires less than half of this width it becomes apparent that a narrow gauge track crane would be cost effective for the civil works. See Figure 6.

However, one can imagine that when a crane's stability base is reduced from 12 mtr (40 ft) to 6 mtr (20 ft), the stability of the crane becomes guestionable. For this reason, when transporting a crane in narrow gauge track configuration, outriggers are used to guarantee the crane's stability. These outriggers, however, are off the ground or only slightly touching the ground. They bear no load during the transport unless the crane starts leaning. Leaning can occur due to an unlevel road surface, slight settlement on one side of the road, weather conditions such as rain, wind etc. This is an unwanted situation as leaning will have to be countered by "pushing" the crane back using the outrigger stroke. Secondly, when the crane start leaning, the pressure underneath the track on the side of the lean reaches extreme values rapidly. It can easily take 70% to 80% of the total weight of the crane. The road needs to be able to withstand these pressures and should not cave in or sink. When this happens the outrigger will not be of much help. It can push the crane back but a void will appear under the track.

Narrow gauge track cranes are cost effective and useful, as long as they are used with caution.

#### Bio.

Marco J. van Daal has been in the heavy lift & transport industry since 1993 starting with Mammoet Transport from the Netherlands and later with Fagioli PSC from Italy, both esteemed companies and leading authorities in the industry. His 20 year plus experience extends to 5 continents and over 55 countries and has resulted in a best selling book "The Art of Heavy Transport" which is available at www.the-works-int.com. Marco has a real passion for sharing knowledge and experience, the prime reason for his frequently held seminars all over the world. He currently resides in Aruba, Dutch Caribbean, with his wife and two daughters.

Interactive Heavy Transport & Lift Seminar From the Expert



## **ANALYSIS ON MINISTRY'S ONLINE PERMISSION**

December'2016 to July'2017





*Source:* National Informatics Centre – Ministry of Road Transport & Highways

## **ANALYSIS ON MINISTRY'S ONLINE PERMISSION**

December'2016 to July'2017

Top 10 Originating States						
MH (25.42%)	TN (12.15%)		OTHERS (11.64%)			
	MP (6.49%)	UP (5	.74%)	KA (5.34%)		
GJ (20.42%)	TG (4.25%)	DD (3.5		AP (2.87%) HR (2.17%)		



Source: National Informatics Centre – Ministry of Road Transport & Highways

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## **ANALYSIS ON MINISTRY'S ONLINE PERMISSION**

December'2016 to July'2017

Top 10 Destination States							
OTHERS (16.40%)	ML (15.84%)	KA (7.94%)	MH (7.78				
		CT (5.90%)					
AP (15.11%)	GJ (12.62%)	UP (5.24%)	TN (5.17%)				
		DN (4.06%)	OP (3.95%)				



Source: National Informatics Centre – Ministry of Road Transport & Highways

## **ANALYSIS ON MINISTRY'S ONLINE PERMISSION**

December'2016 to July'2017



#### HT Wise Permission (Percentage)



Source: National Informatics Centre - Ministry of Road Transport & Highways

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# TRAINING AND EDUCATION IS THE KEY TO SUCCESS IN BUSINESS



Richard L. Krabbendam Heavy Lift Specialist

uring the past year I have written a number of articles on "Heavy Transport & Lifting", as I feel by sharing some of my "Know How" and "Experience" with others, I can help to improve Safety in our Industry. In March 2010, I officially retired from Jumbo Shipping, with whom I have worked for more then 22 years. Before I joined Jumbo, I had already worked with Big Lift, Mammoet and Van Seumeren and founded ITREC in 1980 together with a good friend of mine: Joop Roodenburg (presently owner / director of Huisman Equipment B.V.). I can now look back on a very dynamic career and still enjoy being involved in this Industry by presenting my Seminar "Heavy Transport, Lifting, Shipping & Offshore" and pass on my "Know How " and Experience to younger ones in this fascinating business.

I started with Jumbo in 1989 in setting up a Jumbo Land department and with my know how on land transport & lifting, Jumbo could offer its clients the so-called "Total Transport" Concept, which meant that Jumbo undertook the pre-carriage, shipment and on-carriage of heavy loads from workshop floor until placed on to foundation.



Barging of a Gasturbine, Generator and Transformers to the Connaught Bridge Power Station (1991)

Jumbo was the main contract partner and was responsible for overall project execution. Although this service is still available at Jumbo today, they do not actively pursue it.



Lifting a 95 tons pressure vessel with the Demag CC-4800 of Van Seumeren at the GPP-4 plant, Kerteh, Malaysia, 1994

Mainly in the nineties, Jumbo executed the shipment, land transport and installation of the heavy generators, gas turbines and transformers for quite a few power plants in Malaysia (i.e. Connaught Bridge, Paka, Pasir Gudang, Kuala Langat, Lumut, Port Dickson, Port Klang etc.) as well as the shipment, barging and on-carriage of heavy columns and reactors for a number of gas processing plants (Kerteh GPP-2/3, GPP4, GPP-5/6)

As Jumbo did not have any land based transport equipment, but got the know how, they subcontracted the heavy haulage work from vessel to the jobsite to local heavy haulage contractors. It was Jumbo who first introduced the use of barges in the Malaysian river system in 1991, as in those days it was never considered to be a feasible option. As the Netherlands are well served with a detailed inland waterway system, it was this method of transport that worked well in Malaysia as well. Jumbo was responsible for carrying out the detailed road surveys (many times, in close co-operation with its clients), design and subcontracting work for the construction of river- or beach ro-ro jetties and the engineering and supervision during all phases of the project.

By working as much as possible with local partners, Jumbo was in many cases the preferred carrier and the quality of the performed work guaranteed long term business relations, which are still existing today.

One of their "Total Transport" contracts in 2007, involved the shipment and on-carriage of heavy reactors (up to 1400 ton each) from Europe and Japan to various jobsites in the Middle East. In order to carry these extreme Heavy Lifts up to foundation, a brand new flat top barge (90x27x6 m) was built. Transfer from Jumbo's J-Class heavy lift vessel by means of both 900 tons mast cranes onto Jumbo's JB-2 barge for subsequent beach landing near the jobsite and on-carriage on SPMT's to their final foundations.

#### Seminars Heavy Transport & Lifting"

In order to transfer my know how, I have set up since 2008 a Seminar "Heavy Transport & Lifting", in which I present the basic principles of handling "Heavy Loads". During my 43 years career I have, and still come across a lot of clients and people, who have no idea how to handle Heavy Lifts Safely. As a consequence of this, I still see unnecessary accidents happening and see it as my mission to transfer some of my "Know How" to younger engineers and persons, who are interested and eager to develop themselves in this Industry of moving Heavy loads. In May 2008, I started with the fist one day Mini-Seminar and the response of the participants was very promising. Since then the one day Mini-Seminar was further refined and has now developed into a full two, three or even four day Seminar with 11-14 Chapters. I still realize that in a period of two days, I cannot touch upon all subjects dealing in moving of heavy loads, so I have focused on "Heavy Transport & Lifting" of Heavy loads on land. The longer 3-4 Days Seminars also deal about "Heavy Lift Shipping & Offshore". The basic principles are explained though in great detail and well illustrated by a lot of video footage and pictures.

I start with a general introduction in which various transport and lifting equipment is presented and even some forgotten techniques like airbags and water skates are shown. Then I move on to Forces, Masses, Centre of Gravity, as this subject is the basis of handling and dealing with Heavy Loads. When we all understand the difference between a force and a mass and realize what a Newton is, then we realize how important it is to start moving a load gently and slowly. Heavy Transport, using Hydraulic Platform trailers is the next subject, in which conventional as well as SPMT's (Self Propelled Modular Transporters) are presented in detail. This subject focuses on stability of the transport combination and what suspension system can best be selected to guarantee a safe transport. The next day is used to discuss Lifting techniques using one, two or more cranes in which different aspect of preparing a lift plan are presented. In the second day I continue presenting sling forces and how these can easily be calculated and the use of spreader and lift beams. Also subjects like Maintenance and Inspection, Skidding & Jacking Techniques, Project Planning and Cost estimates are presented. All well illustrated with pictures and video footage. Load-outs of extreme Heavy Lifts deals with various Roll-on Roll-off situations on and off barges, during tidal and non tidal conditions. How do you make use of the force of water, etc. The last two subjects deal with Safety & Risk Management and Accidents & How to avoid them. A number of mishaps and accidents are presented and analyzed, all with one purpose: Show it to others, so we can all learn from our previous mistakes and improve safety in the Industry. In the 3- or 4 day Seminar 3 extra Chapter are presented about different type of Heavy Lift vessels, Lift-on/Lift-Off, Float-on/Float-off as well as basic stability rules and lashing and securing principles, as well as "Offshore Lifting & Installation" techniques and the



Chinese participants at the Fujian Huisman Steel Manufacturing plant in Xiamen, China experience "Stability of the load"

#### HTOA

## Seminar tour around the world

In 2010. I started with the first "In Company" Seminar at Fujian Huisman the Manufacturing Steel Company in Xiamen, China, followed bv another "In Company" Seminar with Sarilar Transport & Crane rental of Gebze in Turkey. The first public two day Seminars were conducted in Perth, West Australia, Singapore and Dubai, followed by another In Company Seminar with Al Majdouie in

"Do's & Dont's in Lifting". The Seminar is ideal for anyone who is dealing with project cargo and heavy lifts such as freight forwarders, marine warrantee surveyors, project engineers, construction managers, company directors, crane operators, supervisors, sales engineers and anyone who is interested in learning the basic principles. The Seminar is set up as a good refresher for engineers and not too technical for even persons with no technical back ground at all. I have tried to bring complex matters back to their basics and keep things as simple as possible.

Damman, Saudi Arabia, all in March and April 2010.

#### **Next Seminars**

Since May 2008, more then 2375 participants have followed one of my Seminars in 26 countries. The next complete three day Seminar is scheduled in Delft, the Netherlands from 8-10 Feb. 2017. On 9-10th of Nov. 2017 a two day Seminar is schedule in the Netherlands after the Crane & Transport Summit, organized by KHL in Amsterdam.



