

Annual Report

2015 - 2016



INLAND WATERWAYS AUTHORITY OF INDIA

MINISTRY OF SHIPPING

HEAD OFFICE : A-13, SECTOR-1, NOIDA-201301, DISTT.GAUTAMBUDH NAGAR (U.P.)

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Member	Dr. Mrs. T. Kumar, IAS Special Secretary & Financial Advisor, Ministry of Road Transport, Highways & Shipping (From 16.11.2012 to 31.08.2015)	011-23710140	011-23715195
	Sh. Sanjeev Ranjan Additional Secretary & Financial Advisor, Ministry of Road Transport, Highways & Shipping (From 31.08.2015 onwards)	011-23710140	011-23715195
Member	Chairman Kolkata Port Trust, Kolkata	033-22205370	033-22208226
Member	Sh. C. B. Singh, Advisor, Ministry of Shipping (From 05.05.2012 to 25.09.2015)	011-23716619	011-23350648
Member	Sh. R. K. Agarwal Joint Secretary, Ministry of Shipping (Up to 09.05.2015)		
Member	Sh. Rajat Sachar, Advisor, Ministry of Shipping (From 14.12.2015 onwards)	011-23716619	011-23350648
Member	Sh. Pravir Pandey, IA&AS Member (Finance), IWAI (Up to 22.02.2016) Vice Chairman, IWAI (From 23.02.2016 onwards)	0120-2544004	0120-2543976
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INLAND WATERWAYS AUTHORITY OF INDIA Gaighat, Post-Gulzarbagh, Patna - 800 007 (Bihar)	0612-2310026 0612-2310057 0612-2310028 0612-2310067 0612-2630100 (Terminal)	0612-2310029
INLAND WATERWAYS AUTHORITY OF INDIA P-78, Garden Reach Road, Kolkata - 700 043 (West Bengal)	033-24390393 033-24395577 033-24396055	033-24395570 033-24391710
INLAND WATERWAYS AUTHORITY OF INDIA Pandu Port Complex, Pandu Guwahati - 781 012 (Assam)	0361-2570109 0361-2676925 0361-2676927 0361-2676929	0361-2570099 0361-2570055
INLAND WATERWAYS AUTHORITY OF INDIA National Waterways Road, N. H. 47 Bypass, Kannadikkadu, Maradu, Ernakulam - 682 304 (Kerala)	0484-2295064 0484-2389804	0484-2389445

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INLAND WATERWAYS AUTHORITY OF INDIA 52, 2 nd floor, Patel Nagar, Nadesar, Varanasi - 221002 (U.P.)	0542-2505329	0542-2505329
INLAND WATERWAYS AUTHORITY OF INDIA Navin Ganguli Road, Durga Asthan (Mandir Ghat), Badi Khanjarpur Bhagalpur – 812001 (Bihar)	0641-2400651	0641-2400651
INLAND WATERWAYS AUTHORITY OF INDIA Office Building No. 1, FBP Office Complex, P.O. Farakka Barrage, Distt. Murshidabad - 742212 (West Bengal)	03485-255809	03485-255809
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INLAND WATERWAYS AUTHORITY OF INDIA Dhubri Terminal, Free India Ghat, Dhubri - 786005	0366-2298111	
INLAND WATERWAYS AUTHORITY OF INDIA IWT Terminal Cum Office Complex, Ashramam Nr. ESI Hospital, Kollam-691002	0474-2766460	
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1. IWT SECTOR – GENERAL INFORMATION

(i) Transport sector comprising of railways, roadways, ocean and coastal shipping, inland waterways, pipelines and airways are critical infrastructure component for economic development of any country. A developed transport system enables optimizing cost of transportation in a multimodal network utilizing strengths of all modes on case to case basis. In these corridors, inland waterways can be developed with navigational channel of specified dimensions in order to promote cost effective, environment friendly and fuel efficient mode of transport, specifically for three categories which include – bulk cargo, hazardous cargo and over dimensional cargo. In some of the developed countries (e.g. USA, China and many countries of Europe), the modal share of the inland water transport (IWT) sector is much higher than in India, eventually benefitting their economies significantly through a self-sustainable supplementary mode of transportation.

(ii) India has a number of rivers, canals, creeks and backwaters which have the potential to be developed and used as cost effective and efficient inland water transport system. Till early 20th century, the IWT had been used as an important mode of transportation in various parts of the country. However, due to various factors, including rapid development of road and railways, industrial development in the country, less attention paid to preservation and development of inland waterways etc., many waterways lost their competitive edge to the rail and road modes. Today, IWT sector in India is significant only in a few areas e.g. Assam, Goa, Mumbai, West Bengal, Bihar, Uttar Pradesh, Kerala and small tidal stretches in peninsular India.

(iii) Some of the major constraints which IWT sector in India is currently facing includes – Inadequate discharges in the rivers resulting in inadequate fairway with depth and width required for round the year operation of IWT vessels of reasonable size; terminal infrastructure for loading and unloading of cargo and their first & last mile connectivity with road/rail infrastructure; navigational aids for safe and unhindered navigation during day and night and shortage of IWT vessels. To achieve substantial IWT traffic, major thrust is therefore on creation of infrastructure (mainly through public funding) and at the same time, augmentation of IWT fleet primarily through private sector participation.

2. ROLE OF IWAI

Inland Waterways Authority of India (IWAI) was constituted on 27th October 1986 vide Inland Waterways Authority of India Act, 1985 for regulation and development of Inland Waterways for the purposes of shipping and navigation.

As per Section 14 of IWAI Act, 1985, IWAI is mandated with the development and regulation of those waterways declared as National Waterways. A total of 111 waterways have been declared as National Waterways by the National Waterway Act, 2016.

Besides, IWAI is also developing and maintaining the Indian side of the designated waterway routes under the Indo-Bangladesh Protocol for Transit and Trade through inland vessels of one country to the other country and is assisting MEA in development & maintenance of Kaladan Multi Modal Project in Myanmar.

The role of IWAI in the overall augmentation of IWT sector is pivotal. It has potential to be developed as an eco-friendly, cheap and viable mode of transportation to boost the economy of India as trade, commerce, employment generation, tourism, etc. as well as satisfy the aspirations of the teeming millions of society.

3. DEVELOPMENT OF NATIONAL WATERWAYS

Three basic infrastructural requirements for making a waterway viable for shipping and navigation includes – (i) navigation channel with adequate depth and width for movement of reasonable size of inland vessels; (ii) navigation aids for day and night navigation; and (iii) terminals to provide berthing of vessels, loading and unloading of cargo/passengers and its road/rail connectivity.

4. NATIONAL WATERWAY (NW) - 1

The Ganga - Bhagirathi - Hooghly river system between Haldia (Sagar) and Allahabad (1620 km) was declared as National Waterway-1 (NW-1) in 1986. Since then IWAI is carrying out various developmental works on the waterway for improvement of its navigability and also development and maintenance of other infrastructure such as navigation aids and terminal facilities as laid down in the IWAI Act, 1985 (82 of 1985). During 2015-16, the important works carried out for development and maintenance of fairway, navigational aids and terminal facilities on NW-1 are as below:

4.1 Fairway Development:

A fairway with targeted depth and width is to be developed / maintained in NW-1 for the purpose of smooth and safe navigation. This was achieved only by undertaking River Conservancy measures like bandalling and dredging and providing navigational aids in Tribeni-Chunar stretch (1226 Km) of NW-1. The stretch between Haldia and Tribeni (196 km) is tidal and Least Available Depth (LAD) of more than 3.0 m is maintained naturally. IWAI is not undertaking any fairway development work in Chunar-Allahabad stretch presently except for day channel marking work as the bandalling alone is not

much effective in this stretch due to low velocity and discharge of water. IWAI has limited dredgers on NW-1 currently being used in the lower stretches of NW-1 due to the high traffic load and more waterway demand. Some of the key development work currently under progress on NW -1 has been listed below:

During 2015-16, Bandalling works of 3900m in Tribeni - Rajmahal (399km) stretch and 18000m in Rajmahal-Chunar (827km) stretch of NW-1 were executed for developing and maintaining the navigational channel (fairway). Besides, 2.85 lakh m³ dredging along Tribeni – Rajmahal stretch and 2.70 lakh m³ dredging in Rajmahal - Varanasi / Chunar stretch of NW-1 was carried out by deploying IWAI's dredgers.



Bandal erected along National Waterway-1



Dredging in progress on National waterway-1

Work for “Removal of Hard strata from river Ganga in Ghazipur - Varanasi stretch of NW-1 is currently being executed by a contracting agency and has been scheduled to be completed by March, 2017. This is a special activity being carried out for the first time in river Ganga which will result into smooth navigation of vessels in the proposed stretch of NW-1 even during lean seasons.



Removal of Hard Strata in progress on National Waterway-1

The Least Available Depth (LAD), which was maintained for various stretches of NW-1 during 2015-16 as given below:

(a)	Haldia – Farakka stretch	(560 km)	–	2.6 m to 3.0 m
(b)	Farakka – Barh stretch	(400 km)	–	2.1 m to 2.5 m
(c)	Barh – Ghazipur stretch	(290 km)	–	1.6 m to 2.0 m
(d)	Ghazipur – Chunar/Allahabad	(370 ¹ km)	–	1.1 m to 1.5 m

¹ In Chunar-Allahabad stretch (198 Km) no river conservancy work has been undertaken.

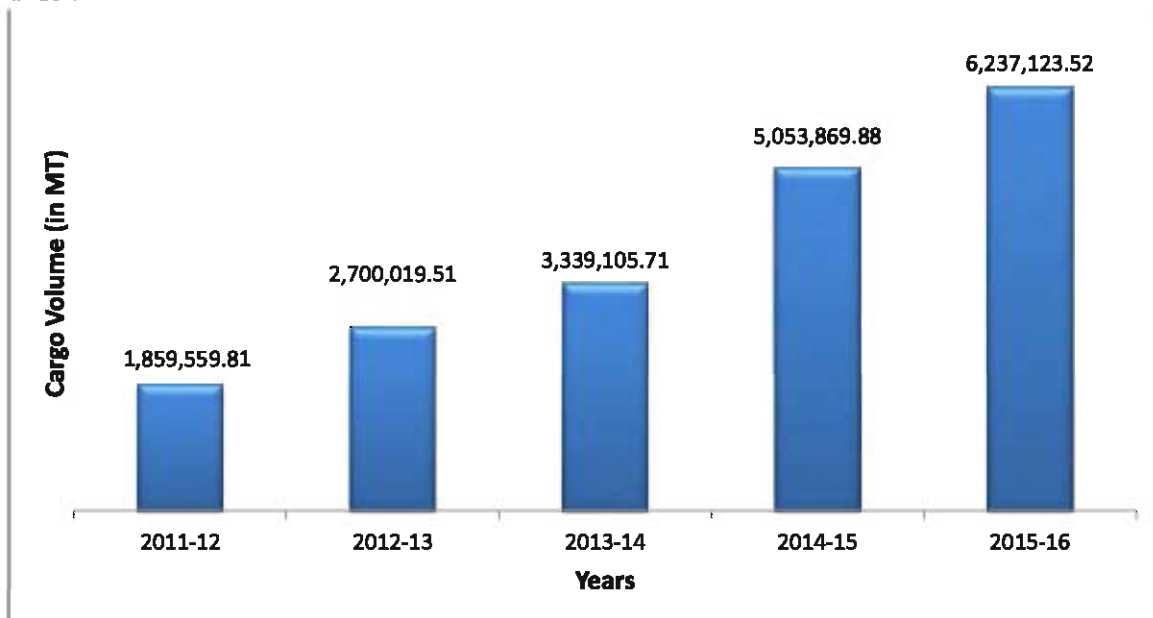
4.2 Cargo Movements:

The transportation of Coal for NTPC Power Plant is being undertaken since November 2013 from sand heads (Bay of Bengal) to Farakka through National Waterway-1. During FY 2015-16 about 7.16 lakh tons of coal has been transported successfully by M/s Jindal ITF Ltd. by using 20 barges of about 1500MT - 2000MT capacity.





Due to IWAI's strategic initiatives, Cargo movement through IWT mode is continuously increasing. An example is increased volume and nature of cargo which include movement of Over Dimensional Cargo (ODC) and other cargo taking place through National Waterway-1. Cargo movement on National Waterway-1 and on Indo- Bangladesh Protocol route through National Waterway-1 in last 5 years are as under:



4.3 Development of Tourism:

Inland tourist vessels – RV Bengal Ganga, Ganga Voyager-I and Ganga Voyager-II of M/s Heritage River Cruise Pvt. Ltd., ABN Rajmahal of M/s Assam Bengal Navigation Co. Pvt. Ltd. and MV Paramhansa of M/s Vivada Inland Waterways Ltd. are plying on NW-1 in the State of West Bengal,

Jharkhand and Bihar since many years. The movement of these vessels with foreign tourists completed successfully during 2015-16 as per their schedule.



4.4 Terminals Facilities:

The low level and high level jetties at Patna (Bihar) are operational since 2008 and 2012 respectively which are capable of mechanical handling of cargo along with bunkering and storage facilities at this terminal.



A view of Low Level and High Level Jetty at Galghat, Patna

A Permanent terminal at GR Jetty-2, Kolkata is operational since Nov 2013 for handling of general cargo.



Fixed jetties at Farakka and Pakur already exist on National Waterway-1 and are being used by transporters/ shippers etc.

Besides, floating terminals at 20 locations along NW-1 are operational between Haldia – Allahabad stretch which are being used for berthing of vessels, logistic support and embarking / disembarking facility to the users.



Floating terminal at Farakka



Tourist vessel berthed at floating terminal on NW-1

The locations of these 20 floating terminals are as under:

- (i) Haldia, Budge-Budge, BISN, Botanical Garden (Kolkata), Shantipur, Swaroopganj, Katwa, Hazardwari, Downstream (D/s) Farakka and Upstream (U/s) Farakka in **West Bengal**;
- (ii) Rajmahal (Manglahat) and Sahibganj (Samdaghat) in **Jharkhand** and Bateshwarsthan, Bhagalpur, Munger, Semaria and Buxar in **Bihar**; and
- (iii) Ghazipur / Rajghat, Ramnagar (Varanasi) and Allahabad terminals in **Uttar Pradesh**.

These floating terminals can be relocated at various sites on National Waterway-1, as per the requirement.

In addition, IWAI has planned to develop Multi-modal terminals at Haldia, Sahibganj and Varanasi for which project development work has been initiated and acquisition of land is in progress. These projects are being implemented under JAL MARG VIKAS project, with the World Bank assistance.

4.5 Navigation Aids:

Day channel marking has been done across entire stretch from Haldia to Allahabad on National Waterway-1 to facilitate round the year navigation. Night navigational aids between Haldia – Ballia (1140 km) stretch of National Waterway-1 have also been provided through a system comprising of light - fitted country boats / bamboo structures, MS poles and trestle beacon towers.



Day Right Hand Mark

Light on Country Boat

Light on Steel Pole

Light on Beacon Tower

Besides above, IWAI is also conducting thalweg surveys regularly on fortnightly basis, issuing River Notices and providing Pilotage to operators on need basis. Moreover, for providing state-of-the-art 24 hours navigation aids on the waterway, the Differential Global Positioning System (DGPS) stations have been commissioned at Swaroopganj, Bhagalpur and Patna on NW-1 and have been made operational for use of transporters / shippers. Further, installation of another DGPS station at Varanasi has been taken up and will be commissioned soon.

An important project of providing world class River Information System (RIS) on NW-1 is under implementation in a phased manner. The Phase-I of this project between Haldia-Farakka stretch of NW1 consisting of 7 base stations, including 2 Control stations and 30 Vessel stations has commenced with a total coverage of 545 km length since 6th of January, 2016 after inauguration by Hon'ble Minister of Shipping, Government of India.

The River Information System (Phase-II) between Farakka-Patna stretch consisting of 6 Base stations and 1 Control station is in progress with a coverage area of 410 km and will be commissioned during FY 2016-17. Phase-III of River Information System between Patna-Varanasi consisting of 4 Base stations and 1 Control station has also been proposed to be undertaken with a coverage area of 363 km length of National Waterway-1 along proposed stretch.

5. NATIONAL WATERWAY (NW) - 2

River Brahmaputra from Sadiya to Bangladesh Border near Dhubri (891km) is the most important inland waterway in North Eastern Region (NER) forming NW-2. Many rivers join this mighty river to form a fish bone structure. About 1687 km stretch of tributaries of Brahmaputra and Barak rivers have been identified in NER having potential for development as feeder routes. NW-2 provides alternate connectivity to NER through 1700 Km Indo-Bangladesh Protocol routes. During

2015-16, the important works carried out for development and maintenance of fairway, navigational aids and terminal facilities on NW-2 are as below:

5.1 Fairway Development:

A navigable fairway of minimum 45 m width and 2.5 m Least Available Depth (LAD) was maintained in Dhubri-Pandu (255 km) and Pandu-Neamati (374 km) stretch. In Neamati-Dibrugarh stretch, 2.0 m LAD was maintained for 350 days. In Dibrugarh- Sadiya (Oriumghat) stretch, LAD of 1.5 m was maintained for 365 days. To maintain this LAD, 21,000 m of bandals were erected at 54 locations and the same was maintained. Besides these, 1,14,506 m³ of dredging was carried out at 13 locations using two departmental CSDs namely CSD Mandovi and CSD Brahmani.

Two HSDs namely HSD Dhansiri and HSD JiaBhorali were also deployed for undertaking dredging in order to augment the depth in the fairway. There are certain volatile zones (about nine) between Bangladesh Border and Neamati where there is a frequent change in the depth and river bed/channel. IIT Guwahati has been entrusted to carry out mathematical and physical model study along one of such locations namely "Ganesh Pahar area, at a cost of Rs. 19.16 lakh on pilot project basis. The outcome of this study will facilitate identification and implementation of river training works at these locations in order to improve the LAD on long term basis.



Typical picture of Bandal



Dredging at Pandu by CSD Mandovi



RCC Jetty at Pandu

5.2 Terminals:

Pandu (Guwahati) is the most important location on NW-2 for development of a multimodal river port. A master plan was therefore prepared for phased development of terminal at Pandu and development was carried out in phased manner. A low level jetty was made operational in 2009. A high level jetty at a cost of Rs.

43.85 crore was also made operational during 2014-15 for round the year operation with mechanical handling facility including containers.

A broad gauge railway siding connecting Pandu port to Kamakhya railway station (Guwahati) has been constructed through NF Railway at a cost of Rs. 16.84 crore and has been opened for commercial operation by NF Railway in 2013. IWAI has signed the Agreement with NF Railway for using the BG Siding for movement of Cargo by third party.