47 Participants joined the two Day Seminar Heavy Transport & Lifting in Dubai early April 2010.



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- Masses, Forces, Centre of Gravity Heavy Transport with Hydraulic Pla
- Heavy Transport with Hydraulic Platform trailers,SPMT's, trailer selection for a particular load
- Lifting of loads with one, two or more cranes
- Maintenance & Inspection of equipment
- Skidding & Jacking Techniques
- Set-up of a Project Planning
- Preparation of a Cost Estimate
- Load-outs of Extreme Heavy Loads onto barges
  Heavy Lift Shipping
- Offshore Transport & Installation techniques
- 🗹 🛛 Safety & Risk analysis
- Accidents & How to avoid them
- 🌠 🛛 The Do's & Don'ts in Lifting

Delft Seminar/ Masterclass "Heavy Transport, Lifting, Shipping & Offshore" 9-10 Nov. 2017







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- ► Logistic Study (On Road Feasibility)
- ► Transport Engineering





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# Digital Transformation for Efficient Futuristic Logistics

Mohit Kumar, Transport Analyst

here is widespread recognition among leaders in most industries that the role of digital technology is rapidly shifting, from being a driver of marginal efficiency to an enabler of

fundamental innovation and disruption.

Digitalization is the cause of large-scale and sweeping transformations across multiple aspects of business,

providing unparalleled opportunities for value creation and capture, while also representing a major source of risk. Business leaders across all sectors are grappling with the strategic implications of these transformations for their organizations, industry ecosystems, and society. The economic and societal implications of digitalization are contested and raising serious questions about the wider impact of digital transformation.

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Global analysts feel that there is \$1.5 at stake for logistics players and a further \$2.4 trillion worth of societal benefits as a result of digital transformation of the industry up until 2025. In other words, industry stakeholders should take notice and come together to prioritize digital transformation initiatives given the potential for significantly higher value to be created for society than for industry.

Over the past two decades, as the Internet revolution swept the world, our day-to-day lives have become increasingly digital. With email eclipsing 'snail mail' and digital downloads replacing physical products, this could well have dealt a devastating blow to the logistics industry. In fact, something remarkable has happened: more packages than ever before are now being shipped. On any single day, a staggering 85 million packages and documents are delivered around the world.

But logistics businesses cannot afford to rest easy and enjoy the fruits of this global boom in shipments. Logistics has introduced digital innovations at a slower pace than some other industries. This slower rate of digital adoption brings enormous risks that, if ignored, could be potentially catastrophic for even the biggest established players in the business. As other industries with close links to logistics, such as retail, are revolutionized by digital technology, the chances of digital disruption engulfing the logistics industry increase – for instance, the rise of e-commerce has led to new digital entrants in the lastmile delivery market.

More significantly, digital platforms will become increasingly important in the logistics industry, allowing small companies to have a global reach and compete with the sector's established giants. Over the next few years, the race to build a dominant global platform will transform the customer's experience of logistics and will be the central issue in determining which enterprises will be the winners and losers in a truly digital logistics industry.

With the logistics industry suffering from some very significant inefficiencies – for instance, 50% of trucks travel empty on their return journey after making a delivery – digital transformation can also bring important social and environmental benefits, by increasing efficiency and cutting down energy consumption and emissions.

The five themes that are central to the digital transformation of the logistics industry over the next decade:



While it is clear that digital technology will transform most industries, there are a number of challenges that need to be understood. These include factors such as the pace of changing customer expectations, cultural transformation, outdated regulation, and identifying and accessing the right skills – to name just a few. These challenges need to be addressed by industry and government leaders to unlock the substantial benefits digital offers society and industry.

- Digitally enabled information services will put data at the heart of a logistics business through initiatives such as logistics control towers and analytics as a service, and help in reducing operating costs while improving efficiency of operations.
- Digitally enabled logistics services will help in trade growth through the creation of digitally enhanced cross-border platforms. It will also allow logistics companies to satisfy the growing need of customers for faster same-day deliveries, and promote the concept of city logistics, which will allow firms to operate in 'megacities'.
- New delivery capabilities will allow logistics to harness technologies such as autonomous trucks and drones to find more efficient ways to deliver shipments, while 3D printing and crowdsourcing offer new ways to think of manufacturing and logistics processes.
- Circular economy will foster a more sustainable product life cycle, helping to lessen the logistics industry's environmental footprint by reducing carbon dioxide (, air pollution and waste material.

 Shared logistics capabilities, through shared warehouse and shared transport capabilities, are expected to increase asset utilization in the near future.

The time and complexity required for these initiatives to reach scale across the markets vary significantly.

#### **India and Digitisation**

Traditionally, the logistics spend of developed economies is about 5-6% of their respective GDP whereas in India, it is about 14-15% highlighting the unorganized and fragmented logistics industry. The road network is in various stages of development, and the rail network is also undergoing upgradation in India. There is also lack of standardization of assets in the Indian logistical space today leading to either lack of productivity or higher inefficiency. With GST rollout, the regulatory hurdles will reduce which will have a positive impact on transportation. The warehousing sector will be consolidated and will be able to optimize further.

In Budget 2017-18, the Government of India has announced heavy investments in the infrastructure sector





which spells positive for the logistics players in India. Over the years, a lot of business potential of logistics players has been lost because of infrastructural deficiencies in our country. If things move as planned, logistics business will hugely benefit as building on infrastructure will now be taken care of.

Technology will play a pivotal role for betterment of the industry. With the implementation of IoT, transporting goods to long distances can be done far more efficiently. This is possible by accurately capturing and processing real time data. The logistics of the near future is based upon sensor technology that measures factors like traffic flow, area specific volume and movement of people and infrastructural strength of the area. An efficient transport and logistics infrastructure that is based on the elements of big data and IoT further enable sustainable economic growth. A futuristic logistics system as this also translates to improved economic opportunities, property value creation, affordable housing and reduced vehicular usage leading to lesser transport congestion and air pollution. It would be safe to say that big data and cognitive computing will be the foundation on which an efficient futuristic logistics' system will be based on.

However, India is a different proposition when it comes to automation. The labour costs, though rising, are fraction of those in developed countries. This makes it challenging to derive required financial benefits from implementing 100% automated warehouses in India. In India, the aim would be to find right balance between automation and labour to get an improved and predictable productivity. Addition of robots may reduce operating expenses for any ecommerce player. Not only could robots pare labour costs over the long term, they may protect employers against labour shortages, a particularly scary proposition for the biggest retailers during demand surges. Robots can help improve speed and accuracy and increase productivity per square foot of warehouse space at a time when the growth of e-commerce is driving up commercial rents.





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# A MACRO VIEW ON WIND TURBINE LOGISTICS IN INDIA

of massive ransportation abnormal structures and weights of multi megawatt wind turbine components in windy places located in remote and narrow villages, hills with many bends and dangerous hairpins throughout the year on all seasons are challenge that every wind turbine manufacturers must be treaded off. Especially in a vast country like India, where diverse regions and culture with limited infrastructures availability, challenges of transporting project cargo are simply overwhelming and the available options are limited.

India has surrounded on three sides by

oceans, endowed with many rivers, canals and has plenty of major and minor sea ports. Indian hinterlands are well connected with rail, road and air networks. These facilities and infrastructures are really world's standard and facilitates the transportation of small and general cargos with utmost ease, throughout the year day and night on all seasons. Wind industry's oversized and overweight abnormal cargos transportation on rail, air and sea is so far not cost effective and consume more transit days, faces cumbersome procedures, complex printed documents and also multiply material handling. Wind industry requires cost optimised, stable and robust logistics system to continually transport these oversized and overweight components like tubular tower shells, lengthier rotor blades, generator assemblies and nacelle assemblies to remotest wind farms located in sea, desert, valley, hills, rural areas, etc.

Multi-modal transportation is a way forward for wind turbine components futuristic transportation plans. But, at the present juncture road transportation is the only cost effective, stable, robust, dependable and end to end logistics option available for oversized wind components delivery to wind farms located in across India.



Wind turbine manufacturers are in general having logistics departments and logistics experts on their roll; through them wind turbine companies outsource their complete or major vehicles requirements from the small and exclusive transport vendors, presently serving the wind energy sector in India.

Transportation of wind turbine oversized components though increased in size and volume year on year have been primarily being done through road transportation. Over the years, the type of deployed trailers, prime movers, skills of drivers and the standards of escort team are all changed with the changing requirements, but, certain pricking issues and the stumbling block of free movements still remains the same. These problems are getting worse and worse with every passing day. On an average wind turbine over dimensional cargo component has to travel minimum distance of 500 kilometres and a maximum distance of 2500 Kilometres to deliver them to wind farm sites from origin to destination.

The outsourced transport vendors are facing flak on every movement, while carrying the oversized wind components from the RTO, highway police, check posts, delay at tolls, harassments by local thugs, villagers, etc. India has federal Governments structure i.e. Central Government and many State Governments. The Central Government can enact and amend the existing Motor Vehicles Act and can provide direction and guidelines to the many State Governments but every State Governments is having their own Motor Vehicles Act to protect their State interests, seize overloaded vehicles and goods, levy penalty and collect revenue thereon. When an oversized component transported through various states from the origin to consumption point, the carrier of the component has to go through different state government Act, procedures, check posts, RTO, highway police, tolls, etc.

This is the grey area where the cost of road transportation shoots up beyond the simple calculation of vehicles purchase cost, diesel consumption, manpower cost, capacity utilization, establishment cost, insurance, permit, maintenance, road tax, toll, interest, depreciation, etc.

Wind turbines components vary in size and weight are changing fast due to the requirements of higher megawatt machines in India. In turn the requirements of wind components transportation vehicles are also changing. The transport vendors due to the wind industry's ever changing requirements are forced to upgrade their vehicles or phase out their existing fleets, so as to exist in the wind industry. This requires massive investment from the transport vendors and there exist fear and drastic reduction of shelf life of vehicles with regard to transportation of wind components. This phenomenon shoots up the freight cost of wind components.

Wind companies are in constant search to reduce or optimise wind turbine components delivery time and cost to the wind farm sites, so as to be competitive in the market. There are various visible and invisible factors influencing the logistics cost and the time to deliver. Wind companies manufacturing facilities are spread across India and their ever increasing abnormal, oversized rotor blade length has gone beyond 60 meters. Overweight nacelles, generator assemblies, tower bottom sections have gone beyond the 100 Metric ton unitised weights. The







size and weight of this nature would pose big challenges even in developed nations around the world. An aspiring country like India must have lion heart to stave off multiple challenges to live and work with traditional mindset of Government officers, archive and redundant laws, handling multiple documentation in every passing state, acceptance of regular delays at RTOs, police, toll, villages, coping with lack of motorable roads, narrow and sharp 'T' turnings, vertical and horizontal obstacles on national highways and the long distance to travel, the disturbance by the locals, petty politicians, thugs, drunken drivers, encroachments in the middle, edges and turning of road. The wind companies to upscale these massive logistics challenges simply outsource their transport services through the specialised transport vendors.

The logistics specialists in every organisation, if, properly understands these influencing visible and invisible factors, they can surely optimise their overall logistics cost and to reduce time to deliver oversized wind components at various wind farms located across the nation in all regions and on all seasons. The world knows that wherever the wind blows, there surely the economic prosperity follows. This dictum is known to all the stakeholders in wind industry. Here, we suggest few unconventional

approaches and innovative ideas to optimise the logistics cost and the transit time.

#### Rationale behind not entering Annual Transport Contract

Most of the wind companies in a hurry to budget their annualised logistics cost in the beginning of financial year is going for annual transport contract for small and generalised cargo, which is quite a volume for all the wind turbine manufacturers. Here lies an opportunity to hire truck market vehicles on spot freight rates. In India, the generalised cargo carrying vehicles are available in plenty throughout the year in all locations with minimum of 25%





to 35% less than the annualised transport contract freight rates. All that wind companies should do is to engage a person with hands on experience in trucking company's traffic department and have a direct contact with brokers and enrol memberships in online truck hire websites. A massive freight rate reduction and efficient delivery system can be created through these arrangements for small and general cargo transportation. Only grey area of this unconventional method is that wind companies must be prepared to pay the truckers at the point of material delivery or at the maximum can avail short credit period.

## Cost Components of Freight Rates for Oversized and Overweight Components

Wind turbine major logistics cost goes into transportation of ODC and OWC components. Dissection on freight rate cost components would highlight an invincible and invisible major cost component i.e. expenses towards RTO, police, locals, thugs, etc., in connection with the transportation of ODC and OWC components from the origin to delivery. These expenses would normally occupy around 30% of the freight rates. If all the wind turbine components transporters approach these expenses in unison the expenses towards this can be reduced reasonably. Alternatively, the logistics experts engaged by the wind turbine companies can directly get in touch with these expenses and direct contact with RTOs that would reduce the expenses drastically from the present level. This unconventional approach also would reduce the logistics cost towards transportation of wind turbines to the wind farms.

## Hire Specialised Vehicles from the Outsourced Contractors

At the present juncture, wind companies engage the hired vehicle to deliver a component to their wind farm but end up of paying for both ways. If wind companies collaborate themselves and align their planning, they can get the reduced freight rates by engaging one way to one company and to return load from another company. This way, the transporters would get round trip and the benefited transporters would pass on the benefits to the wind companies. This way all would get shared benefits and expenses towards transportation would drastically come down.

#### **Multiple Small Transport Vendors**

Wind industry needs multiple small transport vendors over the few major transport vendors to transport ODC and OWC components for better cost and delivery time optimisation. The choice of having multiple small transport vendors are great advantage for wind industry to receive best personalised services, communications,



flexibility and the great prices. The development of major transporters and encouragement of few transport vendors monopolise the services and would kill the competition and encourage muscle flexing and also shoots up the freight rates and doing great disservice to the wind industry. It is proven fact that encouraging multiple transport vendors would bring innovation in service and great price advantage.

#### **Arranging Finance through Banks**

Wind Industry on their own or through their association can influence the banks to fund the upcoming transport entrepreneurs to purchase the specialised trailers, so as to get best freight rates and exclusive and assured services

Wind industry can purchase the specialised trailers and outsource the Freight Management to get extremely low freight rates, depreciation benefits and assured Transport Services. Wind industry can implement another innovative idea of purchasing the specialised trailers and to outsource Freight Management from the specialists, so as to get assured transport services throughout year, best freight rates and depreciation benefits.

#### **Payment to the Transport Vendors**

Wind industry can pay the transport vendors based on the transaction or at percentage on overall invoice or receipts. This is another way of optimising logistics cost and also to

make the vendors as partners in progress by allowing the vendors to plan for vehicles and to work in the truck market to obtain best freight rates and ensure the availability of required vehicles at all times and channelize the efforts to concentrate on core activity of manufacturing of wind components, erect and commissioning the wind turbines.

#### Conclusion

Wind Industry can take many unconventional steps, as cited above to reduce the logistics cost and to compress transit days to deliver the material at the required destinations. Wind turbine manufacturers can also join hands with transporters to impress and influence the government both at Centre and at State Governments about the importance of ensuring the free flow of wind turbine components movements across the nation with less human intervention and accord priority in wind turbine components clearance from check posts, RTOs across the nation, so as to have a faster wind machines delivery across India.

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EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)

PART II-Section 3-Sub-section (i)

प्राधिकार से प्रकाशित

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सड़क परिवहन और राजमार्ग मंत्रालय अधिसूचना नई दिल्ली, 29 दिसम्बर, 2016

सा.का.नि. 1183(अ).—केन्द्रीय मोटर यान नियम, 1989 का और संशोधन करने के लिए प्रारूप नियम जिसे भारत सरकार के सड़क परिवहन और राजमार्ग मंत्रालय की अधिसचूना सं. सा.का.नि. 744(अ) तारीख 28 जुलाई, 2016 द्वारा मोटर यान अधिनियम, 1988 (1988 का 59) की धारा 212 की उप-धारा (1) की अपेक्षानुसार उन सभी व्यक्तियों से जिनके उससे प्रभावित होने की संभावना थीं, प्रारूप नियमों से युक्त उक्त अधिसूचना की प्रतियां जनता को उपलब्ध करा दी गई थीं, तीस दिन की अवधि के समाप्ति से पहले आक्षेप और सुझाव आमंत्रित करते हुए प्रकाशित किए गए थे;

और उक्त राजपत्र अधिसूचना की प्रतियां तारीख 28 जुलाई, 2016 को जनता को उपलब्ध करा दी गई थीं ;

और उक्त प्रारूप नियमों की बाबत जनता से कोई आक्षेप और सुझाव प्राप्त नहीं हुए हैं;

अतः, अब, केंद्रीय सरकार, मोटर यान अधिनियम, 1988 (1988 का 59) की धारा 110 की उपधारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, केंद्रीय मोटर यान नियम, 1989 का और संशोधन करने के लिए निम्नलिखित नियम बनाती है, अर्थात् :-

(1) इन नियमों का संक्षिप्त नाम केंद्रीय मोटर यान (22वाँ संशोधन) नियम, 2016 है।

(2) ये राजपत्र में उनके प्रकाशन की तारीख को प्रवृत्त होंगे ।

2. केन्द्रीय मोटर यान नियम, 1989 में,—

- (i) नियम 9 में, उपनियम (2) में "नियम 32 की सारणी की क्रम संख्या 8 में यथानिर्दिष्ट" शब्दों, अक्षरों और अंकों के स्थान पर "नियम 32 की सारणी में यथानिर्दिष्ट" शब्द और अंक रखे जाएंगे;
- (ii) नियम 14 के उपनियम (1) में खंड (ख) के स्थान पर निम्नलिखित खंड रखा जाएगा, अर्थात् :---

"(ख) यथास्थिति, परीक्षण या पश्चातवर्ती परीक्षण नियम 32 में प्रत्येक वर्ग को चलाने के लिए और अनुज्ञप्ति जारी करने के लिए यथाविनिर्दिष्ट समुचित फीस;";

5993 GI/2016

(iii) नियम 32 के स्थान पर निम्नलिखित नियम रखा जाएगा, अर्थात् :-

"32. फीस:- वह फीस जो इस अध्याय के उपबंधों के अधीन प्रभारित की जाएगी, नीचे सारणी में विनिर्दिष्ट की जाएगी:

परंतु राज्य परीक्षण संचालन के लिए उपयोग किए गए स्वचलन और प्रौद्योगिकी की अतिरिक्त लागत को पूरा करने के लिए या मूल्यवर्धित सेवाएं उपलब्ध कराने के लिए अतिरिक्त रकम का उद्ग्रहण कर सकेंगे ।

क्रम संख्या	प्रयोजन	रकम	नियम	धारा
(1)	(2)	(3)	(4)	(5)
1.	प्रत्येक वर्ग के यान के लिए प्ररूप 3 में नौसिखिया चालन अनुज्ञप्ति जारी करने के संबंध में	एक सौ पचास रुपये	10	8
2.	यथास्थिति, नौसिखिया शिक्षार्थी अनुज्ञप्ति परीक्षण फीस या परीक्षण की पुनरावृत्ति फीस	पचास रुपये		27 (थ)
3.	चलाने की क्षमता के लिए, यथास्थिति, परीक्षण या परीक्षण की पुनरावृत्ति के लिए (प्रत्येक वर्ग के यान को)	तीन सौ रुपये	14(1) (ख)	9
4.	चालन अनुज्ञप्ति जारी करने के लिए	दो सौ रुपये	14(1) (ख)	9
5.	अंतरराष्ट्रीय चालन अनुज्ञा-पत्र जारी करने के लिए	एक हजार रुपये	14(2) (ख)	9
6.	चालन अनुज्ञप्ति में यानों के अन्य वर्ग को जोड़ने के लिए	पाँच सौ रुपये	17(2) (घ)	11
7.	परिसंकटमय मालों के संवहन के यान के पृष्ठांकन या प्राधिकरण के नवीकरण के लिए	एक सौ रुपये	9	27 (थ)
8.	चालन अनुज्ञप्ति के नवीकरण के लिए	दो सौ रुपये	18(1)(क)	15
9.	ऐसी चालन अनुज्ञप्ति के नवीकरण के लिए जिसके लिए आवेदन अनुग्रह अवधि के पश्चात् किया गया है	तीन सौ रुपये। टिप्पण: प्रत्येक वर्ष या उसके भाग के लिए जिसकी गणना अनुग्रह अवधि की समाप्ति की तारीख से की जाएगी एक हजार रुपये की दर से अतिरिक्त फीस		15
10.	चालन में अनुदेश प्रदान करने वाले स्कूल या प्रतिस्थापन को अनुज्ञप्ति जारी करने या उसका नवीकरण करने के लिए	दस हजार रुपये	24 (2)	12
11.	चालन में अनुदेश प्रदान करने वाले स्कूल या प्रतिस्थापन को अनुलिपि अनुज्ञप्ति जारी करने या उसका नवीकरण करने के लिए	पांच हजार रुपये	26 (2)	12

	0	
सा	रणा	

[भाग Ⅱ–खण्ड	3(i)
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12.	नियम 29 में निर्दिष्ट अनुज्ञप्ति	पाँच सौ रुपये	30(1)	17
	प्राधिकारी के आदेश के विरुद्ध			
	किसी अपील के लिए			
13.	चालन अनुज्ञप्ति में अभिलिखित	दो सौ रुपये		27(थ)
	किन्हीं अन्य विशिष्टियों अर्थात्			
	पता, आदि में परिवर्तन के किसी			
	आवेदन के लिए			
			1	

टिप्पण–1: जब भी प्रारूप 7 स्मार्ट कार्ड किस्म में चालन अनुज्ञप्ति जारी की जाती है तो दो सौ रुपये की अतिरिक्त फीस उद्गगृहीत की जाएगी ।