Two Ro-Ro terminals, one at Dhubri and another at Hatsingimari (opposite bank of Brahmaputra river at Dhubri) were planned by IWAI in 2013



Ro-Ro terminal at Dhubri

to provide direct IWT connectivity to Meghalaya from Dhubri (29km by river route) avoiding a circuitous road route 220 km long through Jogighopa. Based on the DPRs prepared through L&T ECC, the work for construction of terminal at Dhubri was awarded to CPWD at an estimate of Rs. 46.69 Cr. on 12.03.2014. CPWD commenced the work during August 2014 and 85% work has been

completed by March 2016. The project is expected to be completed by January, 2017. At Hatsingimari, however, almost entire land selected for construction of terminal has been eroded by the river making it difficult to construct any permanent structure in present condition. Brahmaputra Board has planned a project for protecting the bank in about 5 Km length at this location. This however, will take some time to implement and stabilization of bank thereafter. In view of this, IWAI has developed temporary Ro-Ro facilities at Hatsingimari till the river bank stabilizes. Similar temporary Ro-Ro facility has been developed at Dhubri. Temporary Ro-Ro service has already been initiated by deploying two vessels of IWT Directorate, Government of Assam w.e.f. January 2016.



Floating terminals for facilitating cargo movement have been provided and maintained at ten (10) locations – Dhubri, Jogighopa, Tezpur, Silghat, Vishwanathghat, Neamati, Bogibcel, Dibrugarh, Sengajan/Panbari and Oriumghat. Land for setting up of terminals at Hatsingimari, Dhubri, Silghat, Vishwanathghat, Neamati, Dibrugarh and Oriumghat has been acquired.

At Jogighopa, out of 16.47 hectare of land, about 8.93 hectare of land was eroded. The continued erosion has posed a threat to the nearby habitants. IWAI in co-ordination with Water Resources Department, Government of Assam has protected the remaining terminal land by executing

the bank protection work in two phases at a cost of Rs 27 Cr.



Phase-I activity included Laying of RCC porcupine screens across the river channel upstream of Jogighopa to induce pro-siltation activity; and

Phase-II activity included bank protection works consisting of launching apron & bank revetment with boulders, earthen-downd bund. The

project was completed in November 2015. This project would save about 18.63 acres of land, which otherwise would have been lost permanently.

5.3 Navigation Aids:

Channel marking for day navigation have been provided and maintained in the entire waterway. Night navigation aids have also been provided between Dhubri and Silghat (440 km) stretch and are being maintained. Fortnightly/ monthly thalweg surveys have been carried out in the entire waterway and regular river notices have been issued to provide fairway related information to the IWT operators. To supplement this, DGPS stations have been commissioned at Dhubri, Jogighopa, Silghat and Dibrugarh to facilitate DGPS connectivity in the entire NW-2. The DGPS station of Silghat has been shifted to Vishwanath Ghat due to severe erosion at Silghat.



5.4 **River Tourism:**

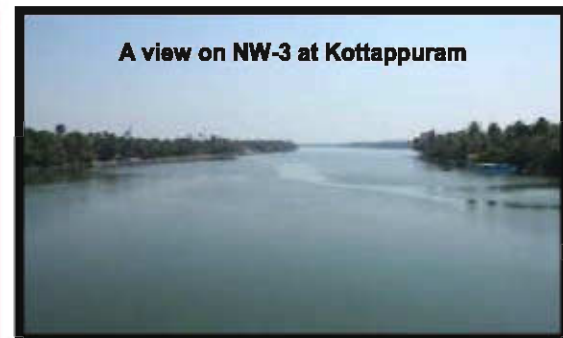
The presence of wild life sanctuaries at Kaziranga, Orang and other places of tourism interest viz. Sualkuchi, Sivasagar and Kamalabari on the banks of Brahmaputra have helped in gaining interest in river tourism along NW-2 for last few years. The provision of 2.5 m LAD in Dhubri-Neamati stretch (630 km) of NW-2 has helped in bringing up the river tourism in this mighty river on the international platform. Three tourist vessels are regularly making voyages between Dhubri/ Pandu and Neamati with increasing number of foreign tourists every year. Commitment of IWAI in providing appropriate navigational infrastructure including aids to navigation and terminal facilities in addition to assistance to the vessels in distress has built-up strong eco system for river tourism. This gets reflected in the number of successful voyages in the mighty river Brahmaputra, wherein the operators have successfully completed 40 trips during 2015-16.

6. NATIONAL WATERWAY (NW) - 3

The NW-3 (total length - 205 km) comprises of the West Coast Canal between Kottappuram and Kollam (168 km), Udyogmandal canal between Kochi Port and Eloor (23 km) and Champakkara canal between Kochi Port and Ambalamugal (14 km). The important works carried out during 2015-16 for development and maintenance of fairway, terminals and navigation aids on NW-3 are briefly described below:

6.1 **Fairway Development:**

NW-3 is a tidal waterway with four sea openings at Munambam, Kochi, Kayamkulam and Neendakara. It has been envisaged that navigational channel of 38 m width in wider reaches and 32 m in narrow reaches with 2 m. depth is to be developed for navigation on NW-3.



An initial requirement of 40.33 lakh m³ capital dredging work has been envisaged over shallow patches spread in entire waterway to develop the navigation channel with above mentioned dimensions. The total length of all these shallow patches were about 87 Km. So far, capital dredging has been completed in all stretches except 1 km long shoal in Kayamkulam Kayal and 2.25 km in Edappallikotta– Kollam stretch. As on 31st of March, 2016, IWAI has carried out 38.50 lakh m³ of dredging work spread over 83.75 Km length. Work in the Edappallikotta– Kollam stretch is in progress.

Single lane channel with targeted depth of 2.0 meter has been provided in the entire NW-3. Widening of the channel in order to provide two lane navigable channel (width of 32 meters) is remaining over a stretch of 3.25 km length spread across 2 locations – (i) 1 km in Kayamkulam Kayal and 2.25 km near Chavara. At Kayamkulam Kayal, the work of removing Chinese fishing nets from the NW-3 channel by the State Government is in progress. Dredging shall be initiated after removal of fishing nets. Widening work including removal of hard strata is under execution through contract at

Chavara since January 2016. Besides, IWAI has also deployed four departmental dredgers (2 cutter suction dredgers and 2 amphibian dredgers) for maintenance dredging at different locations along NW-3.

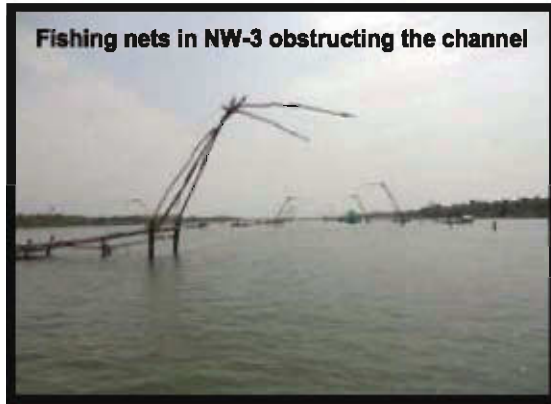


A passenger Jetty re-constructed by IWAI - Alappuzha

Protection of canal banks against crosion is another important activity for safe navigation in NW-3. So far, 15.30 km of canal bank has been provided with permanent bank protection in Champakara and

Udyogmandal canals. In the narrow sections of canal between Alappuzha and Kollam wherever widening was undertaken, bank protection has been provided in a length of 9.78 km till date. Such work is in progress at Chavara. The long drawn capital works in the Alappuzha- Kayamkulam stretch of NW-3 has successfully been completed during 2015-16.

The progress of capital dredging and widening of narrow sections in NW-3 has been experiencing delay over the years due to various local issues related to disposal of dredged material, demand for extra bank protection, frequent stoppage of works and litigations by the local people and objection by the fishermen. To resolve such problems and take the work forward, IWAI is making regular interactions with the State Government and being facilitated by them.



Fishing nets in NW-3 obstructing the channel



Typical IWT Terminal on NW-3

6.2 IWT Terminals:

Cargo terminals have been constructed at eight places (Kottappuram, Aluva, Maradu, Vaikom, Thanneermukkom, Thrikkunnapuzha, Kayamkulam and Kollam). Construction of one terminal at Alappuzha is currently in progress at a cost of Rs. 9.04 Crore, for which 98% works have already been completed. Terminals at two more locations namely Kakkanadu and Chavara are proposed to be developed in the next phase after firming up on the cargo availability (potential demand for waterways). Land acquisition work has been completed. Till now, these terminals are not attracting expected cargo mainly due to reluctance on the part of consignors and consignees to accept a modal shift. The Government of Kerala has implemented a scheme giving Rs. 1 per tonne per km subsidy for IWT from January, 2016 onwards. It is expected that this may create a positive environment for increased use of NW-3 and the terminals. Construction of a new and wider approach road to Kottappuram terminal was initiated after taking over the required land on long term lease from NHAI.

6.3 Ro-Ro Terminals:

Two Roll on Roll off terminals within the Cochin Port area, one at Bolghatty and the other at Willington Island have been constructed by IWA through Cochin Port Trust to provide connectivity with ICTT, Vallarpadam. By utilizing this facility, trucks / trailers bound for Vallarpadam need not pass through the congested roads of Kochi city. These terminals are in operation since February, 2011. By the end of 31st March, 2016, total 93,419 Twenty Feet Equivalent Units (TEUs) and 61,468 Forty Feet Equivalent Units (FEUs) containers have been transported between these terminals using Ro-Ro terminals and a Ro-Ro vessel arranged through contract.



6.4 Over Dimensional Cargo (ODC):

During the year, Over Dimensional project Cargo (ODC) has been transported by barges from Cochin Port Trust to BPCL - Kochi Refinery at Ambalamugal through the Champakara Canal. Total 7 nos. Diesel Hydrotreater (DHDH) & Vacuum Gasoil Hydrotreater (VGO HDT) Reactors / other associated heavy equipment / consignments, varying between 179 Tons to 700 Tons (Total: 2,910 Tonnes) have already been successfully transported.

During 2015-16, total 10.62 lakh tons of cargo, mainly Sulphur, Phosphoric acid, Rock Phosphate, Liquefied Ammonia Gas, POL etc. have been transported by barges in NW-3.



6.5 Navigational Aids:

A total of 312 solar powered lighted buoys and 17 beacon lights were maintained by IWAI all along NW-3 to facilitate round the clock safe navigation facility.



7. NATIONAL WATERWAY (NW) - 4 & 5

These waterways were declared as National Waterways in November, 2008. Thereafter, Detailed Project Reports (DPR) for development of both NWs were prepared. Subsequently, on the advice of Planning Commission, development of commercially viable stretches on PPP mode was explored by appointing a transaction adviser (consultant) with the financial assistance of Department of Economic Affairs (DEA) and Asian Development Bank (ADB). However, both the waterways were not found to be viable for development on PPP Mode. Hence, it was decided to develop both the waterways through Gross Budgetary Support (GBS) / external aid through multilateral resources like ADB or World Bank.

7.1 National Waterway (NW – 4):

For development of the waterway in Andhra Pradesh portion, action has been initiated to develop Krishna River from Vijayawada (Prakasam Barrage) to Muktyala (d/s of Pulichintala dam), Eluru and Kakinada Canal from Vijayawada-Kakinada and River Godavari from Rajamundry to Badrachalam in Phase-I. Commamur Canal from Vijayawada to Pedaganjam alongwith North Buckingham Canal and South Buckingham Canal from Peddaganjam to Puduchery is planned to be developed in Phase-II. Remaining portion of River Krishna and River Godavari is planned to be developed in Phase-III after completion of construction of dams and navigation locks at Polavaram (on Godavari river) and at

Pulichintala (on Krishna river). In the meanwhile, to assess the latest morphological conditions, detailed hydrographic survey across the entire length of NW-4 has been completed. Andhra Pradesh Government is carrying out fresh land delineation surveys, categorization & cost estimation of existing critical cross structures to be modified and DPR for construction of terminals. Based on outcome of this study, IWAI would finalize strategies for developing the fairway either to Class-II or Class-III standard. IWAI has also initiated action to carry out dredging of critical shoals in Muktyala-Harishchandrapur (u/s Vijayawada) stretch of River Krishan as a part of Phase-I activity. A sub-office of IWAI has been set up at Vijayawada in the office premises of Irrigation Dept. for coordination with State Government.

7.2 National Waterway (NW – 5):

An MoU was signed among IWAI, Government of Odisha, Paradip Port Trust (PPT) and Dhamra Port Co. Ltd. (DPCL) on 30th of June, 2016 for developing 332 km stretch of NW- 5 in two phases. Under first phase, 207 km from Pankopal to Dhamra and Paradip; and in second phase, 125 km from Talcher to Pankopal will be taken up. Development works under Phase- I have however, been presently restricted between Erada and Paradip/ Dhamra due to need for re-construction of existing weir at Sujapur and old barrage at Jokadia with suitable navigation locks. A sub-office of IWAI has been set up at Bhubaneswar for coordinating and monitoring the proposed developmental works. In addition, studies for developing the stretch under phase-I have been taken up through M/s WAPCOS. Based on their report and recommendation of State Government, IIT Guwahati has been assigned the responsibility for conducting mathematical model studies for Brahmani river and its delta system for finding the design inputs on the construction of barrages and other cross structures for developing a fairway with 3.0 m LAD. In the meanwhile, to assess the latest morphological conditions, detailed hydrographic survey in the Talcher-Dhamra & Paradip stretch and Matai river of NW-5 has been completed. A co-ordination committee has also been constituted by Government of Odisha with members from IWAI, PPT, DPCL and concerned departments of Odisha who also review the progress of development of NW-5 on monthly basis.

8. INDO-BANGLADESH PROTOCOL ON TRANSIT & TRADE

(i) Inland Water Transit and Trade Protocol exists between India and Bangladesh under which the two Governments agreed to make mutually beneficial arrangement for the use of their waterways for trade between the two countries and for transit cargo from Indian mainland (Kolkata) to NE region. Transportation of goods between the territories of two countries, takes place in accordance with the laws of the country through which goods are moving. The existing protocol routes are – Kolkata-

Silghat-Kolkata, (ii) Kolkata-Karimganj-Kolkata, (iii) Rajshahi-Dhulian-Rajshahi, (iv) Silghat-Karimganj-Silghat. For inter-country trade, five ports of call Haldia, Kolkata, Pandu, Silghat and Karimganj in India and Narayanganj, Khulna, Mongla, Sirajganj and Ashuganj in Bangladesh have been designated in each country. The protocol came into existence in 1972 and is being renewed from time to time. The existing protocol is valid upto March 2020. More than 19 lakh tons of Exim and Transit Cargo have been transported between Kolkata / Haldia and Bangladesh / North-Eastern part of India under this protocol during 2015-16.

9. HYDROGRAPHY SURVEY ACTIVITIES

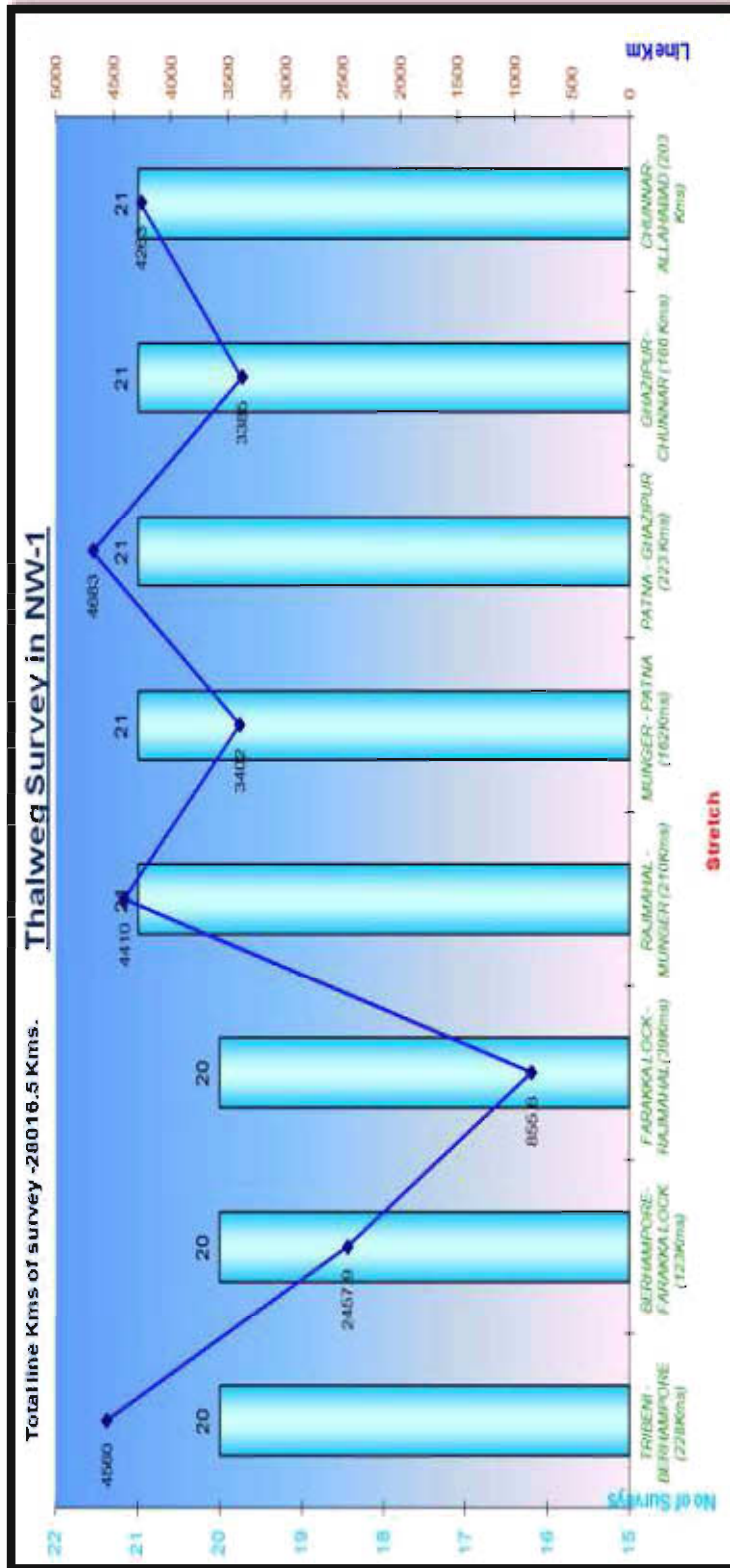
Hydrography is the branch of science which deals with the measurement and description of the physical features of oceans, seas, coastal areas, lakes and rivers, as well as with the prediction of their change over time, for the primary purpose of safety of navigation and in support of all other marine activities, including economic development, security and defence, scientific research, and environmental protection. Hydrographic survey is supporting safe and efficient navigation of ships, hydrography underpins almost every other activity associated with the navigation.

Hydrographic survey is the back bone activity in decision making, whether it is related to planning and execution of developmental and maintenance activities, providing information to mariners/ users, publication of nautical charts etc. Strong emphasis is placed on soundings, shorelines, tides, currents, river morphology and submerged obstructions that relate to the previously mentioned activities. The information collected in Hydrographic survey is usable by the end user for analysis and safe navigation. The hydrographic wing also publishes Navigation Atlas and Pilots for the National Waterways providing supplementary information to the mariners.

9.1 NATIONAL WATERWAY -1 (Haldia-Allahabad):

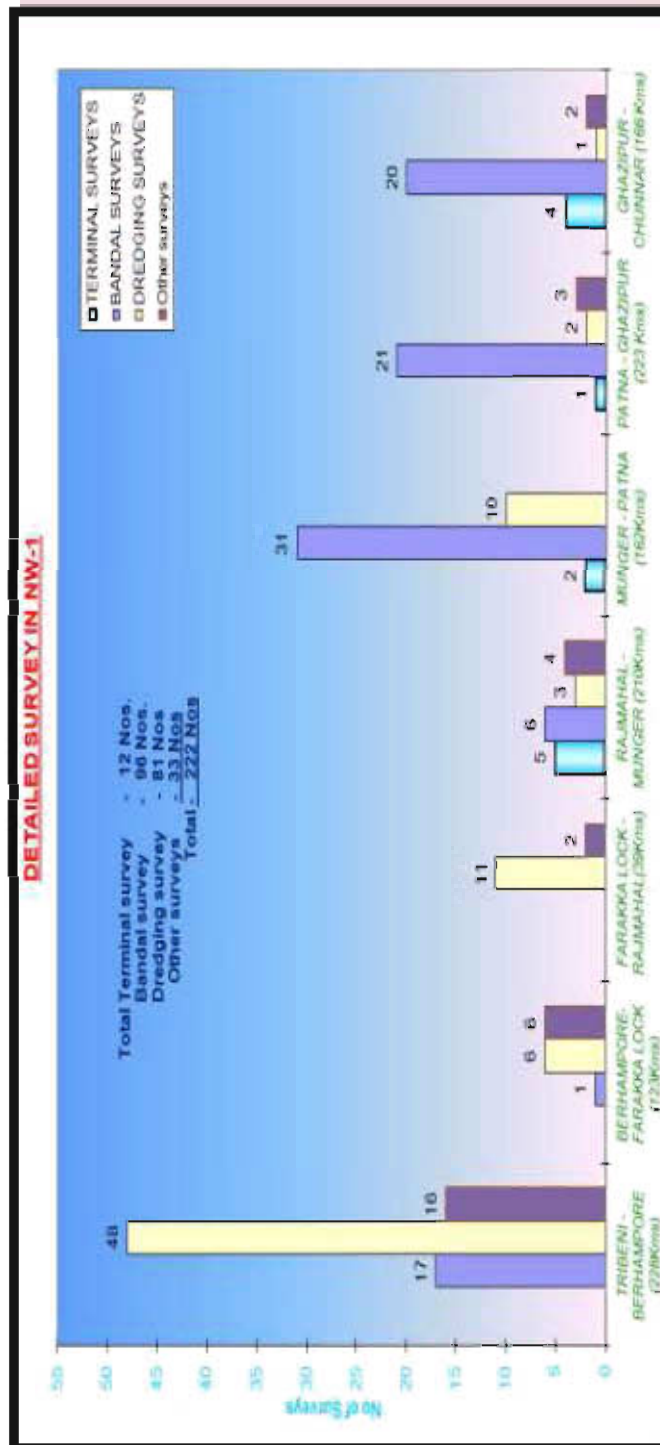
THALWEG SURVEYS

Thalweg (longitudinal) surveys were conducted departmentally on fortnightly basis in lean season and on monthly basis during floods and River Notices issued (both in English & Hindi) to the IWT users. The LAD and River Notice are being published in IWAI website regularly. Total 28016.5 line Km of Thalweg surveys were undertaken during the year 2015-16. Stretch-wise details of surveys undertaken are shown below :-



DETAILED SURVEYS:

Pre / Post Bandalling , Dredging surveys and other surveys were conducted departmentally at 222 locations, details are given below:



TERMINAL SURVEYS:

Terminal Surveys were carried out at Mangla Ghat (Chainage: 589.0 Km), Samada Ghat (Chainage: 618.0 Km), Bateswar (Chainage :683.0 Km), Bhagalpur (Chainage 715.0 Km), in Rajmahal – Munger Terminal survey. has also been conducted in Gaighat terminal (Chainage 955.0 Km) Semeria Ghat in Patna-Munger Stretch, and Ghazipur (Chainage 1178.0 Km), Rajghat (Chainage 1308 Km), Ramnagar (Chainage 1318.00 Km) & Chunar (Chainage 1344.00 Km) in stretch Ghazipur- Chunar.

OTHER SURVEYS:

IWAI, Swaroopganj office has undertaken the cross sectional survey at 16 locations in NW-1 covering 17 Km, to check the navigability of channel during lean season. The details are as follows:-

Sl. No	LOCATION	CHAINAGE (In Km)
1	Bholadanga	305-307
2	Kumarpur	396-399
3	Sahapatti	387.5
4	Balidanga	336.5
5	D/S Guptipara	238.0
6	Sahapatti	387.5
7	D/S Palassey	368.0
8	Balidanga	335.5 & 336
9	Bahirdweep	296.0
10	U/S Gouranga Setu	278.0
11	Balidanga	337.0
12	Nutangram	358.0
13	D/S Palassey	368.0
14	Balidanga	335.5 & 336
15	D/S Balidanga	335.5
16	Sujapur	363.5



Total station survey at Farakka land area

IWAI has carried out topographic survey in the designated land for construction of new navigational lock gate at Farakka. IWAI, Farakka has also carried out 08 Bank to Bank surveys in following locations:

Sl. No.	LOCATION	CHAINAGE (In Km)
1	D/s. Lock gate	542-544.0
2	U/s. Lock gate	546.0
3	U/s. Barrage to Ganga confluence	546.0-554.0
4	Ghodpara	427.5
5	D/s. Dasturihat Ferry	444.5
6	Mohammadpur	450.0

9.2 Indo-Bangladesh Protocol Route (Sunderhans)

Monthly Thalweg survey was carried out in Indo-Bangladesh Protocol route from Silver Tree point to Beharikhil (Bangladesh border). Total 1,872 line Km of Thalweg survey were conducted and River Notices published on the IWAI website.

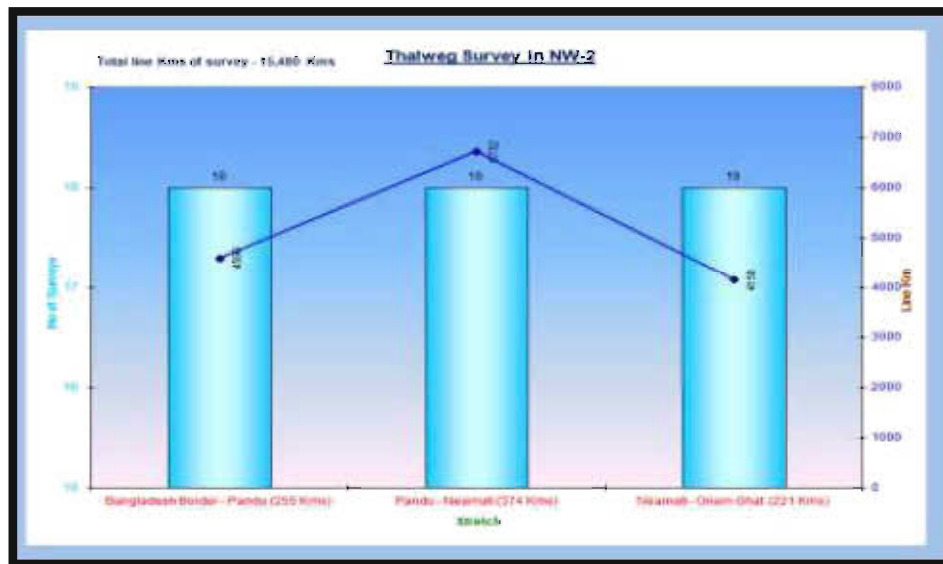


Thalweg survey in Sundarbans

9.3 NATIONAL WATERWAY - 2

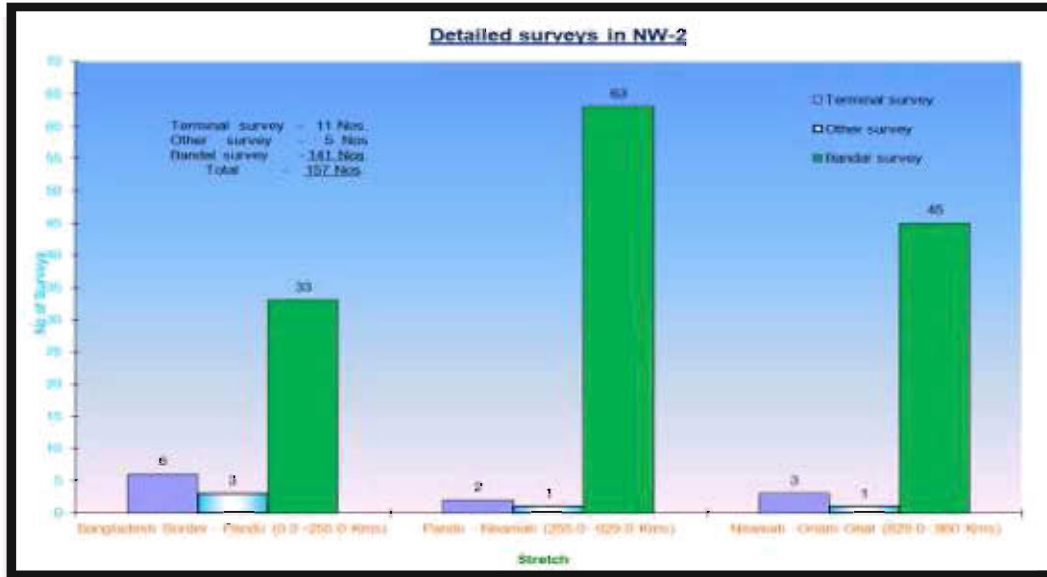
THALWEG SURVEYS

Thalweg surveys were conducted departmentally on fortnightly basis in lean season and on monthly basis during floods and River Notices issued (both in English & Hindi) to the IWT users. The LAD and River Notice have been published in IWAI website regularly. Total 15480 line Km of Thalweg surveys were undertaken during the year, the stretch-wise details are shown below:-



DETAILED SURVEYS

Pre and Post Bandalling, Dredging surveys, terminals and cross section survey were conducted departmentally at 157 locations, details are given below :-



TERMINAL SURVEYS

Terminal Surveys were carried out at Hatsingimari (Chainage 02 Km), Dhubri (Chainage: 32 Km), Jogighoppa (Chainage:108 Km), Bogibil (738 Km), Sengajan (772 Km) and, Oriumghat (860 Km) during year 2015-16.



Automated Hydrographic Survey system (On board)

OTHER SURVEYS

Cross sectional survey has been carried out along the following location in the stretch B' Board to Pandu:-

Sl. No.	LOCATION	CHAINAGE (In Km)
1	Burha Bhuri- Jaleshwar Ghat	50 to 55 Km
2	Hatsingimari-Bherabhaga	02 to 15 Km
3	Bherabhaga- U/s.Dhubri	15 to 33 Km

Volatile Zone Survey has been carried out at Ganesh Pahar area (283 Km to 305 Km) for acquiring of data for mathematical model. The data has been used as input for mathematical modeling by IIT, Guwahati.

Thalweg survey has been carried out in Lohit River over a length of 81 Km to ascertain the navigability of river.

9.4 DGPS Based Navigation systems:

Keeping in view the commitment to introduce more reliable and safe inland navigation methods, IWAI has introduced navigation with DGPS (Differential Global Positioning System) technique in National Waterway 1 and 2. In this project, DGPS stations at Swaroopganj, Bhagalpur, Patna and Varanasi along NW-1 and Dhubri, Jogighoppa and Dibrugarh along NW-2 have already been commissioned and are operational. Presently, DGPS connectivity is available for Sagar - Buxar stretch of NW-1 (1124 Km) out of 1620 Km and the entire stretch of NW-2 (891 Km). The station at Silghat was affected due to heavy flood that occurred in Brahmaputra. All the equipment have been dismantled and kept in safe custody.

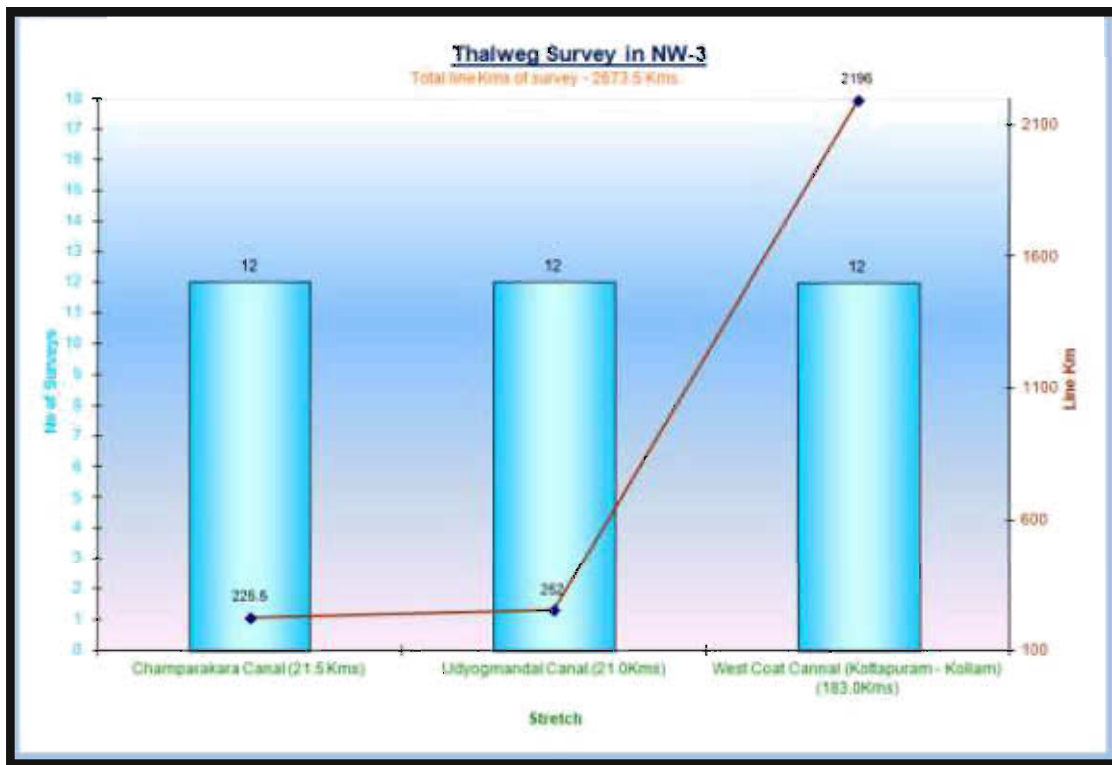
For making the National Waterways – 1: Ganges river system, suitable for night navigation and to ensure the safety and efficiency of waterway, both visual and radio aids to navigation systems have been installed.

The DGPS network is facilitating efficient voyage of vessels plying in National Waterway-1 (the Ganga -Bhagirathi - Hooghly river system between Haldia and Allahabad) and National Waterway -2 (the Brahmaputra river between Sadiya and Dhubri) . The additional station at Dhubri is facilitating safe and effective navigation in the Indo-Bangladesh Protocol routes. These stations are planned in such a manner so as to get a radial coverage of 150 Km (approx.) with sub-meter accuracy in position.

9.5 NATIONAL WATERWAY -3 :

THALWEG SURVEYS

Thalweg surveys were conducted departmentally in Kottappuram – Kochi - Kollam stretch (West Coast Canal along with Udyogamandal and Champakkara Canals) on monthly basis and River Notices were issued (both in English & Hindi). Total 2673.5 line Km of Thalweg surveys have been undertaken during the year, the stretch-wise details are shown below:-



DETAILED SURVEYS

Pre and Post dredging Surveys were carried out at the following location:-

Sl. No.	Location	Pre/pst	Date	Chainage	Dred. Qty
1	Rajagiri- Ambalamugal	Pre	9,10&16.4.15	21.85-23.50	47151 m ³
2	Thevara jetty	Pre	29.05.2015	9.0 (CC)	
3	Dalawapuram- Samrani kodi	Pre	14&15.09.15	172.64-173.1 173.97-175.85	4720 m ³
4	Thevara jetty	Post	14.10.2015	9.0(CC)	4445 m ³
5	T.C.C. (UD canal)	Pre	11.12.2015	23.0(UD)	
6	Kayamkulam s.mouth	Pre	17.12.2015	149.0	
7	KMML &Kovilhottam	Pre	18.12.2015	166.0	
8	Maradu Terminal	Pre	5&29.12.15	12.5(CC)	
9	Ro-Ro jetty Terminals W.Island& Bolghaty	Pre	06.01.2016	3.5(CC) 5.8(UD)	2880 m ³

CC- Chambakara Canal & UD- Udyogmandal Canal
A total quantity of 59196 m³ was dredged out during 2015-16.

9.6 NATIONAL WATERWAY NO-5:

In order to assess the status of navigable route and for their further development, monthly thalweg surveys in NW-5 were conducted.

9.7 SURVEY VESSELS:

All the Survey vessels are fitted with the state-of-the art survey equipment like RIS system and Automated Hydrographic Survey System integrated with Digital echo sounder, DGPS receivers, laptop/desktop and current meter sets for data collection, processing and printing.