2. ऊपर सारणी में क्रम संख्या 1, 2 और 3 में विनिर्दिष्ट फीस, यथास्थिति, नौसिखिया शिक्षार्थी अनुज्ञप्ति या चालन अनुज्ञप्ति जारी करने के लिए या किसी अन्य वर्ग के यान के पृष्ठांकन के लिए आवेदन प्रस्तुत करने के समय सामूहिक रुप से संदत्त की जाएगी ।";

(iv) नियम 81 के स्थान पर निम्नलिखित रखा जाएगा, अर्थात् :-

"81. फीस:- वह फीस जो इस अध्याय के उपबंध के अधीन प्रभारित की जाएगी, नीचे सारणी में विनिर्दिष्ट की जाएगी:

परंतु राज्य परीक्षण संचालन के लिए उपयोग किए गए स्वचलन और प्रौद्योगिकी की अतिरिक्त लागत को पूरा करने के लिए या मूल्यवर्धित सेवाएं उपलब्ध कराने के लिए अतिरिक्त रकम का उद्गहण कर सकेंगे ।

	-		-	
क्रम	प्रयोजन	रकम	नियम	धारा
संख्या				
(1)	(2)	(3)	(4)	(5)
(1)	(2)	(3)	(4)	(0)
1.	यान के प्रत्येक वर्ग के लिए व्यापार		34(1)	
	प्रमाणपत्र अनुदत्त करना या नवीकरण			
	करना:			
	मोटर साइकिल	पाँच सौ रुपये		
	अशक्त यात्री गाडी	पाँच सौ रुपये		
	अन्य	एक हजार रुपय		
2	व्यापार प्रमाणपत्रों की अनलिपि		38(1)	
۷.			00(1)	
	मोटर साइकिल	तीन सौ रुपये		
	अशक्त यात्री गाडी	तीन सौ रुपये		
	अन्य	पाँच सौ रुपये		
3	नियम 46 के अधीन अपील	एक हजार रुपये	46(1)	
0.				
4.	रजिस्ट्रीकरण प्रमाणपत्र जारी करना		47(1)	
	या नवीकरण और नया रजिस्ट्रीकरण		52(1)	
	चिन्ह प्रदान करना		02(1)	
			54(1)	
			76(1) और	

सारणी

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#### THE GAZETTE OF INDIA: EXTRAORDINARY

[PART II—SEC. 3(i)]

		78(1)	
(क) अशक्त यात्री गाड़ी	पचास रुपये		
(ख) मोटरसाइकिल	तीन सौ रुपये		
(ग) तिपहिया/चौपहिया साइकिल/हल्के			
मोटरयान –			
i) गैर परिवहन	छह सौ रुपये		
ii) परिवहन	एक हजार रुपये		
(घ) मध्यम माल यान	एक हजार रुपये		
(ड) मध्यम यात्री मोटरयान	एक हजार रुपये		
(च) भारी माल यान	एक हजार पाँच सौ रुपये		
(छ) भारी यात्री माल यान	एक हजार पाँच सौ रुपये		
(ज) आयातित मोटरयान	पाँच हजार रुपये		
(झ) आयातित मोटरसाइकिल	दो हजार पाँच सौ रुपये		
(ञ) कोई अन्य मोटरयान जिसका ऊपर वर्णन नहीं किया गया है ।	तीन हजार रुपये		
टिप्पण 1: दो हजार रुपये की			
अतिरिक्त फीस का उदावण किंग्स वसराम गवि			
उद्गहण किया जाएगा याद जारी किया गया या			
नवीकृत किया गया रजिस्ट्रीकरण प्रमाणपत्र			
प्रारूप 23क स्मार्ट कार्ड किस्म में नै			
टिप्पण 2: रजिस्ट्रीकरण प्रमाणपत्र			
के नवीकरण के आवेदन में विलंब की दशा में			
मोटरसाइकिलों के संबंध में			
प्रत्येक मास या उसके भाग के लिए तीन सौ रुपये की			
अतिरिक्त फीस और अन्य			
गर पारवहन याना क अन्य वर्गों के संबंध में प्रत्येक			

[ भाग	II-खण्ड	3(i)]

#### भारत का राजपत्र : असाधारण

1		I		
	मास या उसके भाग के विलंब के लिए पाँच सौ रुपये की फीस उद्ग्रहीत की जाएगी।			
5.	रजिस्ट्रीकरण प्रमाणपत्र की अनुकृति जारी करना	क्रमसंख्या 4 के सामने वर्णित फीस का आधा	53(2)	
6.	स्वामित्व का अंतरण	क्रमसंख्या 4 के सामने वर्णित फीस का आधा।	55(2)(iii), 55(3),	
		निराक्षेप प्रमाणपत्र प्रस्तुत करने में विलंब की दशा में प्रत्येक मास या उसके भाग के लिए मोटरसाइकिल की दशा में तीन सौ रुपये और अन्य यानों के लिए प्रत्येक मास या उसके भाग के विलंब के लिए पाँच सौ रुपये की अतिरिक्त फीस उद्ग्रहीत की जाएगी।	56(2)(क) और 57(1)(क)	
7.	निवास में परिवर्तन	क्रमसंख्या 4 के सामने वर्णित फीस का आधा निवास में परिवर्तन के लिए निराक्षेप प्रमाणपत्र प्रस्तुत करने में विलंब की दशा में प्रत्येक मास या उसके भाग के लिए मोटरसाइकिल की दशा में तीन सौ रुपये और अन्य यानों के लिए प्रत्येक मास या उसके भाग के विलंब के लिए पाँच सौ रुपये की अतिरिक्त फीस उद्ग्रहीत की जाएगी।	59	
8.	रजिस्ट्रीकरण प्रमाणपत्र में परिवर्तनों का अभिलेखन	क्रमसंख्या 4 के सामने वर्णित फीस का आधा		
9.	अवक्रय/पट्टा/आड़मान करार का पृष्ठांकन – (क) मोटरसाइकिल (ख) तिपहिया/चौपहिया/हल्के मोटर- यान (ग) मध्यम या भारी यान टिप्पण–पट्टा, आदि को रद्द करने के लिए या उसके पश्चात् नया रजिस्ट्रीकरण प्रमाणपत्र जारी करने के लिए कोई पृथक फीस उद्घहीत नहीं की जाएगी	पाँच सौ रुपये एक हजार पाँच सौ रुपये तीन हजार रुपये	60	
10.	फिटनैस प्रमाणपत्र अनुदत्त करने या उसका नवीकरण करने के लिए किसी यान के परीक्षण का संचालन (क) मोटरसाइकिल	हस्तचालित : दो सौ रुपये स्वचालित : चार सौ रुपये	62(2)	
	(ख) तिपहिया या हल्के मोटरयान या चौपहिया साइकिल	हस्तचालित: चार सौ रुपये स्वचालित : छह सौ रुपये		

#### THE GAZETTE OF INDIA : EXTRAORDINARY

	(ग) मध्यम या भारी मोटर यान	हस्तचालित: छह सौ रुपये		
11.	मोटरयानों की फिटनैस के लिए प्रमाणपत्र अनदत्व करना या उसका	स्वचालत : एक हजार रुपय दो सौ रुपये ।	62(2)	
	नवीकरण करना	टिप्पण: फिटनैस प्रमाणपत्र की समाप्ति के पश्चात् विलंब के प्रत्येक दिन के लिए पचास रुपये की अतिरिक्त फीस		
12.	प्राधिकार पत्र अनुदत्त करना या नवीकरण करना	पंद्रह हजार रुपये	63(2)(क)	
13.	प्राधिकार पत्र की अनुकृति जारी करना	सात हजार पाँच सौ रुपये	66(2)	
14.	नियम 70 के अधीन अपील	तीन हजार रुपये	71(1)	
15.	पूर्वोक्त क्रमसंख्या 1 से 14 के अधीन न आने वाली प्रविष्टियों के लिए किसी आवेदन के संबंध में	दो सौ रुपये		64(त)

टिप्पण 1: शंकाओं को दूर करने के लिए यह स्पष्ट किया जाता है कि मध्यम यात्री मोटरयान, भारी मालयान, आयातित मोटरयान या कोई अन्य यान जिनका पूर्वोक्त सारणी के क्रम संख्या 4 के सामने वर्णन नहीं किया गया है, के अंतर्गत परिवहन और गैर परिवहन यान दोनों हैं ।

टिप्पण 2 : जब भी किसी स्मार्ट कार्ड किस्म के रूप में रजिस्ट्रीकरण प्रमाणपत्र जारी किया जाता है तो सिवाय अवक्रय या पट्टा या आड़मान करार के रद्द होने के पश्चात नए रजिस्ट्रीकरण की दशा में दो सौ रुपये की अतिरिक्त फीस प्रभारित की जाएगी "।

[सं. आर टी-11017/12/2013-एम वी एल]

अभय दामले, संयुक्त सचिव

[PART II-SEC. 3(i)]

टिप्पण : मुल नियम भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (i) में सा.का.नि. सं. 590(अ), तारीख 2 जुन, 1989 द्वारा प्रकाशित किए गए थे और अंतिम संशोधन सा.का.नि. सं. 1096 (अ), तारीख 28 नवम्बर, 2016 द्वारा किया गया ।

#### MINISTRY OF ROAD TRANSPORT AND HIGHWAYS NOTIFICATION

#### New Delhi, the 29th December, 2016

G.S.R. 1183(E).—Whereas, the draft rules further to amend the Central Motor Vehicles Rules, 1989 were published, as required by sub-section (1) of Section 212 of the Motor Vehicles Act, 1988 (59 of 1988), vide notification of the Government of India in the Ministry of Road Transport and Highways number G.S.R. 744(E), dated the 28<sup>th</sup> July, 2016, in the Gazette of India, Extraordinary, Part II, Section (3), Sub-section (i), inviting objections and suggestions from all persons likely to be affected thereby before the expiry of the period of thirty days from the date on which copies of the said notification containing the draft rules were made available to the public;

And whereas, copies of the said Gazette notification were made available to the public on the 28<sup>th</sup> July, 2016;

And whereas, no objections and suggestions were received from the public in respect of the said draft rules.