Following survey vessels in different waterways are operational and deployed for survey work:-

<u>NW-1</u>		<u>NW-2</u>	<u>NW-3</u>
1. S.L.Koel	7. S.L.Mandakini	1. S.L Lohit	1.S.L. Pamba
2. S.L.Dwarkeswar	8. S.L.Gandak	2. S.L. Subansiri	
3. S.L. Megna	9. S.L. Punpun	3. S.L Barak	
4. S.L. Anupallav	10. S.L. Kosi	4. S.L. Burhi Dihing	

<u>NW-1</u>		<u>NW-2</u>	<u>NW-3</u>
5. S.L. Kamla	11. S.L. Rihand	5. S.L. Dibang	
6. S.L. Ghaghra	12. S.L. Dihang		

9.8 Setting up of River Information Services (RIS) system on National Waterway-1

River Information Services (RIS) are combination of modern tracking equipment, related hardware and software designed to optimise traffic and transport processes in inland navigation. The system enhances swift electronic data transfer between mobile vessels and shore (Base stations) through advance and real-time exchange of information. RIS aims to streamline the exchange of information between waterway operators and users. This would facilitate:-

- Enhancement of inland navigation safety in ports and rivers.
- Enhancement of the efficiency of inland navigation.
- Better use of the inland waterways.
- Environmental protection.



The Union Minister for Road Transport & Highways and Shipping, Shri Nitin Gadkari inaugurating the River Information Services (RIS-Phase-I) System, in New Delhi on January 06, 2016. The Secretary, Ministry of Shipping, Shri Rajive Kumar and the Chairman, IWAI, Shri Amitabh Verma are also seen.

IWAI has taken up the above technologically challenging project of setting up of River Information Service System on National Waterway -1 (Ganga) for the first time in India. The project is being implemented in three phases as below:

	Phase -I: Haldia –Farakka	Phase -II: Farakka-Patna	Phase -III: Patna-Varansi
Cost of Project	Rs. 26.23 Cr	Rs. 15.89 Cr	Rs.14.49 Cr
Coverage in the river stretch	545 Km	410 Km	356 Km
Infrastructures	7 base stations 2 Control stations 30 Vessels station Work awarded on 27.4.14	6 Base stations 1 Control station Work awarded on 28.5.15	4 Base stations 1 Control station Work awarded on 03.03.2016
Status	Operational	Civil construction are under progress and Factory Acceptance Test has been carried out for OEM equipment at Belgium.	Acquiring of land & tendering for civil work is in progress.



River View of Farakka RIS Control station

Phase -I: In the Phase I of RIS project where 545 KM river stretch of NW-1 has been implemented by M/s.Elcome Integrated System Pvt Ltd, Mumbai. In this project the vessels are being monitored by installing 7 remote (base station site) at Haldia, GR Jetty, Tribeni, Swaroopganj, Kumarpur, Ballia and Farakka. There would be two control centers at Farakka and GR Jetty. Both the control stations will monitor the vessels plying in this river stretch via AIS (Automatic Identification System) and will communicate with Vessels via VHF. Under this project, there are 30 vessels which are also equipped with Inland AIS system, Short range radar and VHF. The AIS data and voice communication of the vessel will be monitored and recorded at the control stations (Farakka and GR Jetty) and can be retrieved/replayed whenever needed. The vessels can be guided from the control station via VHF and operator can provide the necessary instruction to the vessels.

Site Acceptance Test (SAT) has been carried out, all equipment have been installed under Phase-I project and the contractor has been informed to update the system in accordance with SAT report findings.

Phase -II: The work has been awarded to M/s.Recktronic Devices & Systems (RDS), Pune – 411033. On allotment of license for AIS and VHF equipment by WPC, a team of members from Head office and field office have carried out Factory Acceptance Test (FAT) for OEM equipment at Periskal, Belgium for imported items. Field Director has carried out FAT for indigenous item at Kolkata and Mumbai.

Phase -III: The work has been awarded to M/s.Elcome Integrated System Pvt Ltd, Mumbai and the agency has applied for license for the stations for which the land has been acquired by IWAI.

9.9 CARTOGRAPHIC CELL/SEMINARS/TRAINING:

The cartographic cell in IWAI Head Office Noida is equipped with modern equipment and software for preparation of Digital Charts using Geographic Information System (GIS) & Image processing software like CARIS, ERDAS Imagine, Auto CAD, etc. The cartographers of IWAI have been trained in using GIS software and image processing software etc.

In the cartographic section, the newly identified 106 waterways have been explored and river course have been digitized using state of the art computer hardware and software installed in the Cartographic Lab for preparation of index map of new waterways.

During the year 2015-16, Satellite data from National Remote Sensing Centre, Hyderabad for all Waterways were obtained and the same have been processed, digitized using Caris GIS software. The land marks, topographical features of Survey of India (SOI) digital data were compiled along with field survey data (from Hypack) and latest NRSC data for preparation of electronic Charts.

9.10 Selling of Map, Atlas and Navigational Products 2015-2016:

An amount of Rs. 90,688 has so far been collected through sale of Map, Atlas and Navigational products in 2015-16, to IWAI operator users, Private and Govt. department. Details as shown below:

Sr. No.	Map/Atlas/Pilot	Purchaser Name	Amount
1	Digital Map NW-1	M/s IIC Technologies, Hyderabad	2450.00
2	India map Index	M/s clean Tech	1000.00
3	Atlas NW-1	M/s Howe, New delhi	25000.00
4	Pilot NW-1	do	650.00
5	do	H.R. Wallingford, Mumbai	25000.00
6	Pilot NW-1	do	650.00
7	do	M/s Jeppesen, Mumbai	18750.00
8	Pilot NW-1	do	488.00
9	Atlas NW-2	M/s Tractebel Eng., Gurgaon	10000.00
10	Atlas Sunderban	M/s Virajclean Sea enterprises, Mumbai	6000.00
11	Pilot-sunderban	do	300.00
12	Pilot NW-3	M/s IMC, Channai	400.00
		Total Amount Rs.	90688.00



INCA Ehibition

Participation in INCA Mapping Congress: Inland Waterways Authority of India is a corporate member of Indian National Cartographic Association (INCA) and has participated in XXXV INCA International Congress on special Governance for development and planning of smart cities

disaster management conference, held at Jawaharlal Nehru University, New Delhi during 15th-17th December 2015. IWAI also participated in some exhibitions to showcase the maps and charts. During the conference, Maps, Navigational charts, river atlas and river information system were displayed in the stall allotted to IWAI.

In addition “Technical Literature”, “Geography and You” Hindi/English magazine of IWAI activities and its contribution to Indian economy were also provided to the visitors and research students.

10. NATIONAL INLAND NAVIGATION INSTITUTE (NINI), PATNA

The National Inland Navigation Institute (NINI) was set up by Inland Waterways Authority of India (IWAI) at Patna, Bihar on February 2004 with a view to develop human resource for the Inland Water Transport sector. The management and administration of NINI, Patna is under M/s. ARI Pvt. Ltd, New Delhi in consultation with Program Advisory Committee of IWAI. The major achievements during the year 2015-16 were as below:

A. The following activities were carried out :

Induction Training GP Rating Course (23rd & 24th Batch)

- Conducted internal final examinations (written and oral) for General Purpose Rating Induction courses in the months of July, 2015 and January, 2016.
- The GP Rating (IV) trainees were imparted practical training on board training ship Survekshak and Inland Vessel Training Simulator.
- Training in the following four DG Approved Basic Courses was provided:
 - Elementary First Aid (EFA)
 - Fire prevention and Fire Fighting (FPFF)
 - Personal Survival Technique (PST)
 - Personal Safety and Social Responsibility (PSSR)



Practical Training of 23rd & 24th Batch I.V. G.P. Rating Students

Preparatory Course for Inland Vessel Certificate of Competency

- Conducted the following Preparatory Courses for Inland Vessel Examinations:
 - Serang
 - Master Class II
 - Second Class Engine Driver
 - First Class Engine Driver

Conducting Inland Vessel Examination on behalf of Govt. of Bihar

- Examination conducted for candidates desiring to obtain Certificate of Competency for different categories mentioned below as per Inland Vessel Rules, Govt. of Bihar:
 - Serang
 - Master Class II
 - Master Class I
 - Second Class Engine Driver
 - First Class Engine Driver
 - Inland Engineer

	Serang	Master Class-II	Master Class-I	Engine Driver Class-II	Engine Driver Class-I	IV Engineer
Total Passed	28	0	38	57	4	0

B. TRAINING

NINI conducts training on regular basis and advertises its course schedule in maritime magazines and national newspapers.

- Placement of trainees for undergoing Induction courses on Deck and Engine arranged with private barge operators.
- The Training record books issued to trainees placed on various vessels as on board trainees.
- NINI keeps a record of all the trainees on vessels for their leaves, payments and trainings through a separate placement cell.
- Database of COC examination and certificates being maintained.

C. HUMAN RESOURCE

The Institute has developed a pool of faculty members and instructors for management of the Institute. The Institute deploys faculty in three categories namely regular consulting faculty, regular visiting faculty and need based visiting faculty.



Workshop cum Interactive session on Draft Inland Vessel Act at Mumbai

D. AFFILIATIONS AND ASSOCIATIONS:

- The ISO 9001:2008 certificate by ABS renewed subsequent to their inspection of the Institute.
- NINI conducts the COC (Certificate of Competency) exams in NINI Campus on behalf of IWT, Bihar.

E. MARINE SIMULATOR CENTRE, NINI

The Marine Simulator Centre was established in the NINI campus with Joint Venture agreement with M/s.ARI Pvt Ltd and conducted course for Merchant Marine Officers.

Training for Merchant Marine Officers

- The following courses were carried out as per schedule:
 - Radar Observer Simulator Course (ROSC)
 - Automatic Radar Plotting Aid (ARPA)
 - Ship maneuvering Simulator (SMS)
 - Electronic Chart Display & Information System (ECDIS)
 - Bridge Team management (BTM)

The number of officers trained in the above courses is 171.

11. 111 NEW NATIONAL WATERWAYS :

Ministry of Shipping, Govt. of India had directed IWAI to identify the viable waterways in India for their phased development. Accordingly, 106 new waterways were identified by IWAI and intimated to MoS. In this regard, National Waterways Act, 2016 was published in the Gazette of India, Extraordinary, Part II, and Section I dated 26th March, 2016 as an Act No. 17 of 2016. List of 111 National Waterways with their approx. length is given in Annex-1.

11.1 Status of 111 new National Waterways

1. As part of the preparatory works to undertake development on 106 new National Waterways, IWAI has grouped them under 3 categories as under:
2. (A) Category – I: 8 waterways which are considered to be the most viable and can be taken up for development in Phase-I. Accordingly, consultancy assignments for preparing EPC tender documents contract and environmental studies for these waterways are being undertaken in phased manner.

(B) Category – II: Those waterways which are in the coastal regions and have some tidal stretches are being considered for development in this category. The number of such coastal

rivers and canals is 60 (14 rivers of Sunderbans have been considered as one waterway and extension of West Coast Canal has been considered in NW-3, thus making a total of 46 new waterways). These 60 rivers have been divided into 8 clusters based on their geographical locations.

(i) Two stage DPR studies (stage I feasibility study and based on viability stage II DPR study) for all the rivers have already been awarded. Stage I feasibility reports of 33 waterways are under examination and balance would be available from July, 2016 onwards.

(C) Category – III: The remaining waterways which are in remote, inaccessible and hilly regions have been grouped in this category. These 54 rivers/canals (Krishna and Godavari rivers have been included as extension of NW-4, hence effectively 52 new waterways in the list of 106 waterways) have also been sub-divided into various clusters and initially only feasibility studies for all these waterways have been awarded. Feasibility reports of 17 waterways are under examination and balance would be available from July 2016 onwards.

12. INDO-MYANMAR KALADAN MULTIMODAL TRANSIT TRANSPORT PROJECT

The Kaladan Multimodal Transit Transport Project (KMTTP) in Myanmar was conceptualized and is being administered by the Ministry of External Affairs (MEA) with a view to facilitate connectivity between the mainland and the North Eastern States of the country through maritime shipping, inland waterways and roads of Myanmar. The link between North Eastern States of India and Myanmar will pave way for enhanced trade and commerce across the border, cultural and social integration at the regional level. MEA had appointed Inland Waterways Authority of India (IWAI) as the Project Development Consultant (PDC) for the implementation of the Port and Inland Water Transport (IWT) component of the Kaladan Project on 19.3.2009. M/s Essar Projects (India) Ltd. is the main contractor appointed by MEA for the works being implemented in Myanmar under IWAI's supervision. M/s URS Scott Wilson India Pvt. Ltd is IWAI's Supervision Consultant for the project. As on 31.03.2016, the overall physical and financial progress of the works is 89% and 83% respectively. The highlights of physical progress are as below:

A. Sittwe:

- Reclamation of land for backup facilities – 96% completed.
- Construction of Rubble mounted Dyke - 90% completed.
- The Approach and Main Jetty for both the Port & IWT Jetty – 100% completed.
- Sea dredging work – 100% completed.

- Construction of backup facilities structures – 85% completed.
- Erection of 10 T Level Luffing crane at Port jctty – 100% completed.
- Construction of 6 Nos. of Barges 300 T capacities – 68% completed.
- Construction of Drain (additional item) – 100% completed.
- Installation of Navigational aids - 100 % completed.

B. Paletwa:

- The Approach and main Jetty work – 100% completed.
- Construction of backup facilities structures – 60% completed.
- River dredging work along Kaladan river – 100% completed.

In October 2015 a Revised Cost Estimate (RCE) has been sanctioned by the Cabinet at a total cost of Rs 2904 crore, it includes Rs 983 crore for port and IWT component and balance Rs 1921 crore for highway component. The following is the breakup of items for Port & IWT component approved by the Cabinet:

1. On-going contract with Essar Projects	- Rs 356 crore
2. Currency fluctuation	- Rs 55 crore
3. PDC fees for IWAI	- Rs. 32 crore
4. Contingency	- Rs 11 crore
5. Additional facilities at Paletwa through EPIL	- Rs 50 crore
6. EIA / SIA study for waterway components	- Rs 1 crore
7. Procurement of furniture for site offices	- Rs 2 crore
8. Container facilities at Sittwe & Paletwa	- Rs 300 crore
9. Operation & Maintenance works for 5 years	- Rs 166 crore
10. Wreck removal in Sittwe Port area	- Rs 10 crore

IWAI in its role of PDC maintained regular coordination with all relevant stakeholders like MEA, Embassy of India-Yangon, Ministry of Shipping, Ministry of DoNER, Govt. of Myanmar, Contractors and Consultants for implementation of the project.



NEWLY CONSTRUCTED PORT JETTY AT SITTWE (NAVY VESSEL IS BERTHED)



ROAD AND CIVIL WORKS UNDER CONSTRUCTION AT SITTWE, MYANMAR

13. DETAILS OF CARGO MOVEMENT DURING THE YEAR

Inland Water Transport to function as a supplementary and reliable mode of transportation requires confidence building measures in the shippers in terms of guaranteed fairway with required depth, 24 x 7 navigational facilities, terminal and storage facilities along with mechanical loading and unloading facilities. While the Inland Waterways Authority of India (IWAI) has been relentlessly developing the National Waterways 1, 2, 3 and 5 for providing all the infrastructural facilities that are required for seamless movement of cargo vessels, the shortage of vessels in the IWT market is one of the stumbling blocks for continuous cargo movement. 4 out of 7 cargo vessels owned by IWAI have been deployed for operations on National Waterways and Indo Bangladesh Protocol Route on bareboat charter and remaining 3 vessels are being operated departmentally. There is also regular Over Dimensional Cargo (ODC) movement on National Waterways as it is generally not feasible to move such cargo on railways and roads. 14 consignment of ODC on National Waterway 1 and Indo-Bangladesh Protocol route 2 from Kolkata and National Waterway-2 have moved during the year 2015-16, carrying a total of **6,055.68** MT of ODC mainly equipment for power projects.

IWAI has ordered two (2 Nos.) RO-RO vessels, for deploying in Dhubri and Hatsingimari One has been designed to carry 8 Trucks and 100 passengers at a cost of around 10 cr. Scheduled delivery date is 20th March, 2017 and will be delivered by M/s A. C. Roy & Company, Kolkata. Another one has been designed to carry 12 Trucks and 200 passengers load at a cost of around 13.3 Cr. Scheduled delivery date is 26th of May, 2017 and will be delivered by M/s. Tebma shipyards Limited, Chennai.

There is regular movement of cruise vessels on National Waterway 1, 2 and 3. The companies involved in leisure cruise operations are M/s Heritage, M/s Assam Bangladesh Navigation, M/s Brahmaputra Cruises Private Limited and M/s Horizon Tours. The tourist circuits on the National Waterway-1 are Kolkata-Semaria/Rajmahal/Patna/Buxar-Kolkata/Patna-Varanasi on National Waterway-1 and Jorhat to Pandu on National Waterway-2. Privately owned house boats and tourist boats in the National Waterway-3 have immensely contributed to tourism development in Kerala. Mumbai and Goa waterways also moved 72.69 Lac Ton and 45.45 Lac Ton of cargo respectively.

Flyash from IWAI pontoon jetties at Haldia Dock complex and GR Jetty is continuously being transported to Bangladesh. A total of **2,260,803** MT of flyash moved to Bangladesh through the protocol route during 2015-16. Transportation of imported coal from Sagar Island to Farakka NTPC plant has been going on smoothly.

M/s Jindal ITF has moved about 716,116.300 MT of coal during the year. In conclusion, total cargo handled is 79.005 Lac MT and movement of all types of cargo during the year, is 2.713 BTKM on National Waterways 1, 2 and 3 and IBP routes.

SUMMARISED ANNUAL DATA FOR CARGO MOVEMENT 2015-16

National Waterway	MT	TKM
NW-1	3953440	799895876.2
NW-2	602371	12114556
NW-3	1061041	10472868
IBP ROUTE	2283684	1890260762
TOTAL	7900536	2712744062
	79.00 LAC MT	2.712 BTKM

In sequence of development, IWAI is trying to sign MoUs with PSUs viz. Petronet LNG, Hindustan Petroleum Corporation Limited (HPCL), Shipping Corporation of India (SCI) and Indian Oil Corporation Limited (IOCL), for promoting the use of their resources in the barges/ vessels operating in the National Waterways and creating required requisite infrastructure for this purpose.

14. JAL MARG VIKAS PROJECT

National Waterway- 1 (NW-1) on the Allahabad- Haldia stretch of Ganga-Bhagirathi-Hoogly River System is waterway passing through the States of Uttar Pradesh, Bihar, Jharkhand and West Bengal. It potentially serves the major cities of Haldia, Howrah, Kolkata, Bhagalpur, Patna, Ghazipur, Varanasi and Allahabad, their industrial hinterlands and several industries located along the Ganga Basin.

Depth on the navigational channel is the foremost requirement for making a waterway navigable and commercially viable. While IWAI has been able to maintain Least Available Depth (LAD) of 2.5 to 3.0 meters between Haldia and Farakka, even a LAD of 2.0 meters could not be achieved in the upper reaches of NW-1 between Patna and Allahabad due to very low discharge and difficult hydro morphological conditions.

There is a strong demand for capacity augmentation of the entire NW-1 right up to Allahabad, as many potential shippers (thermal power plants, cement companies, fertilizer companies, cement and fly-ash, edible oil companies, Maruti Suzuki, Food Corporation of India, etc.) have evinced interest to use NW-1, if it is developed with adequate infrastructure to facilitate navigation by larger vessels of 1500-2000 Dead Weight Tonnage (DWT).

Hon'ble Union Finance Minister, in his Budget Speech for 2014-15, delivered on 10.07.2014, made an announcement that a project on the river Ganga called 'Jal Marg Vikas' (National Waterways-I) would be developed between Allahabad and Haldia to cover a distance of 1,620 km, which would enable commercial navigation of at least 1,500 ton vessels and that the project would be completed over a period of six years at an estimated cost of Rs. 4,200 crore.

14.1 Project Objective:

- i) Improve navigability of NW-1 by (i) fairway development by providing an assured depth of at least 3 m throughout the corridor for at least 330 days in a year to make it navigable for comparatively larger vessels of 1,500-2000 Dead Weight Tonnage (DWT) and (ii) civil structural, logistics and communications interventions required for this project which includes terminals, jetties, navigational locks, barrages, channel marking systems, automated information techniques of DGPS, River Information System (RIS), night navigation aids, slipways, bunkering facilities, fairway development through river training and river conservancy works etc.
- ii) Create/improve integration opportunities with other surface transport modes, viz. road and rail, so as to improve the overall efficiency of the logistics chain. This would entail improvement of the overall water transport management capability through institutional strengthening, capacity building and improving investment climate.

14.2 Project Development Studies

The following three Consultancies have been commissioned:

- (1) Detailed Feasibility Study for Capacity Augmentation of NW-1 and Detailed Engineering for its Ancillary Works by the Joint venture of M/s Howe Engineering Projects (India) Pvt. Ltd., M/s Walling Ford Ltd. and M/s Rodic consultants Pvt. Ltd. The study commenced on 25.05.2015 and is in progress. Study by the Consultant is in progress. The Consultant has submitted the following reports/documents so far:
 - a) Inception Report;
 - b) Preliminary Feasibility Report. This has been examined and accepted;
 - c) Intervention Measures Report;
 - d) DPR and tender document for the new Navigational Lock at Farakka;
 - e) DPR and tender document for Phase-I (A) of the multi-modal terminal at Varanasi.
 - f) The DPR and tender document for Phase-I of the Multimodal Terminal at Haldia.

- g) Detailed Feasibility Report and tender document for the Multimodal Terminal at Sahibganj.
 - h) Detailed Feasibility Report and Tender Document for provision of LAD of 3 m with bottom width of 45 m at Farakka-Bhgalpur stretch.
- (2) Environmental and Social Impact Assessment Study (ESIA), including Environment Management Plan (EMP) and Resettlement Action Plan (RAP) by the Joint Venture of M/s. EQMS India Pvt. Ltd., M/s. Abnaki Infrastructure Application & Integrated Development Pvt. Ltd. and IRG Systems South Asia Pvt. Ltd. The study commenced on 25.03.2015 and is in progress. The Consultant has submitted the following reports so far:
- a) Basin level Critical Resource Study;
 - b) Draft EIA and EMP reports for the Varanasi, Sahibganj and Haldia Multimodal Terminals;
 - c) Draft SIA and RAP reports for the Varanasi, Sahibganj and Haldia Multimodal Terminals;
 - d) Draft SIA &RAP and draft EIA &EMP Reports for the new Navigational Lock at Farakka.
 - e) Draft EIA Report for the Turtle Sanctuary near Varanasi.
 - f) Draft consolidated EIA Report for NW-1.
- (3) IWT Sector Development Strategy and Market Development Study for capacity augmentation of NW-1 by the Joint Venture of M/s. Hamburg Port Consulting, M/s. Universal Transport Consulting, M/s IMS Ingenieurgesellschaft Gmbh and M/s. Ramboll India. The study commenced on 24.04.2015 and is in progress. The Consultant has submitted the following reports so far:
- a) Inception Report;
 - b) Traffic study reports for the Multi-modal terminals at Varanasi, Haldia, Sahibganj, Ghazipur and GR Jetty at Kolkata;
 - c) Final draft for Part-A of Market Development Analysis Report.
 - d) Final Draft report of Part-B Institutional Development Study.
 - e) Draft Part-C of IWT Development Strategy.

14.3 Sub-projects of Jal Marg Vikas Projects

(a) Multimodal Terminal at Varanasi

IWAI is already in possession of 5.586 hectares of land, which was acquired in 2010 at a cost of Rs.3.95 crores, at Ram Nagar, Varanasi. Phase I (A) of the terminal, mainly offshore works, is being implemented on this plot at a cost of Rs.196 crores. The technical design and terminal layout in EPC mode has been prepared with supporting cargo data, market analysis and EIA/SIA studies. The Division Bench of the Allahabad High Court headed by the Chief Justice passed an order on 28.04.2016 permitting IWAI to construct the IWT Terminal at Varanasi. The contract for construction of Phase-I (A) of the terminal was signed with M/s AFCONS Infrastructure Ltd. on 13th May, 2016. Land has been handed over to the Contractor and the work has commenced.

Report on rail connectivity from Jeonathpur to Varanasi terminal submitted by the Consultant is under examination by North Central Railway, Allahabad for approval. Thereafter, requisition for another about 22 hectares of land will be filed with DM, Varanasi.

(b) Multimodal Terminal at Sahibganj

Application for acquisition of 183.13 acres of land for the main terminal and 8.7 acres for road connectivity has been filed with the State Govt. Rs.79.00 crore has been deposited so far with the Govt. of Jharkhand. The Award List for 111 acres has already been processed and is in the final stage with the State Govt. The proposal for acquisition of land at a total cost of Rs.187.00 crores including the cost on rehabilitation and resettlement measures for construction of the multimodal terminal was appraised by the SFC chaired by Secretary, Ministry of Shipping in the meeting held on 16.02.2016. The Competent Authority has approved the proposal to acquire 195 acres of land at a cost of Rs.187.00 crores including the cost towards rehabilitation and resettlement of the project affected families. Tendering for phase – 1 of the terminal is in progress.

(c) Multimodal Terminal at Haldia

61 acres of land has been taken on 30 year lease from the Haldia Dock Complex for construction of the terminal. Possession of the land has been taken over by Director (IWAI), Kolkata. The estimated cost of construction of Phase-I of the terminal is Rs.495.00 crores.

(d) New Navigational Lock at Farakka

The proposal for transfer of land from FBP to Ministry of Shipping was considered by the Cabinet in its meeting held on 06.01.2016 and approved. This land was transferred from the Farakka Barrage Project to IWAI on 02.03.16. Geo-technical investigation has been completed. Detailed technical design of the new Navigational Lock has been finalized in consultation with Farakka Barrage Project, Central Water Commission. The estimated cost of construction of the navigational lock excluding the cost of land is Rs.380.00 crore.

(e) Provision of Least Assured Depth of 3m and a bottom channel width of 35-45 m on the Farakka-Kahalgaon stretch.

The scope of the proposed work covers the following:

- (i) Maintenance of a guaranteed (assured) minimum depth of 3 meters during the entire five-year period of the proposal;
- (ii) Maintenance of a bottom channel width of 35 meters during the first two years of the proposal;
- (iii) Maintenance of a bottom channel width of 45 meters during the third, fourth and fifth years of the proposal; and
- (iv) Installation and maintenance of aids to navigation throughout the proposal period.

The estimated cost of the project is Rs. **162.93** crore.

Annex- 1**111 - NATIONAL WATERWAYS LIST**

No. of National Waterways	Name of National Waterways	Length in Km	State
1.	Ganga – Bhagirathi - Hooghly	1620	UP, Bihar, Jharkhand, West Bengal
2.	Brahmaputra	891	Assam
3.	West Coast Canal alongwith Champakara & Udyogmandal Canal	365	Kerala
4.	Kakinada Puducherry Canal alongwith Godavari & Krishna rivers	2890	Tamil Nadu, Andhra Pradesh, Telanagana
5.	East Coast Canal alongwith Brahmani & Mahanadi Delta	588	Odisha, West Bengal
6.	Aai	71	Assam
7.	Ajoy (Ajay)	96	West Bengal
8.	Alappuzha- Changanassery Canal	28	Kerala
9.	Alappuzha- Kottayam- Athirampuzha Canal	38	Kerala
10.	Amba River	45	Maharashtra
11.	Arunawati/ Aran River	98	Maharashtra
12.	Asi	5.5	UP
13.	AVM Canal (Kanyakumari to Kollam)	11	Tamil Nadu
14.	Baitarni River	49	Odisha
15.	Bakreswar/ Mayurakshi River	137	West Bengal
16.	Barak	121	Assam
17.	Beas	191	HP & Punjab
18.	Beki	73	Assam
19.	Betwa	68	UP

No. of National Waterways	Name of National Waterways	Length in Km	State
20.	Bhavani River	94	Tamil Nadu
21.	Bheema	139	Telangana & Karnataka
22.	Birupa/ BadiGenguti/ Brahmani River System	156	Odisha
23.	BudhaBalanga	56	Odisha
24.	Chambal	60	UP
25.	Chapora	33	Goa
26.	Chenab	53	J&K & Punjab
27.	Cumberjua	17	Goa
28.	Dabhol Creek/ Vasishti river	45	Maharashtra
29.	Damodar	135	West Bengal
30.	Dehing	114	Assam
31.	Dhansiri/ Chathe	110	Assam
32.	Dikhu	63	Assam
33.	Doyans	61	Assam
34.	DVC Canal	130	West Bengal
35.	Dwarekeswar	113	West Bengal
36.	Dwarka	121	West Bengal
37.	Gandak	300	Bihar & UP
38.	Gangadhar	62	Assam & West Bengal
39.	Ganol River	49	Meghalaya
40.	Ghaghra River	340	Bihar & UP
41.	Ghataprabha	112	Karnataka
42.	Gomti	518	UP
43.	Gurupur	10	Karnataka
44.	Ichamati	64	West Bengal
45.	Indira Gandhi Canal	650	Haryana, Punjab & Rajasthan
46.	Indus	35	J&K
47.	Jalangi	131	West Bengal
48.	Jawai-Luni river & Rann of Kutch	590	Rajasthan & Gujarat

No. of National Waterways	Name of National Waterways	Length in Km	State
49	Jhelum	110	J&K
50	Jinjiram River	43	Meghalaya & Assam
51	Kabini	23	Karnataka
52	Kali	54	Karnataka
53	Kalyan – Thane – Mumbai Waterway, Vasai creek & Ulhas river	145	Maharashtra
54	Karamnasa	86	UP & Bihar
55	Kaveri/ Kollidam river	364	Tamil Nadu
56	Kherkai	23	Jharkhand
57	Kopili River	46	Assam
58	Koshi	236	Bihar
59	Kottayam- Vaikom Canal	28	Kerala
60	Kumari	77	West Bengal
61	Kynshi River	28	Meghalaya
62	Lohit	100	Assam
63	Luni	327	Rajasthan
64	Mahanadi	425	Odisha
65	Mahananda	81	West Bengal
66	Mahi	248	Gujarat
67	Malaprabha	94	Karnataka
68	Mandovi	41	Goa
69	Manimutharu	5	Tamil Nadu
70	Manjara	242	Maharashtra, &Telangana
71	Mapusa/ Moide river	27	Goa
72	Nag	60	Maharashtra
73	Narmada	227	Gujarat
74	Netravathi	78	Karnataka
75	Palar	141	Tamil Nadu

No. of National Waterways	Name of National Waterways	Length in Km	State
76	Panchagangavali (Panchagangoli)	23	Karnataka
77	Pazhyar	20	Tamil Nadu
78	Penganga/ Wardha	265	Maharashtra & Telangana
79	Pennar	29	Andhra Pradesh
80	Ponniyar	125	Tamil Nadu
81	Punpun	35	Bihar
82	Puthimari	72	Assam
83	Rajpuri creek	31	Maharashtra
84	Ravi	42	HP & J&K
85	Revdanda Creek/ Kundalika river	31	Maharashtra
86	Rupnarayan River	72	West Bengal
87	Sabarmati	212	Gujarat
88	Sal	14	Goa
89	Savitri River (Bankot creek)	46	Maharashtra
90	Sharavati River	29	Karnataka
91	Shastri River/ Jaigad creek	52	Maharashtra
92	Silabati	26	West Bengal
93	Simsang River	62	Meghalaya
94	Sone	160	Bihar
95	Subansiri	111	Assam
96	Subarnrekha River	314	Jharkhand, West Bengal & Odisha
97	Sunderbans Waterway	654	West Bengal
	Bidya river		West Bengal
	Chhota Kalagachi (Chhoto Kalergachi) river		West Bengal
	Gomar		West Bengal
	Haribhanga river		West Bengal
	Hogla (Hogal) – Pathankhali river		West Bengal

No. of National Waterways	Name of National Waterways	Length in Km	State
	Kalindi (Kalandi) river		West Bengal
	Katakali river		West Bengal
	Matla river		West Bengal
	Muri Ganga (Baratala) river		West Bengal
	Raimangal river		West Bengal
	Sahibkhali (Sahebkhali) river		West Bengal
	Saptamukhi river		West Bengal
	Thakurran river		West Bengal
98	Sutlej	377	Punjab & HP
99	Tamaraparani	64	Tamil Nadu
100	Tapi	436	Maharashtra & Gujarat
101	Tizu / Zungki Rivers	42	Nagaland
102	Tlawng (Dhaleswari)	86	Mizoram
103	Tons	73	UP
104	Tungabhadra	230	Telangana, Karnataka & AP
105	Udayavara	16	Karnataka
106	Umgot (Dawki) River	20	Meghalaya
107	Vaigai	45	Tamil Nadu
108	Varuna River	53	UP
109	Wainganga / Pranahita River	164	Maharashtra & Telangana
110	Yamuna	1089	Haryana, UP & Delhi
111	Zuari	50	Goa

15. FINANCIAL PERFORMANCE
A. INCOME & EXPENDITURE

During the financial year 2015-16 a sum of Rs.32191.00 lakh was received from the Government of India, Ministry of Shipping and a sum of Rs.1249.12 lakh was earned by the Authority by way of interest on short term deposits, sale of tender forms, over dimension Cargo/general Cargo movement, berthing/Pilotage chargers etc. The major scheme-wise expenditure is indicated below:-

(Rs. in Lakh)

Sl. No.	Name of the scheme	Expenditure	
		Previous year 2014-15	Current year 2015-16
1.	Technical Studies	77.00	98.50
2.	Loan Interest Subsidy / IVBBS	-	-
3.	National Waterway No – 1		
a.	River Conservancy Works	3703.23	3519.70
b.	Construction of Cargo berth/ Terminals	153.19	99.73
c.	Construction of Dredgers & allied vessels	75.99-	-
d.	Acquisition of work boats	878.16	-
e.	Procurement of steel Pontoon	-	28.04
f.	Installation of DGPS Station	33.54	61.83
g.	Office Building at Patna	78.62	-
h.	Installation of RIS System	1047.57	664.27
i.	NINI	304.86	236.67
4.	National Waterway No – 2		
a.	River Conservancy Works	1403.77	1436.31
b.	Construction of Terminals	839.26	467.49
c.	Construction of RO-RO Terminal	-	2182.00
d.	Construction of RO-RO Vessels		327.12
e.	Bank protection work at Jogig		546.20
f.	Construction of work boats	1358.11	2595.54
g.	Silpway		253.79
h.	Development of Protocol route (single boats)	132.31	130.83
i.	Construction of survey equipment	-	-

SL No.	Name of the scheme	Expenditure	
		Previous year 2014-15	Current year 2015-16
5.	National Waterway No. – 3		
a.	River Conservancy works	948.12	740.88
b.	Construction of Terminals	86.97	90.13
c.	Procurement of survey equipment	35.44	0.72
6.	National Waterway No. – 4		
a.	Development work	179.06	256.97
7.	National Waterway No. – 5		
a.	Development work	61.86	385.14
8.	I.T. activities expenses	9.77	23.09
9.	Vertical expansion of office cum R&D complex at Noida	6.51	-
10.	Jal Marg Vikas (Allahabad – Haldia) World Bank Project	78.39	14144.07
11.	IWT Development Fund	203.36	178.85
12.	Establishment	3589.77	3389.65
13.	Project Management Consultancy		226.39
14.	PPP Project Exp.		183.05
15.	New National Waterways		145.74
	Total	15203.87	32412.70

B. Source and Application of Funds :-

(Rs. in lakh)

SL No.	Name of the scheme	Expenditure	
		Previous year 2014-15	Current year 2015-16
SOURCE			
1.	Increase in Capital Grant	3243.00	18901.66
2.	Decrease in working capital	3569.72	-
3.	Decrease in capital working progress	2675.11	4297.82
	Total	9487.83	23199.48
APPLICATION			
1.	Increase in fixed assets	9487.83	10713.22
2.	Increase in capital work in progress	-	-
3.	Increase in working capital	-	12486.26
	Total	9487.83	23199.48

CASH FLOW STATEMENT FOR F. Y. 2015-16

Rs. In Lakh

Particulars	F. Y. 2014-15	F .Y. 2015-16
<u>CASH FLOW FROM OPERATING ACTIVITY</u>		
Excess of expenditure over income	(1,903.91)	(1,135.59)
Revenue Grants from Govt.	(11,817.44)	(13,800.60)
Capital Reserve	(6.19)	(7.49)
Depreciation	2,882.14	2,219.85
Replacement Reserve	(2,875.99)	(2,212.35)
Interest Paid		
Less: Interest income	(333.74)	(555.96)
Add: Writeoff/Loss on sale of Fixed assets	21.04	-
Less: Profit on sale of Fixed Assets		(1.82)
Provision for Obselence of stock		-
Provision for employee benefits charged to opening reserves		-
Operating Profit	(14,034.09)	(15,493.96)
<u>Adjustment for working capital changes</u>		
Decrease/Increase in stocks	(86.59)	21.87
Decrease/Increase in loans & advances	3,341.08	(9,334.11)
Increase/decrease in Deposits on a/c of others	727.63	(318.67)
Increase /Decrease in Current liabilities	820.43	2,351.76
Decrease/Increase in other liabilities and provisions	1,110.77	914.42
Cash generated from operations	(8,120.77)	(21,858.69)
Income Tax (Net)		
CASH FLOW FROM OPERATING ACTIVITY (a)	(8,120.77)	(21,858.69)

<u>CASH FLOW FROM INVESTING ACTIVITY</u>		
Purchase of Fixed Assets	(9,661.46)	(12,004.38)
Payment for Lease Land	-	(3,959.28)
Sale of Fixed Assets	173.62	1,291.17
Profit on Sale of Assets	(21.08)	1.82
On account of Replacement Reserve		
Decrease in CWIP	2,675.11	4,297.83
Invt. In Govt. Securities	(168.86)	(34.48)
sale of other than Govt. Securities	49.97	0.03
Govt. Grant Received	15,081.82	32,702.97
Interest income	333.70	555.96
CASH FLOW FROM INVESTING ACTIVITY (b)	8,462.82	22,851.64
<u>CASH FLOW FROM FINANCING ACTIVITY</u>		
Increase/Decrease in bank overdraft		
Dividend & Corporate Dividend Tax		
Interest paid		
CASH FLOW FROM FINANCING ACTIVITY (c)		
Total Increase / Decrease in cash and cash equivalents during the year	342.05	992.95
Cash & cash equivalents at the beginning of the year	3,404.33	3,746.38
Cash & cash equivalents at the end of the year	3,746.38	4,739.33

16. Implementation of Official Language Policy of Union in the Authority : 2015-16

The Authority is committed to implement official language policy of the Union in all its activities in a progressive manner. Hindi workshops and other related activities were periodically organized at the head office and regional offices. Hindi fortnight/week/day was organized at the Head Office and Regional Offices. On this occasion different types of Hindi competitions were organized in all the offices.