Now, therefore, in exercise of the powers conferred by section 110 of the Motor Vehicles Act, 1988 (59 of 1988), the Central Government hereby makes the following rules further to amend the Central Motor Vehicles Rules, 1989, namely:

- 1.(1)These rules may be called the Central Motor Vehicles (Twenty-second Amendment) Rules, 2016.
- (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. In the Central Motor Vehicles Rules, 1989,-
  - (i) in rule 9, in sub-rule (2), for the words, letters and figures "as is referred to in Sl.No.8 of the Table to rule 32", the words and figures "as specified in the Table in rule 32" shall be substituted;

(ii) in rule 14, in sub-rule (1), for clause (b), the following clause shall be substituted, namely:-

"(b) appropriate fee as specified in rule 32, for the test, or the subsequent test, as the case may be, of competence to drive for each class and for issue of licence;";

(iii) for rule 32, the following rule shall be substituted, namely:-

"32. Fees.—The fees which shall be charged under the provisions of this Chapter shall be as specified in the table below:

Provided that the States may levy additional amounts to cover the cost of automation and technology utilised for conducting the testing or providing value added services.

Sl. No.	Purpose Amount		Rule	Section
(1)	(2)	(3)	(4)	(5)
1.	Issue of learner's licence in Form 3 for each class of vehicle	One hundred and fifty rupees	10	8
2.	Learner's licence test fee or repeat test fee, as the case may be	Fifty rupees		27(q)
3.	For test, or repeat test, as the case may be, of competence to drive (for each class of vehicle)	Three hundred rupees	14 (1)(b)	9
4.	Issue of a driving licence	Two hundred rupees	14 (1)(b)	9
5.	Issue of International Driving Permit	One thousand rupees	14(2)(b)	9
6.	Addition of another class of vehicle to driving licence	Five hundred rupees	17(1)(d)	11
7.	Endorsement or renewal of authorisation for vehicle carrying hazardous goods	One hundred rupees	9	27(q)
8.	Renewal of driving licence	Two hundred rupees	18(1)(a)	15
9.	Renewal of a driving licence for which application is made after the grace period	Three hundred rupees. Note.:- Additional fee at the rate of one thousand rupees for delay of each year or part thereof reckoned from the date of expiry of the grace period shall be levied.		15
10.	Issue or renewal of licence to a school or establishment for imparting instructions in driving	Ten thousand rupees	24(2)	12
11.	Issue of duplicate licence to a school or establishment for imparting instructions in driving	Five thousand rupees	26(2)	12
12.	An appeal against the orders of licensing authority referred to in rule 29	Five hundred rupees	30(1)	17
13.	Any application for change in address or any other particulars recorded in the driving licence e.g. address etc.	Two hundred rupees		27(q)

#### TABLE

**Note.** 1. Where a Smartcard Type driving licence is issued in Form 7, an additional fee of two hundred rupees shall be levied.

2. The fees specified at serial numbers 1, 2 and 3 of the Table above shall be paid collectively at the time of submission of application for issue of learner's licence or driving licence or for endorsement of another class of vehicle, as the case may be.";

#### THE GAZETTE OF INDIA: EXTRAORDINARY

[PART II—SEC. 3(i)]

(iv) for rule 81, the following rule shall be substituted, namely:-

"81. Fees.-The fees which shall be charged under the provisions of this Chapter shall be as specified in the Table below:

Provided that the States may levy additional amounts to cover the cost of automation and technology utilized for conducting the testing or providing value added services.

Sl. No.	Purpose	Amount	Rule	Section
(1)	(2)	(3)	(4)	(5)
1.	Grant or renewal of trade certificate in respect of each class of vehicle:		34(1)	
	(a) Motorcycle	Five hundred rupees		
	(b) Invalid Carriage	Five hundred rupees		
	(c) Others	One thousand rupees		
2.	Duplicate trade certificate:      (a) Motorcycle	Three hundred rupees	38(1)	
	(b) Invalid Carriage	Three hundred rupees		
	(c) Others	Five hundred rupees		
3.	Appeal under rule 46	One thousand rupees	46(1)	
4.	Issue or renewal of certificate of registration and assignment of new registration mark: (a) Invalid Carriage		47(1) 52(1) 54(1)	
	(b) Motor cycle	Fifty rupees	76(1)	
	(c) Three wheeler/Quadricycle/Light Motor Vehicles:	Three hundred rupees	78(1)	
	i) Non transport;	Six hundred rupees	1	
	ii) Transport	One thousand rupees	1	

#### TABLE

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[ भाग	II-खण्ड	3(i)]

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	(d) Medium goods vehicle	One thousand rupees		
	(e) Medium passenger motor vehicle	One thousand rupees		
	(f) Heavy goods vehicle	One thousand and five hundred rupees		
	(g) Heavy passenger motor vehicle	One thousand and five hundred rupees		
	(h) Imported motor vehicle	Five thousand rupees		
	(i) Imported motor cycle	Two thousand and five hundred rupees		
	(j) Any other vehicle not mentioned above	Three thousand rupees		
	Note 1: Additional fee of			
	two hundred rupees shall be			
	levied if the certificate of			
	registration is a smart card type issued or renewed in Form 23A.			
	<b>Note 2:</b> In case of delay in applying for renewal of certificate of registration, an additional fee of three hundred rupees for delay of every month or part thereof in respect of motor cycles and five hundred rupees for delay of every month or part thereof in respect of other classes of non-transport vehicles shall be levied.			
5.	Issue of duplicate certificate of registration	Half of the fee mentioned against Serial No.4	53(2)	
6.	Transfer of ownership	Half of the fee mentioned against Serial No.4.	55(2)(iii), 55(3),	
		Note: In case of delay in submission of 'No Objection Certificate', an additional fee of rupees three hundred for delay of each month or part thereof in case of motor cycles and five hundred rupees for each month of delay or part thereof for other vehicles shall be levied.	56(2)(a) and 57(1)(a)	

THE GAZETTE OF INDIA: EXTRAORDINARY

[PART II—SEC. 3(i)]

7.	Change of residence	Half of the fee mentioned against Serial No.4.	59
		<b>Note:</b> In case of delay in submitting 'No Objection Certificate' for change of residence, an additional fee of rupees three hundred for delay of each month or part thereof in case of motor cycles and five hundred rupees for each month of delay or part thereof for other vehicles shall be levied.	
8.	Recording alteration in the certificate of registration	Half of the fee mentioned against Serial No.4	
9.	Endorsing hire purchase/lease/hypothecation agreement-		60
	(a) Motorcycle	Five hundred rupees	
	(b) Three wheeler/quadricycle/light motor vehicle	One thousand and five hundred rupees	
	(c) Medium or heavy vehicle	Three thousand rupees	
	<b>Note:</b> No separate fee will be levied for cancellation of lease, etc, or for issue of fresh Certificate of Registration thereafter.		
10.	Conducting test of a vehicle for grant or renewal of certificate of fitness		62(2)
	(a) Motorcycle	<ul><li>(i) Manual: Two hundred rupees</li><li>(ii) Automated: Four hundred rupees</li></ul>	
	(b) Three wheeled or light motor vehicle or quadricycle	(i) Manual : Four hundred rupees	
		(ii) Automated: Six hundred rupees	
	(c) Medium or heavy motor vehicle	(i) Manual: Six hundred rupees	
		(ii) Automated: One thousand rupees	
11.	Grant or renewal of certificate of fitness for motor vehicle	Two hundred rupees.	62(2)
		<b>Note:</b> Additional fee of fifty rupees for each day of delay after expiry of certificate of fitness shall be levied.	
12.	Grant or renewal of letter of authority	Fifteen thousand rupees	63(2)(a)
13.	Issue of duplicate letter of authority	Seven thousand and five hundred rupees	66(2)
14.	Appeal under rule 70	Three thousand rupees	71(1)

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[भाग II–खण्ड 3(i)]

#### भारत का राजपत्र : असाधारण

15.	Any application not covered under entries at	Two hundred rupees	64(p)
	Serial Nos. 1 to 14 above	-	
	Serial Nos. I to 14 above		

- Note 1: For the removal of doubts, it is hereby clarified that medium passenger motor vehicles, heavy goods vehicles, imported motor vehicles or any other vehicles not mentioned against Serial No.4 of the above Table include both transport and non-transport vehicles.
- Note 2: Where the certificate of registration issued is in the form of any Smart Card Type, an additional fee of rupees two hundred shall be charged *except* in the case of issue of fresh certificate of registration after cancellation of hire purchase or lease or hypothecation agreement.".

[No. RT-11017/12/2013-MVL]

ABHAY DAMLE, Jt. Secy.

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Note: The principal rules were published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-section (i) vide notification number G.S.R. 590(E), dated the 2<sup>nd</sup> June, 1989 and last amended vide notification number G.S.R.1096(E), dated the 28<sup>th</sup> November, 2016.

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Specialized in Over Dimension Cargo & Project Equipments, Owners of Cranes, Trailers And Hydraulic Axles And Provides Warehousing Facilities At Taloja



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REGISTERED OFFICE 301, Commercial Manor, 4th Cross Clive Road, Masjid (E), Mumbai - 400009. Fax: (022)6177 5500 Tel: (022)6177 5555 e-mail: info@darshanroadlines.com Website: www.darshanroadlines.com

## **Delivering Your Valued Assets Across**

heavyhaulers.in







#### ew drive at Cometto!

As known, Cometto was taken over by the international Faymonville Group in April.

With headquarters in Luxembourg Faymonville is the leading manufacturer of trailers for special and heavy duty transport. This family company employs around 950 people and runs production sites in Belgium, Luxembourg, Poland, Italy and Russia.

#### The customer is king

Faymonville's quality management will have an effect not only on the production process but also in R&D, global service and spare parts delivery, in order to offer our customers the best possible products with outstanding service.

Since the takeover, Cometto has integrated seamlessly into the famously dynamic Faymonville Group. The initial focus was on redesigning the service and after sales





organisation. What this actually means is: the customer is king!

- A 24/7 service hotline (+39 0171 263330) from now on guarantees practical assistance around the clock
- Global spare parts delivery will be significantly improved from now on
- Communication will be more (pro)active and comprehensive

#### **Production & Know-How**

The integration into the Faymonville Group gives Cometto new strength. Faymonville combines its expertise in production processes with specialist knowledge of Cometto in the field of self-propelled modular vehicles segment. Cometto will accordingly become the competence centre for self-propelled vehicles.

#### **Better together**

To mark the transition, the company has been renamed as "Cometto S.p.A". In order to confirm its long-term strategy and ensure the sustainability of the company, the new shareholders increased the capital to  $\in$  12,000,000.

These are the first steps in the reorientation of Cometto. There are more to follow.

True to our new motto: **Propelled to the MAX!** 







- ODC (Over Dimensional Cargo) Transportation and Handling
- OWC (Over Weighted Consignments) Transportation and Handling
- Custom Handling through owned CHA License Registered at major ports of India
- Route Survey and Feasibility Study
- Project Handling and Forwarding
- Project Warehousing Management
- RO-RO/Barge Operations

Having more than 125 Heavy Duty Goldhofer and Tratec Axles with heavy duty Volvo Puller and Other accessories like Telescopic Spacer, Well bed, Spreader etc.