The Authority has been entrusted with the additional responsibility of implementing the official language policy of the Union in all the member offices of the Town Official Language Implementation Committee (T.O.L.I.C.), Noida by the Department of Official Language of the Ministry of Home Affairs. The Chairman of the Authority is the Chairman of T.O.L.I.C., Noida. A half-yearly meeting was organized regularly to discuss problems and difficulties being faced by the different member offices of the T.O.L.I.C., Noida. In order to encourage personnel of the member offices to work more and more in Official Language different types of Hindi Competitions, Workshops and other related activities were organized from time to time under the auspices of T.O.L.I.C., Noida. Also, the children of the personnel of member offices who secure outstanding marks in 10th and 12th examinations are awarded each year with 'Hindi Pratibha Award'.

17. Personnel and Administration

As on 31-03-2016, 30 Officers and 64 staff at the head office and 47 Officers and 162 staff in the field offices were in position.

ACKNOWLEDGEMENT

IWAI places on record its appreciation of the sincere efforts and contribution made by the employees at all levels.

IWAI also acknowledges the assistance and support given by the Ministry of Shipping, Comptroller & Auditor General of India and other Government departments and other agencies.

**FOR AND ON BEHALF OF
INLAND WATERWAYS AUTHORITY OF INDIA**



**(AMITABH VERMA)
CHAIRMAN**

**INLAND WATERWAYS
BALANCE SHEET AS**

PREVIOUS YEAR (RUPEES)	CAPITAL & LIABILITIES	SCHEDULE NO.	CURRENT YEAR (RUPEES)	
1	2	3	4	5
	<u>CAPITAL</u>			
9,437,244	Capital u/s 11(i)(c)		9,437,244	
8,585,231,285	Capital Grant u/s 18		10,469,420,936	
(1,934,434,668)	Less replacement reserve		(2,153,194,589)	
(5,976,407)	Lease rent written off			8,325,663,591
	<u>RESERVES & SURPLUS</u>			
15,010,367	Capital Reserves		15,121,007	
(6,784,509)	Deduction		(7,533,306)	7,587,701
	General Reserves			
	Deduction			
	<u>BORROWINGS</u>			
	<u>CURRENT LIABILITIES & PROVISIONS.</u>			
395,590,039	Current Liabilities	I	630,765,909	
391,835,091	Provisions		483,237,198	
170,626,939	Deposits held on account of others		138,760,938	1,252,764,045
7,620,535,381	TOTAL			9,586,015,337

Schedule I to VIII form an integral part of accounts.


 (AJAY KUMAR GUPTA)
 CAO(I/C)


 (PRAVIR PANDEY)
 Vice-Chairman/ Member (Finance)

AUTHORITY OF INDIA
ON 31ST MARCH 2016

PREVIOUS YEAR (RUPEES)	PROPERTY & ASSETS	SCHEDULE NO.	CURRENT YEAR (RUPEES)	
			9	10
6	7	8		
	<u>FIXED ASSETS</u>	II		
6,784,036,815	Gross Block		7,855,358,401	
1,941,219,177	Less Depreciation		2,160,727,895	
4,842,817,638	Net Block		-	5,694,630,506
24,448,916	Lease land		414,400,569	
(5,976,407)	Less written off		-	414,400,569
1,022,573,182	Capital work-in-progress			592,790,739
-	<u>INVESTMENTS (AT COST)</u>		-	-
71,261,202	Govt. Securities		-	74,709,494
303,289	other than Govt. Securities		-	300,000
	<u>CURRENT ASSETS, LOANS & ADVANCES</u>	III		
47,532,851	Stores, Spares & Tools		45,345,796	
-	Sundry Debtors		-	
920,906,618	Deposits, Loans & Advances		1,854,316,869	
374,637,566	Cash & Bank Balances		473,932,833	2,373,595,498
	<u>MISC. EXPENDITURE</u>			
322,030,526	Income & Expenditure Account (Debit Balance)			435,588,531
7,620,535,381	TOTAL			9,586,015,337

For and on behalf of the Authority

(AMITABH VERMA)
Chairman

**INLAND WATERWAYS
INCOME & EXPENDITURE FOR THE**

PREVIOUS YEAR (RUPEES)	EXPENDITURE	SCHEDULE NO.	CURRENT YEAR (RUPEES)	
1	2	3	4	5
	<u>OPERATIONAL & MAINTENANCE EXPENSES</u>	IV		
204,495,317	Pay & Allowances & other staff costs		210,691,590	
95,359,068	Surveying		58,601,313	
195,296,899	Dredging		318,825,144	
64,970,466	Bandalling		78,185,313	
-	Aids to Navigation & Channel Marking		21,471,259	
15,853,381				
108,018,802	Terminal Facilities		115,199,387	
101,205,706	Repairs of Vessels		53,849,509	
27,175,095	Training Institute NINI		23,887,313	
76,392,055	Night Navigation		77,362,657	
-	P.P.P.Project		18,305,000	
117,459,000	Bank Protection		-	
-	Project Management & Consultancy		16,198,758	
	Consultancy Charges		155,455,440	
12,524,495	Protocol		13,083,031	
	New National Waterways		14,573,805	
54,365,485	Other Administrative & Misc. Expenses		25,594,844	1,199,064,363
	<u>ADMINISTRATIVE EXPENSES</u>			
117,183,737	Pay & Allowances & Other Staff Costs	V		113,337,524
24,792,313	General & Other Expenses	VI	-	28,563,002
	<u>Financing Charges</u>			
70,783	Bank Commission/Charges		-	89,652
977,157	Interest		-	2,308,968
	I.T.Expenses		-	
	Bad debts written off		-	
	Foreign Exchange		-	
8,743,880	Technical Studies & Consultancy Charges		-	16,205,880
-			-	
288,213,804	Depreciation		-	221,984,444
-	Subsidy		-	-
2,108,001	Loss on sale/ valuation/ written off of assets		-	-
-			-	
19,513,142	IWT Promotional Activities		-	17,884,709
29,300,172	Prior Period Adjustment account		-	2,605,970
1,563,818,358	TOTAL			1,602,044,512

(AJAY KUMAR GUPTA)
CAO (IC)

(PRAVIR PANDEY)
Vice-Chairman/ Member (Finance)

AUTHORITY OF INDIA
YEAR ENDED 31st MARCH, 2016

PREVIOUS YEAR (RUPEES)	INCOME	SCHEDULE NO.	CURRENT YEAR (RUPEES)	
			9	10
6	7	8	9	10
1,181,741,586	Revenue Grant from Govt			1,380,060,068
33,374,196	Interest/ Income		55,595,641	
	Consultancy fees		-	
6,500	Storage & Handling Charges		4,955,792	
204,176	Wharfage		-	
	Demurrage		-	
502,032	Pilotage Charges		332,250	
2,669,715	Berthing Charge		3,791,821	
43,862,706	Others		22,821,358	
12,777,163	Misc. Receipts		38,836,348	
466,680	Rent terminal		83,100	
	Profit on sale of fixed assets (internal receipts not show as income being payable to Govt. and KPMU)		182,810	
			126,599,118	
619,037	Capital reserve as per Contra			748,797
287,594,567	Replacement reserve as per Contra			221,235,647
	Prior Period Adjustment			-
	Excess of expenditure over income carried over to Balanca Sheet			-
1,563,818,358	TOTAL			1,602,044,512

For and on behalf of the Authority


(AMITABH VERMA)
 Chairman


OTHER SCHEDULES
&
AUDIT REPORT


SCHEDULE - I

CURRENT LIABILITIES & PROVISIONS AS ON 31.03.2016

Previous year (Rupees)	Particulars	Current Year (Figure in rupees)	
	(A) CURRENT LIABILITIES		
-	(i) Liability for sundry Creditors	36,734	
1,485,150	(ii) Liability for Expenses	344,228,623	
223,254,486	(iii) Grant Received in surplus		
	(iv) Liability for internal receipts	124,912,196	
	(v) Liability for Kaladan Project	1,686,922	
170,850,403	(vi) Others	159,901,434	630,765,909
	(B) PROVISIONS		
-	(i) Provision for Gratuity	498,564	
1,143,071	(ii) Provision for Leave Salary & pension contribution (Deputation)	978,215	
904,948	(iii) Provision for Bonus	894,331	
391,895,344	(iv) Provision for pension contribution	480,866,088	
-	(v) Provision for leave encashment.	-	-
78,565	(vi) Provision for new pension	-	483,237,198
	(C) DEPOSITS HELD ON ACCOUNT OF OTHER		
170,626,939	Sundry parties	138,760,938	138,760,938
960,238,906	TOTAL		1,252,764,045


(AJAY KUMAR GUPTA)
CAO(IC)


(PRAVIR PANDEY)
Vice-Chairman/ Member (Finance)

For and on behalf of the Authority

(AMITABH VERMA)
Chairman

**INLAND WATERWAYS
SCHEDULE OF FIXED**

	PARTICULARS	GROSS BLOCK AS ON 31.03.2015	ADDITIONS DURING THE YEAR	ADJUSTMENT/ DEDUCTIONS
1	2	3	4	5
NOIDA	Survey Equipment	2,503,166	-	-
	Vehicles	2,312,373	-	(887,772)
	Furniture & Fixture	5,170,980	67,790	-
	Office Equipment	4,864,740	260,510	-
	Electric Installation	10,185,045	218,989	-
	Air Conditioners	20,538,986	471,603	-
	Water Coolers & Refrigerators	182,751	-	-
	Fans & Air-Coolers	1,183,023	3,990	-
	Generator Set	7,047,195	-	-
	Cycle	27,711	-	-
	Temporary Structure	539,260	-	-
	Library Books	1,120,746	51,025	-
	Computer	16,444,942	571,163	-
	Communication equip.	778,471	744,949	-
	Building	104,654,503	5,522,396	-
	Computer Software	1,515,011	-	-
	Residence Quarter	30,732,753	-	-
	Car Parking	23,392,491	-	-
	Passenger Lift	4,612,400	-	-
	TOTAL (A)	237,806,547	7,912,415	(887,772)
KOLKATA	Terminal	422,436,441	8,241,719	-
	Vehicles	2,354,787	-	(1,170,738)
	Furniture & Fixture	1,449,466	-	-
	Office Equipment	651,567	29,000	-
	Electric Installation	67,889	-	-
	Survey Instruments	25,446,600	-	-
	Library Books	127,535	2,665	-
	Speed Boats	2,961,016	-	1,271,666
	Vessels Ordinary	206,991,004	-	12,751,129
	Fans & Air Coolers	76,323	14,750	-
	Communication Network	450,413	66,900	-
	Barges	120,666,602	-	-
	Cycles	5,975	-	-
	Vessel Dredging Unit	492,389,907	-	(52,862,958)
	Computers	2,585,482	59,500	-
	Computers Software	1,679,784	-	-
	Night Nav. Equipment	43,850,743	7,118,250	(13,495)
	Air Conditioner	658,854	70,000	-
	Generator Set	1,185,869	-	-
	RIS Station Structure/Equipment	-	160,368,112	-
	DGPStation	14,215,359	-	-
	TOTAL (B)	1,340,251,616	175,970,896	(40,024,394)

(AJAY KUMAR GUPTA)
CAO(I/C)

(PRAVIR PANDEY)
Vice-Chairman/ Member (Finance)

AUTHORITY OF INDIA
ASSETS AS ON 31.03.2016

SCHEDULE-II

(FIGURES IN RUPEES)

GROSS BLOCK AS ON 31.03.2016	DEPRECIATION		ADJUSTMENT ON ACCOUNT OF ASSETS SOLD/TRANSFERRED	TOTAL DEPRECIATION AS ON 31.03.2016	NET BLOCK AS ON 31.03.2016
	AS ON	FOR THE			
(3+4+5)	31.3.2015	YEAR		(7 + 8 + 9)	(6 - 10)
6	7	8	9	10	11
2,503,166	1,302,707	1,075,301		2,378,008	125,158
1,424,601	1,405,660	124,274	(890,884)	639,070	785,531
5,238,770	3,416,168	355,448		3,773,616	1,465,154
5,125,250	2,084,654	1,310,665		3,395,319	1,729,931
10,404,034	1,721,005	1,087,004		2,808,009	7,596,025
21,010,589	3,219,048	2,103,204		5,322,250	15,688,339
182,751	119,840	34,058		153,898	28,853
1,187,013	884,861	219,426		1,104,287	82,728
7,047,195	1,334,993	562,797		1,897,790	5,149,405
27,711	23,793	587		24,380	3,331
539,260	539,260	-		539,260	-
1,171,771	1,120,748	51,025		1,171,771	-
17,016,105	13,109,254	2,188,674		15,297,928	1,718,177
1,523,420	739,548	141,540		881,088	642,332
110,176,899	27,293,899	1,633,366		28,927,265	81,249,634
1,515,011	1,179,382	198,714		1,378,096	136,915
30,732,753	6,512,272	472,834		6,984,908	23,747,847
23,392,491	2,222,266	338,977		2,561,263	20,831,228
4,612,400	438,178	66,838		505,016	4,107,384
244,831,190	68,669,572	11,962,532	(890,884)	79,741,220	165,089,970
430,678,160	34,812,510	11,925,192		46,737,702	383,940,458
1,184,049	1,290,303	94,852	(1,112,201)	272,954	911,095
1,449,466	708,900	158,988		887,868	581,598
680,567	299,624	238,900		538,524	142,043
87,889	24,764	11,891		36,655	31,234
25,448,600	14,006,096	1,489,414		15,475,510	9,971,090
130,200	127,535	2,865		130,200	-
4,232,684	2,587,078	51,157	1,129,605	3,787,838	464,846
219,742,133	81,571,780	6,291,185	(4,226,007)	83,636,958	138,105,175
91,073	40,514	11,799		52,313	38,760
517,313	298,549	135,678		434,227	83,086
120,666,602	29,292,982	2,427,482		31,720,464	88,946,138
5,975	3,796	230		4,028	1,947
439,526,949	163,228,588	11,078,779	(50,689,411)	123,617,958	315,908,993
2,644,982	2,166,723	250,190		2,438,913	208,069
1,879,784	1,346,739	244,180		1,590,919	88,865
50,955,498	14,732,980	4,335,143		19,068,123	31,687,375
728,854	128,606	80,332		208,938	519,916
1,185,869	222,921	77,893		300,614	865,055
160,368,112		9,212,858		9,212,858	151,155,254
14,215,359	2,925,522	705,271		3,630,793	10,584,566
1,476,198,118	349,836,510	48,804,059	(54,898,014)	343,742,555	1,132,455,563

For and on behalf of the Authority


(AMITABH VERMA)
Chairman

**INLAND WATERWAYS
SCHEDULE OF FIXED**

	PARTICULARS	GROSS BLOCK AS ON 31.03.2015	ADDITIONS DURING THE YEAR	ADJUSTMENT/ DEDUCTIONS
1	2	3	4	5
PATNA	Land	35,051,542	-	-
	Vehicle	1,982,617	-	-
	Furniture & Fixture	2,061,235	-	-
	Office Equipment	181,263	14,600	-
	Electric Installation	6,885	-	-
	Air Conditioners	1,210,025	-	-
	Water Coolers & Refrigerators	-	39,500	-
	Generator Set	31,450	-	-
	Survey Instruments	-	-	-
	Survey Instruments	16,519,165	-	-
	Vessels: Dredging Unit	342,348,611	141,307,107	263,371,824
	Vessels: Ordinary	137,428,270	-	(28,808,868)
	Speed Boat	3,654,977	-	(1,271,668)
	Barges	84,062,200	-	-
	Temporary Structure	1,018,158	-	(1,018,158)
	Computer	3,909,679	49,900	-
	Library Books	75,787	13,879	-
	Survey Equip(compu)	4,837,917	-	-
	Survey Pillars	649,995	-	-
	Communication Equip. Building	1,118,858	-	-
	Building	-	49,719,000	-
	Terminals & Building - Night Navigation BOUYS	602,909,758	-	-
	Night Navigation BOUYS	9,277,200	-	-
	DGPS STATION	32,245,501	-	-
	BEACON Tower	15,895,321	-	-
	SHOAL ANALYSIS	-	3,335,236	-
	CRANE	46,326,824	-	-
	TOTAL (C)	1,342,803,238	194,479,222	232,473,130
GUWAHATI	Communication Equipment	1,673,126	-	-
	Vehicles	590,523	-	-
	Furniture & Fixture	919,772	-	-
	Office Equipment	495,972	-	-
	Electric Installation	46,979	-	-
	Fans & Air-Coolers	39,580	-	-
	Survey Instruments	16,425,912	-	-
	Cycle	680	-	-
	Library Books	40,595	290	-
	Vessel Speed Boat	4,021,123	-	-
	Generator Set	38,100	-	-
	Computer	4,076,929	346,700	-
	Terminals- Pandu	1,067,963,536	207,497,432	-
	Night Navigation Equip.	12,460,554	-	-
	Barges	133,745,241	-	-
	Vessels - Ordinary	184,159,998	-	-
	Land - Terminal	39,457,809	62,020	-
	Vessels Dradging Unit	952,736,583	523,555,614	(194,692,577)
	CRANE	44,969,796	-	-
	Air Conditionar	246,350	-	-
	Building	-	-	-
	TOTAL (D)	2,464,107,158	731,462,056	(194,692,577)

(AJAY KUMAR GUPTA)
CAO(I/C)

(PRAVIR PANDEY)
Vice-Chairman/ Member (Finance)

**AUTHORITY OF INDIA
ASSETS AS ON 31.03.2016**

SCHEDULE-II

(FIGURES IN RUPEES)

GROSS BLOCK AS ON 31.03.2016	DEPRECIATION		ADJUSTMENT ON ACCOUNT OF ASSETS SOLD/TRANSFERRED	TOTAL DEPRECIATION AS ON 31.03.2016	NET BLOCK AS ON 31.03.2016
	AS ON	FOR THE			
(3+4+5)	31.3.2015	YEAR		(7 + 8 + 9)	(6 - 10)
6	7	8	9	10	11
35,051,542	-	-	-	-	35,051,542
1,982,817	945,940	97,386	-	1,043,326	939,291
2,081,235	521,837	144,919	-	666,556	1,394,879
195,863	23,999	64,042	-	88,041	107,822
8,885	2,946	719	-	3,665	3,220
1,210,025	132,819	108,162	-	240,981	969,044
-	-	-	-	-	-
70,950	4,989	11,420	-	16,389	54,561
-	-	-	-	-	-
18,519,185	9,829,225	986,327	-	10,815,552	5,903,813
747,027,542	254,388,473	7,480,821	141,320,873	403,188,167	343,839,375
108,819,402	48,183,181	3,148,741	(10,302,808)	39,029,094	89,790,308
2,383,309	2,458,181	72,456	(1,129,605)	1,399,012	984,297
84,062,200	34,594,815	1,521,269	-	36,115,884	47,948,318
-	1,018,158	-	(1,018,158)	-	-
3,959,579	3,258,302	289,126	-	3,547,428	412,151
89,868	75,787	13,879	-	89,666	-
4,837,917	4,371,386	147,108	-	4,518,494	319,423
649,995	281,741	89,906	-	371,647	278,348
1,118,858	983,875	80,291	-	1,043,966	74,892
49,719,000	-	675,797	-	675,797	49,043,203
602,909,758	155,577,867	16,294,772	-	171,872,639	431,037,119
9,277,200	3,084,669	494,552	-	3,579,221	5,697,979
32,245,501	7,470,817	1,640,344	-	9,111,161	23,134,340
15,895,321	3,775,137	1,029,583	-	4,804,720	11,090,601
3,335,236	-	1,056,269	-	1,056,269	2,278,967
46,326,824	16,884,939	4,963,362	-	21,848,301	24,478,523
1,769,755,590	545,644,423	40,411,251	128,870,302	714,925,976	1,054,829,614
1,673,126	1,153,390	77,944	268,393	1,499,727	173,399
590,523	580,997	-	-	580,997	29,528
919,772	589,271	58,889	14,972	641,132	278,640
495,972	202,171	128,268	90,329	420,768	75,204
48,979	25,293	7,081	82	32,456	14,523
39,580	20,381	2,715	572	23,648	15,932
16,425,912	8,203,191	1,268,910	142,188	9,614,289	6,811,623
880	646	-	-	646	34
40,885	40,595	290	-	40,885	-
4,021,123	2,383,220	58,162	-	2,441,382	1,579,741
38,100	29,155	-	5,141	34,296	1,804
4,423,629	3,592,044	148,588	-	3,740,632	882,997
1,275,480,968	187,539,869	30,597,367	-	218,137,036	1,057,323,932
12,480,554	5,873,437	1,321,592	-	6,995,029	5,485,525
133,745,241	42,288,770	3,916,523	-	46,205,293	87,539,948
164,159,998	64,026,395	5,274,420	-	69,300,815	114,859,183
39,519,829	-	-	-	-	39,519,829
1,281,599,620	377,396,846	17,342,908	(76,102,647)	318,839,105	962,960,515
44,969,798	15,019,910	4,819,008	-	19,638,918	25,330,878
248,350	44,329	24,298	8,823	77,248	169,102
-	-	-	-	-	-
3,000,876,637	708,771,690	64,844,959	(75,572,347)	698,044,302	2,302,832,335

For and on behalf of the Authority


(AMITABH VERMA)
 Chairman

**INLAND WATERWAYS
SCHEDULE OF FIXED**

	PARTICULARS	GROSS BLOCK AS ON 31.03.2015	ADDITIONS DURING THE YEAR	ADJUSTMENT/ DEDUCTIONS
1	2	3	4	5
BHAGALPUR	Buoys	54,467		
	Vehicle	152,658		
	Furniture & Fixtures	195,158	58,254	-
	Office Equipment	66,090	61,500	
	Electric Installation	3,227		
	Fans & Air Coolers	15,899	9,920	
	Survey Instruments	2,585,423	-	
	Barges	561,255		
	Cycle	701		
	Library Books	25,805		
	Communication Equipment	157,028		
	Land	36,734		
	Computers	237,197		
	DGPS STATION	18,320,308		
Terminals-	2,856,463			
Air-Conditioner	20,000			
	TOTAL (E)	25,288,411	127,674	-
KOCHI	Vehicle	-		
	Furniture & Fixtures	947,266	69,527	
	Office Equipmant	369,761	46,487	
	Fans & Air Coolers	56,885		
	Air-Conditionar	67,595		
	Survey Instruments	6,922,627		
	Communication Equipment	734,727		
	Generator	354,969		
	Computer	3,929,007	105,650	
	Survey Launch	5,484,584		
	SPEED BOATS	1,120,418		
	Land (Terminals)	182,870,917	10,063,613	(600,000)
	Land Widening	170,295,586	898,483	(125,426,486)
	Library Books	18,847		
	Building	8,318,182	71,854	
	Terminal & Building	338,679,010	1,282,000	
	Dredger	183,821,000	1,704,953	
	Night Navigation	38,824,825		
Foot Over Bridge Thottappally	2,188,615			
Fork Lifts	6,370,925			
Hydraulic Cranes	88,945,177			
Tempory Terminal	1,196,370			
	TOTAL (F)	1,019,298,293	14,242,547	(126,026,466)
ALLAHABAD	Computer	424,291	51,000	
	Furniture & Fixtures	154,341		(2)
	Office Equipment	83,554		
	Fans & Air Coolers	12,155		
	Library Books	34,310	5,000	
	Electrical Installation	24,950	1,049,389	
	Land	2,405,763		
	TERMINAL	5,882,942		
	Survey Instruments	2,284,447		
	TOTAL (G)	11,286,753	1,105,389	(2)

(AJAY KUMAR GUPTA)
 CAO(IC)

(PRAVIR PANDEY)
 Vice-Chairman/ Member (Finance)

**AUTHORITY OF INDIA
ASSETS AS ON 31.03.2016**
SCHEDULE-II
(FIGURES IN RUPEES)

GROSS BLOCK AS ON 31.03.2016	DEPRECIATION		ADJUSTMENT ON ACCOUNT OF ASSETS SOLD/TRANSFERRED	TOTAL DEPRECIATION AS ON 31.03.2016	NET BLOCK AS ON 31.03.2016	
	AS ON	FOR THE				
	31.3.2015	YEAR				
(3+4+5)	6	7	8	9	10	11
6	7	8	9	10	11	11
54,467	52,612	-		52,612	1,855	
152,658	151,776			151,776	882	
251,412	158,636	8,903	-	167,539	83,873	
127,590	48,756	5,937		54,893	72,697	
3,227	2,351	213		2,564	683	
25,819	7,129	1,080		8,209	17,610	
2,585,423	1,706,897	314,296		2,020,993	564,430	
581,255	564,410	-		554,410	6,845	
701	682	-	-	682	19	
25,805	25,805	-	-	25,805	-	
157,026	157,026	-		157,026	-	
36,734				-	36,734	
237,197	219,627	8,234		227,861	9,336	
18,320,308	5,137,811	966,905		6,104,716	12,215,592	
2,856,463	421,745	90,455	-	512,200	2,344,263	
20,000	1,900	1,900		3,800	16,200	
25,416,085	8,646,963	1,397,923	-	10,044,886	15,371,199	
-	-	-	-	-	-	
1,016,793	546,734	123,536	(11,893)	658,377	358,416	
416,266	181,583	140,305	(889)	320,999	95,269	
58,865	24,834	19,592	(157)	44,269	12,616	
67,595	47,289	16,946		64,215	3,360	
6,922,627	2,798,095	561,787	(6,804)	3,351,076	3,571,549	
734,727	395,591	302,400		697,991	36,736	
354,969	150,679	30,784		181,483	173,506	
4,034,657	3,514,170	195,692	(25,069)	3,864,793	349,864	
5,464,564	2,800,744	307,873		3,106,417	2,356,167	
1,120,416	792,140	54,452		846,592	273,826	
192,334,530	-	-		-	192,334,530	
45,787,563	-	-		-	45,787,563	
19,847	19,847	-		19,847	-	
8,390,016	890,833	136,817		1,029,650	7,360,366	
339,961,010	95,451,924	6,631,306	-	104,083,232	235,677,776	
185,525,953	56,886,546	4,827,504	-	61,516,052	124,009,901	
36,624,625	13,500,100	3,101,920	-	16,602,020	20,022,605	
2,166,615	920,507	54,743		975,250	1,213,365	
6,370,925	3,603,396	349,855		3,953,251	2,417,674	
66,945,177	37,787,105	3,819,798		41,606,903	27,338,274	
1,196,370	1,196,370	-		1,196,370	-	
907,514,374	221,508,469	22,477,112	(44,812)	243,940,769	663,573,605	
475,291	292,886	72,570	-	365,456	109,835	
154,339	136,789	7,833	-	148,622	7,717	
83,554	41,818	16,758		60,378	3,178	
12,155	7,364	4,183		11,547	608	
39,310	34,310	5,000		39,310	-	
1,074,339	16,590	103,255		119,845	954,494	
2,405,763	-	-		-	2,405,763	
5,862,942	838,320	175,944		1,014,264	4,868,678	
2,284,447	1,167,273	217,061	-	1,384,334	900,113	
12,392,140	2,537,150	604,604	-	3,141,754	9,250,386	

For and on behalf of the Authority

(AMITABH VERMA)
Chairman

**INLAND WATERWAYS
SCHEDULE OF FIXED**

	PARTICULARS	GROSS BLOCK AS ON 31.03.2015	ADDITIONS DURING THE YEAR	ADJUSTMENT/ DEDUCTIONS
1	2	3	4	5
VARANASI	Furniture & Fixtures	129,719	46,888	
	Computer	308,505	56,190	
	Office Equipment	53,297	14,990	
	Fans & Air Coolers	5,875	1,350	
	Vehicle	243,069		
	Communication Equipment	-	-	-
	Library book	5,520	-	-
	Survey Instruments	2,971,849	-	-
	LAND	29,662,024	22,440,382	
	TOTAL (H)	33,379,858	22,559,800	-
NINI	Furniture & Fixtures	5,031,121	-	-
	Generator Set	657,371	-	-
	Computer	1,477,002	-	-
	Office Equipment	1,252,179	-	-
	Air Conditioner	1,237,281	-	-
	Building/Workshop	98,354,075	3,277,000	-
	Hostel & kitchen	808,957	-	-
	Work SHOP WQUIPMENT	402,778	-	-
	Fire Mock up Equipments	5,237,144	-	-
	FRP Boat with OBM	528,982	-	-
	Water Cooler & Refrigerator	367,573	-	-
	Temporay Structure	1,440,262	221,280	-
	Course Material & Equipments	529,999	-	-
	SIMULATOR	31,731,375	-	-
	Library book	890,223	366,380	-
	Computer Software	3,108,400	2,893,988	-
	Electric Installation	494,676	-	-
	Fans & Air Coolers	90,545	-	-
	Survey Instruments	2,953,202	-	-
	Vessel (Buxar, Ghoghre)	-	-	41,450
	LAND	152,450,100	-	-
	TOTAL (I)	308,841,225	6,758,648	41,450
KALADAN	Furniture & Fixtures	63,845	39,489	
	Temporay Structure	15,364	-	
	Computer	243,452	-	
	TOTAL (J)	322,661	39,489	-
PMU	Furniture & Fixtures	87,440	6,192,781	
	Computer	455,200	1,801,872	
	Office Equipment	-	1,794,973	
	Library book	-	3,085	
	Computer Software	-	147,315	
	Temporay Structure	-	9,037,112	
	Land-Terminal Farrakka	-	23,580,160	
	Electric Installation	-	2,549,577	
	TOTAL (K)	542,640	44,906,855	-
NW-4	Computer	82,415	149,498	
	Furniture & Fixtures	-	339,866	
	Air Conditioner	26,000	90,000	
	TOTAL (L)	108,415	579,364	-
NW-5	Computer	-	52,000	
	Furniture & Fixtures	-	154,862	
	Water Cooler & Refrigerator	-	34,000	
	Air Conditioner	-	53,000	
	TOTAL (M)	-	293,862	-
	GRAND TOTAL (A+B+C+D+E+F+G+H+I+J+K+L+M)	6,784,036,815	1,200,438,217	(128,116,631)
	PREVIOUS YEAR	5,835,253,912	986,145,030	(17,382,127)



(AJAY KUMAR GUPTA)
CAO(IC)



(PRAVIR PANDEY)
Vice-Chairman/ Member (Finance)

**AUTHORITY OF INDIA
ASSETS AS ON 31.03.2016**
SCHEDULE-II

GROSS BLOCK AS ON 31.03.2016	DEPRECIATION		ADJUSTMENT ON ACCOUNT OF ASSETS SOLD/TRANSFERRED	TOTAL DEPRECIATION AS ON 31.03.2016	NET BLOCK AS ON 31.03.2016
	AS ON	FOR THE			
(3+4+5)	31.3.2015	YEAR		(7 + 8 + 9)	(6 - 10)
6	7	8	9	10	11
176,807	97,841	30,046	-	127,887	48,920
384,895	244,019	86,654	-	310,673	53,822
66,287	31,140	22,340	-	53,480	14,807
7,225	3,348	2,361	-	5,709	1,518
243,089	230,919	-	(3)	230,916	12,153
-	-	-	-	-	-
5,520	5,520	-	-	5,520	-
2,971,849	1,005,418	278,390	60,032	1,343,840	1,628,009
52,102,406	-	-	-	-	52,102,406
55,939,658	1,618,005	399,991	60,029	2,078,025	53,861,633
5,031,121	2,779,563	822,168	-	3,601,731	1,429,390
657,371	343,475	70,257	-	413,732	243,639
1,477,002	1,117,925	252,843	-	1,370,788	108,234
1,252,179	468,554	523,835	-	992,389	259,790
1,237,281	450,428	334,387	-	784,815	452,466
101,831,075	11,299,377	1,726,088	-	13,025,485	88,805,810
606,857	146,870	326,113	-	472,983	133,974
402,778	97,945	26,341	-	124,288	278,492
5,237,144	1,028,926	2,869,140	-	3,898,066	1,539,078
528,862	112,194	30,113	-	142,307	388,655
367,573	182,032	160,043	-	342,075	25,498
1,661,542	1,440,262	221,280	-	1,661,542	-
529,999	529,999	-	-	529,999	-
31,731,375	7,885,540	11,440,886	-	19,326,426	12,404,949
1,256,603	890,223	366,380	-	1,256,603	-
6,002,388	2,001,661	966,384	-	2,968,045	3,034,343
494,676	37,988	50,014	-	88,002	406,674
90,545	4,571	8,925	-	13,498	77,049
2,953,202	2,805,539	-	-	2,805,539	147,663
41,450	-	-	-	-	41,450
152,450,100	-	-	-	-	152,450,100
315,641,323	33,623,072	19,995,197	-	53,618,269	262,023,054
103,334	24,248	12,853	-	37,099	66,235
15,384	15,384	-	-	15,384	-
243,452	229,798	1,483	-	231,279	12,173
362,150	269,406	14,336	-	283,742	78,408
6,280,221	5,535	596,293	-	601,828	5,678,393
2,057,072	73,768	848,021	-	721,809	1,335,263
1,794,973	-	341,045	-	341,045	1,453,928
3,085	-	3,085	-	3,085	-
147,315	-	48,850	-	48,850	100,885
9,037,112	-	9,037,112	-	9,037,112	-
23,580,180	-	-	-	-	23,580,180
2,549,577	-	242,210	-	242,210	2,307,367
45,449,495	79,323	10,914,396	-	10,993,719	34,455,776
231,913	13,359	72,133	-	85,492	146,421
339,868	-	32,287	-	32,287	307,579
116,000	1,235	10,989	-	12,224	103,776
687,779	14,594	115,409	-	130,003	557,776
52,000	-	16,468	-	16,468	35,532
154,862	-	14,712	-	14,712	140,150
34,000	-	6,460	-	6,460	27,540
53,000	-	5,035	-	5,035	47,965
293,862	-	42,675	-	42,675	251,187
7,855,358,401	1,941,219,177	221,984,444	(2,475,726)	2,160,727,895	5,694,630,506
6,784,036,815	1,846,517,681	288,213,604	6,487,892	1,941,219,177	4,842,817,638

For and on behalf of the Authority

(AMITABH VERMA)
Chairman

Schedule III
CURRENT ASSETS, LOANS & ADVANCES AS ON 31.3.2016

PREVIOUS YEAR (RUPEES)	PARTICULARS		CURRENT YEAR (Figures In rupees)
	a) STORES, SPARES & TOOLS (AT COST)		
33,143,245	1) Marine Spare Parts	30,843,944	
471,854	2) Permanent Stores	289,149	
22,070	3) Consumables & Marking Material	-	
209,449	4) Stationary	592,516	
13,441,507	5) POL Stock	12,772,687	
244,726	6) Others	847,500	45,345,796
	b) SUNDRY DEBTORS		
	1) Secured		
	2) Unsecured		
	– Considered Good		
	1) more than 6 months		
	2) less than 6 months		
	– Considered Doubtful		
	c) DEPOSITS, LOANS & ADVANCES		
5,421,769	1) Advance to staff	5,446,852	
20,830	2) Departmental Advance	273,665	
759,818,267	3) Advance to Contractors & Suppliers	1,627,696,923	
45,439,340	4) Deposits	41,077,250	
88,139,275	5) Claims Recoverable	144,469,583	
21,680,210	6) Prepaid Expenses	33,049,338	
386,927	7) Others	2,303,258	1,854,316,869
	d) CASH & BANK BALANCES		
58,290	1) Cash/Stamps in-hand	38,710	-
(58,134,281)	2) Cash with Scheduled Banks	(125,219,203)	-
	3) Remittance in transit	-	
398,509,072	4) Short term deposit	599,113,326	473,932,833
1,308,872,550	TOTAL		2,373,595,498

 (AJAY KUMAR GUPTA)
CAO(IC)

 (PRAVIR PANDEY)
Vice-Chairman/ Member (Finance)

For and on behalf of the Authority

 (AMITABH VERMA)
Chairman

SCHEDULE - IV

**OPERATIONAL AND MAINTENANCE EXPENSES
FOR THE YEAR ENDED 31-03-2016**

Previous Year (Rupees)	Particulars		Current Year (Figures in Rupees)
	<u>NATIONAL WATERWAY NO.1</u>		
	1. Pay & Allowances & Other		
154,826,192	Staff Costs	148,715,574	
	2. Works Expenses		
41,044,432	(i) Surveying	15,222,788	
97,193,793	(ii) Dredging	117,969,814	
34,591,040	(iii) Bandalling	40,003,982	
7,822,782	(iv) Aids to navigation & Channel marking	10,223,746	
82,855,954	(v) Terminal Facilities	78,579,845	
82,127,688	(vi) Repairs of Vessels	41,534,811	
40,099,496	(vii) Night Navigation	38,931,185	
27,175,095	(viii) Training Expenses(NINI)	23,667,313	
5,112,723	3. Other Administrative & Misc. Expenses	4,974,405	519,823,463
	<u>NATIONAL WATERWAY NO.2</u>		
	1. Pay & Allowances & Other		
29,716,020	Staff Costs	31,859,044	
	2. Works Expenses		
28,203,039	(i) Surveying	28,712,804	
30,379,426	(ii) Bandalling	36,181,331	
7,830,599	(iii) Aids to navigation & Channel marking	8,155,522	
16,481,845	(iv) Terminals	16,564,723	
16,167,830	(v) Dredging	9,207,462	
17,864,338	(vi) Rapairs of Vessels	9,358,870	
30,059,627	(vii) Night Navigation	31,550,570	
12,524,495	(viii) Protocol	13,083,031	
117,459,000	(ix) Bank Protection	-	
774,569	3. Other Adminlstrative & Misc. Expenses	668,085	185,341,242

Contd.