Head Office : Hisar Darcl Logistics Limited 19/3, Tilak Bazar, Hisar - (Haryana) Mob. : 9315828100, 9355544935 Ph. : 01662 - 241003-06, 321001-03 Fax. : 01662 - 232269 Email : project@darcl.com sushil.goyal@darcl.com

Corporate Office : Gurgaon Darcl Logistics Limited SCO-47, 3rd Floor, Old Judicial Complex, Civil Lines, Gurgaon - (Haryana) Ph. : 0124 - 3207169, 3249100 Fax. : 0124 - 4034162 Email : co@darcl.com

#### Registered Office : New Delhi Darcl Logistics Limited M-2, Himland House, Karampura Commercial Complex, New Delhi Ph.: 011 - 25920610 - 613 Fax.: 011 - 25920618 Email : ro@darcl.com

### **Contact Details of State Transport Commissioners**

S.N.		Authority	Address	City	STD Code	Phone
1	Andhra Pradesh	The Transport Commissioner	Dr.B.R.Ambedkar Transport Bhawan,RTA Campus, Somajiguda,	Hyderabad-500082	40	23321283
2	Arunchal radesh	Secretary of Transport	"Transport Secretariat Govt. of Arunchal Pradesh"	ltanagar	360	2212457
3	Assam	"Transport Commissioner"	"Paribahan Bhawan, Jawahar Nagar, Khanapara"	Guwahati-22	361	2304110;2308525
4	Bihar	"Transport Commissioner"	"Vishwesaraiya Bhawan, Bailey Bhawan"	Patna	612	2546449
5	Chattisgarh	The Transport Commissioner	New Bus Terminal Complex, Pandari	Raipur	771	2582799/ 2582788/ 2221338
6	Goa	Secretary of Transport	"1st floor, Junta House, 18th June Road, Panaji"	GOA	832	"2225606, 2225724"
7	Gujrat	The Transport Commissioner	Block No.6, 2nd floor, Dr.Jivraj Mehta Bhawan, Old Sachivalaya	Gandhinagar	79	23251367
8	Haryana	The Transport Commissioner	30, Bays Building, Sector-17	Chandigarh	172	2784359
9	Himanchal Pradesh	The Transport Commissioner	"Directorate of Transport, Parivahan Bhawan, "	Shimla-171004	177	2803136;2808642
10	Jharkhand	The Transport Commissioner	Transport Bhawan	Ranchi	651	"2401706 9934345820"
11	Karnataka	The Transport Commissioner	"1st Floor, 'A' Block, TTMC Building, Shantinagar, Bangalore-560027"	Bangalore-560027	80	22214900
12	Kerala	The Transport Commissioner	"Motor Vehicles Department Trans Towers, Vazhuthacad,	Thiruvananthapuram	471	2333314; 8547639000
13	Madhya Pradesh	The Transport Commissioner	E7/446, Arera Colony	Bhopal	755	2424500
14	Maharasthra	The Transport Commissioner	3rd Floor, New Administrative Building, Near Dr.Ambedkar Garden, Government Colony, Bandra-East	Mumbai-400051	22	26516336
15	Meghalaya	Secretary of Transport	"Madanrting, Sawlad, Shillong - 793021"	Shillong-793021	364	2534617
16	Mizoram	Secretary of Transport	"State Trpt. Authority Mizoram Directorate Of Transport Bldg, Chaltlang Mst Transport Bldg Top Floor, Tuikual Aizawl, Aizawl H O"	Aizawl-796001	389	2318613
17	Nagaland	Secretary of Transport	"GOVERNMENT OF NAGALAND, Motor Vehicles Department, Transport Commissioner, Nagaland, Kohima-797 001"	Kohima-797001	370	2290409
18	Odisha	The Transport Commissioner	6th Floor, Rajaswa Bhawan	Cuttack-753002		
19	Rajasthan	The Transport Commissioner	"Transport Deporment Parivahan Bhawan, Sahkar Marg, Jaipur–302 005 (Rajasthan)"	Jaipur-302005	141	2740021; 5194600
20	Tamil Nadu	The Transport Commissioner	Ezhilagam, Chepauk,	Chennai	44	28588989
21	Telangana	The Transport Commissioner	Dr.B.R.Ambedkar Transport Bhawan, RTA Campus, Somajiguda,	Hyderabad-500082	40	23321282
22	Uttar Pradesh	The Transport Commissioner	Tehri Kothi, M.G.Marg	Lucknow-226001	522	2613978
23	Uttrakahnd	The Transport Commissioner	Kulhan, Sahasthradhara Road	Haridwar-248001	135	2711227
24	West Bengal	The Addl. Chief Secretary-Transport	Writer's Building	Kolkatta-700001	33	22625411

### National Highway Authority of India Project Implementation Units

S.N.	State	Location	Authority	Address	Phone
1	Andhra Pradesh	Anantapur	The Project Director, National Highway Authority of India,	House No.6-4-239, 3rd Cross, Maruthi Nagar Anantpur-515001	08554-275599
2	Andhra Pradesh	Hyderabad	The Project Director, National Highway Authority of India,	Dr. No.331/2RT, 2nd Floor, P. S. Nagar, Masab Tank, Hyderabad-500057	040-23372666
3	Andhra Pradesh	Nandyal	The Project Director, National Highway Authority of India,	D.No.25/684/150, 1st Floor, Near Indore Stadium, Padmavathi Nagar, Nandyal–518501, Kurnool District, Andhra Pradesh	08154-225089
4	Andhra Pradesh	Nellore	The Project Director, National Highway Authority of India,	Bypass Road Junction with old GNTRoad, Vedayapalem, Nellore–524004, Andhra Pradesh	0861-2307733
5	Andhra Pradesh	Nirmal	The Project Director, National Highway Authority of India,	#1-3-594, Road No. 6 Shastrynagar, Distt. Adilabad Nirmal-504106	08734-241365
б	Andhra Pradesh	Rajamundry	The Project Director, National Highway Authority of India,	D. No. 78-14-21, Shyamala Nagar Rajamundry-533103	0883-2431170
7	Andhra Pradesh	Vijayawada	The Project Director, National Highway Authority of India,	Flat No. 21, Teachers Colony, (Above SBH), Vijayawada-520008	0866-2483910
8	Andhra Pradesh	Vishakapatnam	The Project Director, National Highway Authority of India,	(GQ) NHAI Enclave, Km 2/8, Hanumanthavaka, Visakapatnam-530040	0891-2707600
9	Andhra Pradesh	Vishakapatnam	The Project Director, National Highway Authority of India,	(Port Connectivity),Sheela Nagar,BHPV (P.O.) ,Visakhapatnam- 530012(A.P.)	0891-2707275
10	Assam	Bongaigaon	The Project Director, National Highway Authority of India,	Dolaigaon (Near Police Reserve) Bongaigaon-783380 Assam	03664-237493
11	Assam	Silchar	The Project Director, National Highway Authority of India,	H.No.328, 1st Floor, College Road, Ambicapatty, Silchar-788 004	03824-267213
12	Assam	Guwahati	The Project Director, National Highway Authority of India,	House No.1,1st Floor,Dilip Huzuri Path,Near Bageswari Mandir, Sorumotoria ,Dispur Guwahati-781006,Assam	0361-2233207
13	Assam	Nangaon	The Project Director, National Highway Authority of India,	Sankar Mission Road, Panigaon Ist Floor, Opposite to I.T.I. Nagaon Pin Code: 782003, Assam	03672-236701
14	Bihar	Begusarai	The Project Director, National Highway Authority of India,	At-Harpur, P.O Tilrath, Dist-Begusarai-851 122	06243-245144
15	Bihar	Muzaffarpur	The Project Director, National Highway Authority of India,	Sharma Sadan(3rd Floor),Opp D.A.V. School Khabra, Khabra NH- 28,Muzaffarpur-843146	0621-2251934
16	Bihar	Patna	The Project Director, National Highway Authority of India,	D-63 Sri Krishna Puri, PATNA -800 001, Bihar	0612-2540184
17	Bihar	Darbhanga	The Project Director, National Highway Authority of India,	House of Mr. S.N. Mishra Diggi West, Professor's Colony Ward No. 10, Darbhanga (Bihar)–846004	06272-250194
18	Bihar	Purnia	The Project Director, National Highway Authority of India,	House of Shri. Sikkandar Singh, Sahiban Hata, Mahananda Colony, Near Janta Chowk , Purnia-85431	06454-243756
19	Bihar	Hajipur	The Project Director, National Highway Authority of India,	Sharma House, 2nd floor, Ramashish Chowk, Hajipur-844101	06224-274255
20	Bihar	Gaya	The Project Director, National Highway Authority of India,	House No. 70/244, West Jagjiwan Road,Opp.Judicila Quarters, Chanakyapuri Colony, Gaya-823001	
21	Bihar[70]/	Dhanbad	The Project Director, National Highway Authority of India,	Project Director – National Highways Authority of India, PlU Dhanbad, NHAI Complex, P.O. Bhitia, P.S. Govindpur, Distt. Dhanbad, Jharkhand	06540-283090
22	Chattisgarh	Raipur	The Project Director, National Highway Authority of India,	Project Director National Highways Authority of India House No.– A–7, VIP Estate Shankar Nagar, Raipur–492001, Chhattisgarh	0771-2282358
23	Goa	Goa	The Project Director, National Highway Authority of India,	Nr.Dr.Babasaheb Ambedkar Vocational Centre, Old Primary Health Centre, MPT, Headland, SADA, Goa-403804	0832-2521517
24	Gujarat	Gandhidham	The Project Director, National Highway Authority of India,	Z-6, Ground Floor, Near Divine Life Society Hospital (Sterling), Adipur, Dist-Kutch-370 205	0283-6260104
25	Gujarat	Ahmedabad	The Project Director, National Highway Authority of India,	Bunglow No,. 3A & 3B, Amul Building, Amrut Baug Society, Near Dena Bank, Vejalpur Road, Jivraj Park, Ahmedabad-380051	079-26821062
26	Gujarat	Rajkot	The Project Director, National Highway Authority of India,	301–303, Krishna–Con–Arch–I,Plot No.9, Nr.Kotecha Chowk, University Road, Raikot–360007	0281-2585193

S.N.	State	Location	Authority	Address	Phone
27	Gujarat	Surat	The Project Director, National Highway Authority of India,	Laxmi Bunglow No.4, B/H. Big Bazar, Nr. S.D. Jain School, Vesu – Piplod Road, Surat-395007	0261-2221223
28	Haryana	Rohtak	The Project Director, National Highway Authority of India,	Project Director National Highways Authority of India 305 Vidyaniketan Road Ist Floor Model Town Rohtak-124001	01262-212010
29	Haryana	Ambala	The Project Director, National Highway Authority of India,	Project Director — CMU National Highways Authority of India 17L Model Town Ambala City — 134003	0171-2521361, 2520280
30	Haryana	Gurgaon	The Project Director, National Highway Authority of India,	Project Director Project Implementation Unit National Highways Authority of India, Dundahera, Delhi-Gurgoan Border Km.24 Mile Stone,NH-8,Gurgaon-122001	0124-2438056
31	Haryana	Faridabad	The Project Director, National Highway Authority of India,	6P, Sector-16A, Faridabad-121001	Telefax: 0129– 2400900
32	Himanchal Pradesh	Shimla	The Project Director, National Highway Authority of India,	Kamna View Bhawan, Phase-III, Shimla-171009	0177-2673819
33	Jammu Kashmir	Srinagar	The Project Director, National Highway Authority of India,	Bashir Ahmad Parray, Opposite Jee Enn Sons, Airport Road, Parray Pora, Srinagar–190005	0194-2430728
34	Jammu Kashmir	Jammu	The Project Director, National Highway Authority of India,	Amar Villa House No.315;Sector No.1(1st floor) Channi, Himat Jammu–180015	0191-2473363
35	Jharkhand	Ranchi	The Project Director, National Highway Authority of India,	B-402, Road No. 4-C, Ashok Nagar, Ranchi-834002	0651-2245293
36	Karnataka	Dharwad	The Project Director, National Highway Authority of India,	2nd Cross, Sattur Colony Vidyagiri, Dharwad —580004	0836-2461244
37	Karnataka	Bangalore	The Project Director, National Highway Authority of India,	Survey No.13. Nagasandra Village, 14th Km. Bangalore–Tumkur Road, Hesaragatta, Bangalore – 73	080-28394383
38	Karnataka	Mangalore	The Project Director, National Highway Authority of India,	House No.7-35/10(4),Near Pumpwell,Mahaligeshwara Temple Raod,Kankanady,Mangalore-575002	0824-4254499
39	Karnataka	Chitradurga	The Project Director, National Highway Authority of India,	Project Director National Highways Authority of India Near J.M.I.T. Campus, NH-4 (Km 201) Chitradurga-577502	08194-223344
40	Karnataka	Hospet	The Project Director, National Highway Authority of India,	C-10,"Shree Nilayam" 1st Main,2nd Cross, Vivekanand Nagar, Nr.RTO office, Hospet-583203	08394-231565
41	Karnataka	Gulbarga	The Project Director, National Highway Authority of India,	Plot No. 65, Kothari Layout, Venkatesh Nagar, Gulbarga - 585103	08472 - 253756
42	Kerala	Palakkad	The Project Director, National Highway Authority of India,	No. 8/1187, Arumughan Colony,Chandranagar, Palakkad-678007	0491-2573790
43	Kerala	Kozhikode	The Project Director, National Highway Authority of India,	No. 2/2175-B, Krishna Kripa,Aishwarya Road, Civil Station(Post), Kozikhode-673020	0495-2376818
44	Kerala	Cochin	The Project Director, National Highway Authority of India,	Tharakans", 1st Floor, Near ICCI Bank Kalamasseri Ernakulam, Pin No. 682 104	0484-2559416
45	Kerala	Thiruvananthapuram	The Project Director, National Highway Authority of India,	TC .29/1539/1 Rajasree, Perumthanni, Vallakadavu (Post), Thiruvananthapuram-695 008,	0471-2460924
46	Madhya Pradesh	Guna	The Project Director, National Highway Authority of India,	Plot No.1, Phulwari Colony, Near Millennium School, Guna (M.P)- 473001	07542-268051
47	Madhya Pradesh	Gwalior	The Project Director, National Highway Authority of India,	House No. 13, Vivekanand Colony Saraswati Nagar University Road, Gwalior-474011 (MP)	0751-2233116
48	Madhya Pradesh	Indore	The Project Director, National Highway Authority of India,	15, Sampat Hills,Opp. Sahara City, Indore- Dewas Bypass Bicholi Mardana Indore(M.P)-452 016	0731-2901666
49	Madhya Pradesh	Sagar	The Project Director, National Highway Authority of India,	67, Shivaji Ward, Poddar Colony Sagar Madhya Pradesh-470002	07582-236412
50	Madhya Pradesh	Narsinghpur	The Project Director, National Highway Authority of India,	1st floor, Near Paras Industries Tilak Ward, BargiColony Road Narsinghpur(Madhya Pradesh) -487001	07792-230330
51	Madhya Pradesh	Shivpuri	The Project Director, National Highway Authority of India,	Narendra Nagar, Chhatri Road (Near Jain Atta Chakki), Shivpuri-473551	07492-223902
52	Madhya Pradesh	Bhopal	The Project Director, National Highway Authority of India,	Plot No. A # 43, Sakshi Bunglow, Trilanga, Shahpura, Bhopal-462039	0755-2902448
53	Madhya Pradesh	Jabalpur	The Project Director, National Highway Authority of India,	Near jain Multispecialty Dental Clinic,Plot no. 13BB, Ahimsa Chowk, Vilaynagar, Jabalpur–482002	0761-4047042

S.N.	State	Location	Authority	Address	Phone
54	Madhya Pradesh[405] / Maharashtra[13]	Chindwara	The Project Director, National Highway Authority of India,	House No-84, Beside Polythene Factory, Swarna Jayanti Nagar, Near Friends Colony, Khajri Road, Chhindwara- 480001	07162-238120
55	Maharashtra	Nashik	The Project Director, National Highway Authority of India,	"Subodh House", S. No. 911/2, Plot No. 4, Behind Toyota Showroom, Off. Mumbai Agra Highway, Nashik 422 009 (Maharashtra).	0253-2372800
56	Maharashtra	Nagpur	The Project Director, National Highway Authority of India,	Bungalow No.2, Shubankar Apartments Plot No.159, Ambazari Hill Top Area, Ram Nagar Nagpur — 440 010	0712-2249316
57	Maharashtra	Pune	The Project Director, National Highway Authority of India,	S. No. 134/1, BAIF Bhavan Campus Dr. Manibhai Desai Nagar Above Bank of India (Warje Br.) NH-4, Wajre, Pune 411052	020-25231745
58	Maharashtra	Solapur	The Project Director, National Highway Authority of India,	Plot No. 80, Old Santosh Nagar, In front of Devika Gas Agency. Jule Sholapur, –413003 (MH)	0217-2303379
59	Maharashtra	Dhule	The Project Director, National Highway Authority of India,	S. No. 10/2, Plot No.11, Mansaram Nagar, Near Circuit House, Sakri Road, Dhule-424002	02562-276276
60	Maharashtra	Amravati	The Project Director, National Highway Authority of India,	"Matruchhaya"Plot No.33, Raguvir Co-op Housing Society, Opp Bank of Maharashtra, Badnera Road, Sai Nagar, Amravati — 444 607 Tele./Fax. 0721 — 2510035	0721-2510035
61	Maharashtra	Panvel	The Project Director, National Highway Authority of India,	SURVEY NO. 63, 'D' POINT ON NH-4B,CHINCHPADA KALAMBOLI BYPASS ROAD,PANVEL – 410 206	022- 65140560
62	Maharashtra	Aurangabad	The Project Director, National Highway Authority of India,	B-23, Near Kamgar Chowk, N-3, CIDCO, Aurangabad-431003	0240-2481592
63	Meghalaya	Shilong	The Project Director, National Highway Authority of India,	PWD , Easter Circle Building Top Floor, Lower Lachumiere Shillong — 793003, (Meghalaya	0364-2505177
64	Odisha	Keonjhar	The Project Director, National Highway Authority of India,	Plot No. 19/419, Badedera, Mandua, Keonjhar - 758001. Odisha	06766-253295
65	Odisha	Bhubaneswar	The Project Director, National Highway Authority of India,	1st Floor, Setu Bhawan, Nayapalli Unit-VIII, Bhubaneswar-751012	0674-2392720
66	Odisha	Berhampur	The Project Director, National Highway Authority of India,	Surya Nivas, Sales Tax Square, Engineering School Road, Berhampur- 760010-Odisha	0680-2291796
67	Odisha	Sambalpur	The Project Director, National Highway Authority of India,	Bhatra,Opp. Poddar Petrol Pump, Dhanupalli, Sambalpur, Odisha 768005	0663-2546066
68	Punjab	Chandigarh	The Project Director, National Highway Authority of India,	Bay No 35-38, Ground Floor, Sector -4, Panchkula	0172-2587446
69	Punjab	Jalandhar	The Project Director, National Highway Authority of India,	135, Guru Amardas Nagar, Near Verka Milk Plant, Jalandhar Bypass Jalandhar	0181-2603642
70	Rajasthan	Kota	The Project Director, National Highway Authority of India,	A 575, Talwandi KOTA (Rajasthan)–324005	0744-2433396
71	Rajasthan	Udaipur	The Project Director, National Highway Authority of India,	10-A, New Panchwati Udaipur- 313001	0294-2428094
72	Rajasthan	Bhilwara	The Project Director, National Highway Authority of India,	Project Director, PIU, Bhilwara,6-A-1, R.C. Vyas Colony, Bhilwara- 311001(Raj.)	01482-230611
73	Rajasthan	Dausa	The Project Director, National Highway Authority of India,	87,Ganga Vihar Colony,Behind Rawat Palace Hotel Dausa-303303, Rajasthan	1427224918
74	Rajasthan	Chittorgarh	The Project Director, National Highway Authority of India,	59–B, Bapu Nagar, West Road No. 5, Senthi Chittorgarh, Raj–312001	01472-246474
75	Rajasthan	Jaipur	The Project Director, National Highway Authority of India,	156, Girnar Colony, Near Laxmi Marriage Garden, Vaisali Nagar, Jaipur	0141-4026465
76	Rajasthan	Reengus	The Project Director, National Highway Authority of India,	Sangeeta Travels, Ward No. 20, Near Toll Booth, NH–11, Reengus –332404,Rajasthan	01575-224090
77	Haryana	Hisar	The Project Director, National Highway Authority of India,	H.No. S-17, Near Mezbaan Hotel, Model Town, Hisar Haryana Pin 125005	01662-248273
78	Rajasthan	Pali	The Project Director, National Highway Authority of India,	27, Tagore Nagar, Near Circuit House, Pali (Raj.)	02932-263556
79	Rajasthan	Jodhpur	The Project Director, National Highway Authority of India,	148 UMAID HERITAGE Ratanada, Jodhpur-342006 (Rajasthan)	
80	Rajasthan	Ajmer	The Project Director, National Highway Authority of India,	Plot No. 111, Grah Nirman Sahakari Samiti Ltd., Adarsh Nagar, Ajmer, Rajasthan 305001	0145-2680571
81	Tamil Nadu	Krishangiri	The Project Director, National Highway Authority of India,	Door No.259/1, Salem Main Road,Near KAKC Petrol Bunk, Krishnagiri — 635 001,	04343-234250

S.N.	State	Location	Authority	Address	Phone
82	Tamil Nadu	Karaikudi	The Project Director, National Highway Authority of India,	No.1, Second Floor, Subramaniapuram, 3rd Street, Karaikudi-630002	04565-230707
83	Tamil Nadu	Tirunelveli	The Project Director, National Highway Authority of India,	Plot No.A–21, Thomas Nilayam, St. Thomas Road, Thendral Nagar, Maharaja Nagar, P.O. – Tirunelveli– 627 011,	0462-2522591
84	Tamil Nadu	Karur	The Project Director, National Highway Authority of India,	No.7 Kamadhenu Nagar, Karur-639001	04324-223670
85	Tamil Nadu	Thanjavur	The Project Director, National Highway Authority of India,	No. 54,First Floor,Natarajapuram Colony,Medical College Road, Thanjavur-613004	04362-246473
86	Tamil Nadu	Salem	The Project Director, National Highway Authority of India,	19/2B, Junction Road , Salem-636004	0427-2444275
87	Tamil Nadu	Chennai	The Project Director, National Highway Authority of India,	No. 1/54 – 28, Butt Road, St. Thomas Mount, Near Kathipara Junction, chennai–600016	044-22331795
88	Tamil Nadu	Coimbatore	The Project Director, National Highway Authority of India,	Door No.9/9A, 4th Cross Street, Kothari Layout, B.R. Nagar, (Opp. Coimbatore Stock Exchange) ,Trichy Road, Coaimbatore-641005	0422-2324734
89	Tamil Nadu		The Project Director, National Highway Authority of India,	Door No. 13, Travellers Bungalow Road, Kamaraj Nagar, 1st Street, Valliyoor – 627 117, Tirunelveli District, Tamil Nadu.	04637-222985
90	Tamil Nadu	Villupuram	The Project Director, National Highway Authority of India,	10, Govindasamy Nagar, Behind Collectorate, Villupuram-605602	04146-251247
91	Tamil Nadu	Madurai	The Project Director, National Highway Authority of India,	No.83/1, SBI First Colony extension,Near Hotel Gowri Krishna.,Byepass Road,Madurai - 625016	0452-2387750
92	Tamil Nadu	Trichy	The Project Director, National Highway Authority of India,	New No.6, Old No. 44, 1st Floor, 3rd Main Raod, Ponnagar, Tiruchirappalli-620001, Tamil Nadu	0431-2482959
93	Uttar Pradesh	Moradabad	The Project Director, National Highway Authority of India,	3-C/446, Budhi Vihar , Behind Springfield College, Delhi Road, Moradabad-244001	0591-2480070
94	Uttar Pradesh	Agra	The Project Director, National Highway Authority of India,	A-208, Kamla Nagar Agra-282005	0562-2580274
95	Uttar Pradesh	Varanasi	The Project Director, National Highway Authority of India,	S-8/108 DIG Colony, Maqbool Alam Road, Varanasi —220 001	0542-2501003
96	Uttar Pradesh	Aligarh	The Project Director, National Highway Authority of India,	C 47 and 48, Dream City, Bal Jiwan Ghutti, GT Road, Salsor, Aligarh–202001	0571-2900697
97	Uttar Pradesh	Raibareilly	The Project Director, National Highway Authority of India,	House no. 784, Vishnu Nagar, Opp Satyam Hospital, Raebareilly (UP)-229001.	0535-2702526
98	Uttar Pradesh	Allahabad	The Project Director, National Highway Authority of India,	18-C/28A, Sarojini Naidu Marg, Civil Lines, Allahabad-211001	0532-2422035
99	Uttar Pradesh	Kanpur	The Project Director, National Highway Authority of India,	53, Basant Vihar, Naubasta, Kanpur-208021	0512-2630154
100	Uttar Pradesh	Lucknow	The Project Director, National Highway Authority of India,	1/73G, Vineet Khand, Gomti Nagar Lucknow — 226 010 (UP)	0522-2726167
101	Uttar Pradesh	Gorakhpur	The Project Director, National Highway Authority of India,	No-3/40 Bahar, Cluster-3, Sahara State, Gorakhpur-273010 (U.P.)	0551-2231040
102	Uttar Pradesh	Barielly	The Project Director, National Highway Authority of India,	26, Green Park, Beesalpur Road, Bareilly-243006(UP)	0581-2523752
103	Uttar Pradesh	Meerut	The Project Director, National Highway Authority of India,	B-88, European Estate Colony, Near Best Price, Kankarkheda,	0121-2959090
104	Uttar Pradesh	Ghaziabad	The Project Director, National Highway Authority of India,	R-7/6 Raj Nagar Ghaziabad,Distt- Ghaziabad(UP)-201002	0120-2822406
105	Uttar Pradesh	Jhansi	The Project Director, National Highway Authority of India,	Jhansi House No. 214/1, K. K. Puri, Near Shiv Temple, Jhansi 248003	0510-2450967
106	Uttrakhand	Dehradun	The Project Director, National Highway Authority of India,	House No-5, Lane-4, Sector-4, Teg Bahadur Road, Dehradun	0135-2669562
107	Uttrakhand	Rudrapur	The Project Director, National Highway Authority of India,	A-35, Green Park, Kashipur Road	-
108	West Bengal	Kolkata	The Project Director, National Highway Authority of India,	" White House", 119, Park Street, Block -A, 2nd floor, Kolkata-700017	033-22268131
109	West Bengal	Siliguri	The Project Director, National Highway Authority of India,	Sevoke Road, 2½ Mile, Jyotinagar Near Don Bosco School Siliguri 734001 (WB)	0353-2540564
110	West Bengal	Krishnagar	The Project Director, National Highway Authority of India,	Vill.+P.O Bhatjangla, Krishnagar, Dist Nadia, PIN-741101 (WB)	03472-271713
111	West Bengal	Durgapur	The Project Director, National Highway Authority of India,	NHAI Complex, Sector 2(A) Bidhan Nagar, Durgapur-713212	0343-2535766
112	West Bengal	Kharagpur	The Project Director, National Highway Authority of India,	NHAI Complex, Near Chaurangi, P.O. Inda, Kharagpur - 721305	03222-227682
113	West Bengal	Malda	The Project Director, National Highway Authority of India,	UCO Bank Building 2nd Floor Mangalbari (NH-34) Mangalbari Pin-732142 Malda	03512-260630

### MINISTRY OF ROAD, TRANSPORT & HIGHWAYS REGIONAL OFFICES IN INDIA

S.N.	Location	Authority	Address	City	STD Code	Phone	Fax
1	Gandhinagar	Superintending Engineer, Department of Road Transport & Highways	Block No. 14, 4th Floor, New Sachivalaya	Gandhinagar-382010	79	23240091	23220705
2	Bhopal	Superintending Engineer, Department of Road Transport & Highways	1st Floor, D-Wing, Satpura Bhawan,	Bhopal-462004	755	2551329	2551329
3	Thiruvananthapuram	Superintending Engineer (Civil), Department of Road Transport & Highways	Public Office Building,	Thiruvananthapuram — 695033	471	2320879	2320991
4	Lucknow	Superintending Engineer (Civil), Department of Road Transport & Highways	NH Bhawan, Bio Tech Chowk, Ring Road, Vikas Nagar	Lucknow-226022	522	2322741	2321446
5	Jaipur	Superintending Engineer (Civil), Department of Road Transport & Highways	opp.D.C.M., Ajmer Road, P.O. Shyam Nagar,	Jaipur — 302019	141	2811883	2811776
6	Kolkata	Superintending Engineer (Civil), Department of Road Transport & Highways	Room No.106, Block–C (Ist Floor), Central Govt. Office Complex, C Wing DG Block,Salt Lake,	Kolkatta-700064	33	23586942	
7	Chandigarh	Superintending Engineer, Department of Road Transport & Highways	6th Floor, Kendriya Sadan, Sector-9A,	Chandigarh-160017	172	2740376	2740376
8	Bhubaneshwar	Superintending Engineer, Department of Road Transport & Highways	Plot No.184 in front of CRPF Stadium Baramunda,	Bhuvaneshwar-751003	674	2564260	2564260
9	Guwahati	Superintending Engineer(Civil), Department of Road Transport & Highways	Rajgarh Road, Chandmari	Guwahati-781003	361	2540552	2540552
10	Mumbai	Superintending Engineer, Department of Road Transport & Highways	95, New Admn. Building No.2, Ground Floor, PWD Compound, R.C.Marg, Chembur	Mumbai-400071	22	25294858	25294858
11	Patna	Superintending Engineer, Department of Road Transport & Highways	17, Aniket Cooperative Housing Society, IAS Colony,Colony, Kidwaipuri (S.K. Nagar),	Patna-800001	612	2260471	2260471
12	Bangalore	Superintending Engineer (Civil), D/o Road Transport & Highways,	PWD Office, Annexe Building, K.R. Circle,	Bangalore-560001	80	22217457	22212765
13	Dehradun	Office of Engineer Liaison Officer, C/o Chief Engineer (Level-I), D/O Road, transport & Highways	Uttaranchal PWD, Dehradun — 248001	Dehradun-248001	135	2531125	2531125
14	Hyderabad	Superintending Engineer, C/o Chief Engineer(NH) Building, D/O Road, Transport & Highways	2nd Floor, Quality Control Bldg.,Errum Manjil,	Hyderabad-500082	40	23393206	23393206
15	Chennai	Superintending Engineer, Department of Road Transport & Highways	C–1–A,Rajaji Bhawan, Besant Nagar,	Chennai-600090	44	24912115	24912115
16	Raipur	Superintending Engineer, Department of Road Transport & Highways	Pension Bada, NH campus	Raipur(Chattisgarh)-492001	771	2429786	2429786
17	Ranchi	Superintending Engineer, Department of Road Transport & Highways	New Area, Dutta Villa Road, Near TMC, Morabadi, House No.18F	Ranchi-834008	651	2403879	
18	ltanagar	Superintending Engineer, Department of Road Transport & Highways	1st Floor, Campus of CE(WZ), NoWB,	ltanagar-791111 Arunachal Pradesh		9766321693	



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