**OPERATIONAL AND MAINTENANCE EXPENSES
FOR THE YEAR ENDED 31-3-2016**

SCHEDULE - IV

Previous Year (Rupees)	Particulars		Current Year (Figures in Rupees)
	<u>NATIONAL WATERWAY NO.3</u>		
19,729,184	1. Pay & Allowances & Other Staff Costs	18,776,804	
	2. Works Expenses		
2,128,366	(i) Surveying	1,143,981	
81,935,276	(ii) Dredging	178,424,187	
	(iii) Channel marking	3,091,991	
6,232,932	(iv) Night Navigation	6,880,902	
8,881,003	(v) Terminal Facilities	12,977,054	
1,213,880	(vi) Repair of vessel	2,958,028	
	(vii) Maintenance of lock gate		-
	(viii) Bank Protection		-
738,056	3. Other Administrative & Misc. Expenses	379,064	224,630,011
	<u>NATIONAL WATERWAY NO.4</u>		
	1. Works Expenses		
8,577,623	(i) Surveying	5,028,859	
8,118,942	(ii) consultancy	18,418,023	
-	2. Other Administrative & Misc. Expenses	1,375,847	24,822,729
1,103,031			
	<u>NATIONAL WATERWAY NO. 5</u>		
	1. Works Expenses		
2,187,218	(i) Surveying	8,492,881	
3,934,888	(ii) Consultancy Charges	14,374,153	
	(iii) Dredging	13,223,881	
63,529	2. Other Administrative & Misc. Expenses	2,422,629	38,513,344
	KALADAN PROJECT		
-	1. Pay & Allowances & Other staff Costs	-	
223,921		37,815	
	2. Works Expenses		
30,381,243	(i) Consultancy Charges	29,119,364	
10,081,496	3. Other Administrative & Misc. Expenses	1,433,919	30,591,098
	JAL MARG VIKAS PROJECT (NW-1)		
-	1. Reumeration to Consultant & Other staff Costs	-	
-		11,302,353	
	2. Works Expenses		
-	(i) Surveying	-	
3,163,586	(ii) Consultancy Charges	93,543,900	
	(iii) Terminal Facilities	7,077,765	
4,133,812	3. Other Administrative & Misc. Expenses	14,340,895	126,264,913
	Project Management Consultancy Charges	16,198,758	16,198,758
	P.P.P. Project Expenses	16,305,000	18,305,000
-	New National Waterways	14,573,805	14,573,805
1,072,915,769	TOTAL		1,199,064,363


(AJAY KUMAR GUPTA)
CAO(IC)


(PRAVIR PANDEY)
Vice-Chairman/ Member (Finance)

For and behalf of the Authority


(AMITABH VERMA)
Chairman

SCHEDULE V**PAY & ALLOWANCES & OTHER STAFF COSTS FOR THE YEAR ENDED 31.03.2016**

PREVIOUS YEAR (RUPEES)	PARTICULARS	CURRENT YEAR (FIGURES IN RUPEES)
	PAY & ALLOWANCES & OTHER STAFF COSTS	
63,802,598	i) Pay & Allowances	70,254,202
31,000	ii) Honorarium	-
3,390,344	iii) Medical Reimbursement	2,830,177
202,933	iv) Daily Wages	58,127
105,100	v) OTA	106,805
245,234	vi) Bonus	236,887
-	vii) Leave Salary & Pension Contribution (Dep.)	- 978,215
1,011,134	viii) Rent for Residence	1,443,322
1,432,773	ix) Liveries	10,350
102,920	x) Staff welfare Expenses	1,004,736
878,734	xi) Tuition fees	491,499
381,388	xii) Pension & Gratuity Contribution	33,967,926
43,284,400	xiii) Leave Encashment	675,149
1,068,227	xiv) New Employees Cont. to NPS	285,309
274,784	xv) LTC Exp.	994,820
1,650,593		
117,862,162	TOTAL	113,337,524


 (AJAY KUMAR GUPTA)
 CAO(IC)



 (PRAVIR PANDEY)
 Vice-Chairman/ Member (Finance)

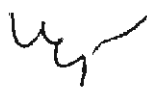
For and on behalf of the Authority


 (AMITABH VERMA)
 Chairman

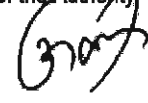
SCHEDULE VI
GENERAL & OTHER EXPENSES FOR THE YEAR ENDED 31.03.2016

PREVIOUS YEAR (FIGURES IN RUPEES)	PARTICULARS	CURRENT YEAR (FIGURES IN RUPEES)
4,597,989	i) Repairs & Maintenance	8,544,725
330,848	ii) Staff Recruitment Expenses	349,489
1,280,377	iii) Postage, Telephone & Telegram	1,398,092
2,445,443	iv) Printing & Stationery	2,467,061
2,093,075	v) Vehicle Running & Maintenance	2,667,011
147,003	vi) Advertisement & Publicity	-
294,728	vii) Conveyance Reimbursement	324,101
4,375,418	viii) Travelling Expenses	4,878,627
2,281,885	---Inland	915,604
95,280	---Abroad	124,864
46,287	ix) Newspaper & Periodicals	59,087
145,287	x) Misc. Expenses	210,588
2,875,567	xi) Consumables	2,857,425
2,031,419	xii) Electricity & Water Charges	2,659,688
1,183,039	xiii) Audit Fees & expenses	357,095
202,031	xiv) Legal Charges	271,655
241,748	lease rent	16,180
124,889	xv) Seminar & Workshop/Conference	349,377
	xvi) Hindi Promotion	112,333
	xvii) Authority meeting expenses	
24,792,313	TOTAL	28,563,002


 (AJAY KUMAR GUPTA)
 CAO(I/C)


 (PRAVIR PANDEY)
 Vice-Chairman/ Member (Finance)

For and on behalf of the Authority


 (AMITABH VERMA)
 Chairman

Schedule - VII**NOTES FORMING PART OF ACCOUNTS AS ON 31.03.2016**

1. Capital works in progress amounting to **Rs. 5927.91 lakh** (previous year Rs. 10225.73 lakh) consist of the following:

(in Lakh)

Sl. No.	Name of Party	Purpose	Amount
1.	M/s A.C.Roy & CO.	Construction of RO-RO Vessels	141.55
2.	M/s Tebma Shipyards	Construction of RO-RO Vessels	184.95
3.	CPWD - Guwahati	Construction of RO-RO Terminal at Dhubri	3315.02
4.	CPWD - Kerala	Construction of terminals & Approach Road	1129.07
5.	CPWD - Patna	Construction of Office Building	144.08
6.	M/s Gupta Construction, Varanasi & Others	Construction of D.G.P.S. at Varanasi	95.37
7.	M/s Dinesh Prasad Sharma	Construction of RIS Station Manihan and Bhagalpur	19.22
8.	M/s ARI	Supply of GMDSS Simulator	19.63
9.	CPWD - Patna	Construction of Swimming Pool at NINI	107.46
10.	M/s Elcome Integrated Systems Pvt. Ltd.	Supply of RIS Equipment	126.48
11.	Nalanda Engineering Enterprises	construction of Gangway at Haldia Terminal	63.67
12.	M/s Meralyn Engineering Works Pvt. Ltd.	Design construction & supply of steel pontoon	28.04
13.	M/s IRS	Procurement Survey-cum-Inspection Vessels	7.30
14.	M/S Turnkey Waterways Joint Venture GOA	Procurement Survey-cum-Inspection Vessels	546.07
Grand Total			5927.91

2. During the F. Y. 2015-16, the Authority incurred the following expenditure in respect of Chairman and full time Members:

(in rupees)

Salary	House Rent	Leave Salary & Pension Contribution	Medical Reimbursement	Travelling Expenses		Total
				Foreign	Inland	
58,20,430	6,95,872	5,69,412	1,40,073	9,09,717	14,77,372	96,12,876
Previous Year (2014-15) -						
67,43,739	5,84,320	6,44,982	70,752	6,80,383	9,18,340	96,42,516

During the year Chairman and Member (Finance) & Project Director, Jal Marg Vikas Project visited European Union for exposure visit organized by the World Bank from 27th June – 2nd July 2015. Member (Finance) & Project Director, Jal Marg Vikas Project visited Massachusetts, USA for Senior level training on Public Private Partnership and Project Finance Program from 11th - 15th May, 2015. Member (Finance) & Project Director, Jal Marg Vikas Project and Joint Secretary, Ministry of Shipping visited Brisbane, Australia to participate in the Integrated Logistics Hub conference from 26th - 27th August, 2015.

3. (i) ITAT, New Delhi for the assessment years 1988-89 to 1997-98 (excluding Assessment Year 1990-91) ruled in July, 2006 that the grants to the Authority is not revenue in nature and hence not taxable. While giving effect to the ITAT order, ACIT, Noida issued fresh assessment order in November, 2010 wherein the miscellaneous receipts of the Authority has been treated as income. Thereafter, the Authority continuously pursued the matter through appeals and counter appeals in ITAT, New Delhi; CIT (Appeals), Ghaziabad; and, ACIT, Noida to get the order of ACIT, Noida regarding treatment of miscellaneous receipts as income of the Authority dismissed. The Authority filed an appeal in ITAT, New Delhi against the order of CIT (Appeal). In F. Y. 2014-15, ITAT, New Delhi passed the order with the view that miscellaneous receipts is adjusted/ refunded to Government while releasing grant in subsequent financial year. Hence, the same cannot be treated as income for the Authority. The matter is pending with ACIT (Exemption), Ghaziabad for execution of the order of ITAT, New Delhi.

(ii) ACIT, Noida also imposed penalty in the fresh assessment order of November, 2010 and raised a demand of Rs.11.80 crore, the same has been collected. Thereafter, the Authority continuously pursued the matter through appeals and counter appeals in ITAT, New Delhi, CIT (Appeals), Ghaziabad and ACIT, Noida to get the order of ACIT, Noida dismissed.

Subsequently, ACIT, Noida issued an order with the contention that no fresh adjudication of penalty u/s 271(1) (C) in view of ITAT direction is required. Against the said order of ACIT, Noida, the Authority has filed an application with ACIT, Noida u/s 154 to review the matter in accordance with the directions of ITAT, New Delhi. The matter is pending with ACIT, Noida at present.

(iii) The Income Tax department has also filed an appeal in High Court of Allahabad against the order of ITAT, New Delhi for the assessment years 1988-89 to 1997-98.

4. Ministry of Shipping vide gazette notification on 15.10.2014 has designated the Authority as the Project Implementing Agency for "Jal Marg Vikas" Project. Under the Jal Marg Vikas Project, the stretch between Allahabad and Haldia covering a distance of 1620 k.m. at an estimated cost of Rs.4200.00 crore is to be developed under technical and financial assistance of the World Bank. The cost of the project will be shared in the ratio of 50:50 between Government of India and World Bank.

A Project Management Unit (PMU) with a Project Director was setup in July, 2014 for going ahead with the consequential necessary action. Various other functionally essential specialists for engineering, procurement, environment, communication and business development were engaged. A Project Oversight Committee (POC) was setup with the representatives from the stake holder State Governments of UP, Bihar, Jharkhand and West Bengal. During the year, World Bank has approved Project Preparatory Fund Advance (PPFA) USD 3.50 million. Authority has submitted claims of Rs.18.25 crore for the period 03.06.2015 to 31.03.2016 to CAAA, Ministry of Finance for the reimbursement of the expenditure. The same was approved by CAAA and World Bank the amounts reimbursed to Government account. During the year, an amount of Rs.14144.06 lakh (previous year Rs.78.40 lakh) has been incurred on the project out of the Grants received from the Government.

5. A sum of Rs.5164.31 lakh (previous year Rs. 5137.31 lakh) towards cost of land for 11 terminals and land for widening of narrow canal has been made as advance to Government of Kerala. Out of the above, 12.3809 hectares of land for terminal has been capitalized for Rs.1923.35 lakh till 31.03.2016. For widening of canal, 21.26 hectares of land has been acquired at the cost of Rs.1711.94 lakh. An amount of Rs.1254.26 lakh has been charged to revenue expenditure since the land is submerged in water after widening of waterways upto F. Y. 2015-16

Authority is liable to pay interest and enhancement of cost on land acquired as per the orders of Hon'ble Court of Kerala Rs.1522.81 lakh was available with various District Collectors in Kerala which included Rs.1390.00 lakh deposited for land acquisition for the new approach road to Maradu terminal.

6. A sum of Rs.3270.17 lakh (previous year Rs. 3270.17 lakh) has been paid as advance to CPWD for construction of terminals. A sum of Rs.1654.13 lakh has been capitalized (Terminals and Buildings) till date. The expenditure incurred till date for Rs.1129.07 lakh for the construction of Alapuzha Terminal (Rs.839.49 lakh), Kakkanadu Terminal (Rs.49.88 lakh), Kottapuram Approach Road (Rs.0.32 lakh) Kayamkulam Terminal and Approach Road (Rs.26.67 lakh) and Chavara Approach Road and Compound wall (Rs.212.71 lakh) have been shown in Capital Work in Progress.
7. A sum of Rs.1660.00 lakh (previous year Rs.1660.00 lakh) has been paid as deposit to Cochin Port Trust (CPT) for construction of Jetty at Bolghatty and Wellington Island. Out of the same, Rs.1575.02 lakh has been capitalized till date and balance Rs.84.98 lakh is available with CPT.
8. A sum of Rs.1254.00 lakh (previous year Rs.1254.00 lakh) has been released as deposit to NF Railway, Guwahati in connection with construction of Broad Gauge Siding at Pandu Terminal (Rs.1030.00 lakh) and the work of replacement of 28 units Type - II quarters (Rs.224.00 lakh) at Guwahati. A sum of Rs.1865.66 lakh has been capitalized in F. Y. 2015-16. It is to mention that an additional cost of Rs.611.66 lakh claimed by NF Railway has been provided for. The same is yet to be released.
9. A sum of Rs. 706.22 lakh (previous year Rs.577.64 lakh) has been deposited with CPWD, Patna for construction of office building, boundary wall, sanitary box, generator room and partitions of office space at Gaighat, Patna. Out of this, as per financial progress of work, an amount of Rs.497.19 lakh has been capitalized for construction of office building. For construction of boundary wall, sewage plant, guest house etc. an amount of Rs.144.08 lakh has been shown in Capital Work in Progress and Rs.64.95 lakh as advance to CPWD.
10. A sum of Rs 4408.00 lakh (provision year Rs.2226.00 lakh) has been deposited with CPWD, Guwahati for construction of RO-RO Jetty, Dhubri including administrative block, roads, electricity connections etc. Out of this, an amount of Rs.3315.02 lakh (previous year Rs.1748.75) has been charged to Capital Work in Progress.
11. 53 flats at Sector-34, Noida were taken over on December, 2002 from Director General of Light Houses & Light Ships (DGLL), Ministry of Shipping for the staff of IWAI at a total transfer price of Rs.225.28 lakh plus transfer fee, stamp duty etc.

A sum of Rs.307.33 lakh (previous year Rs.307.33 lakh) has been capitalized. However, transfer in the name of IWAI could not be registered since the flats have not yet been registered in the name of the first owner DGLL. After persuasion with DGLL for making payment of land rent, etc. to Noida, the initial registration will be taken-up with Noida. The actual liability for registration of flats will be taken care at the time of registration.

12. A claim was lodged with M/s Oriental Insurance Co. for Rs.34.47 lakh towards loss of Buoys and Lights in October 2006. The Insurance Company has agreed for payment of Rs.23.93 lakh only on completion of certain formalities and documentation. The matter is being pursued with the insurance company to settle the claim as agreed for Rs.23.93 lakh.

13. 47 buoys with chain, anchor and accessories and 7 day marks had been lost in the Kolkata region during 2002-03. Authority had lodged an insurance claim of Rs.28.91 lakh and a sum of Rs.5.92 lakh had been received from the Insurance Company. Authority had recovered an amount of Rs.11.05 lakh from the contractor in June, 2013. The Balance of Rs.11.94 lakh has been shown in claim recoverable.
14. The Authority signed an agreement with M/s HDPEL, Kolkata in March, 2005 for construction and delivery of Floating Dry Dock at a cost of Rs.873.00 lakh excluding taxes and cost of spare parts. As M/s HDPEL, Kolkata were unable to deliver the Floating Dry Dock, the Authority cancelled the contract and an amount of Rs.190.42 lakh was released to HDPEL, Kolkata after adjusting amount payable of Rs.71.48 lakh due for Liquidated Damages (LD), repair of vessels for oil tanker and container vessels. The amount of Rs.190.42 lakh has been shown as claim recoverable.
15. Ministry of External Affairs (MEA), Government of India in March, 2009 through an agreement appointed the Authority as Project Development Consultant for implementation of multi-modal transit transport facility on Kaladan river connecting Sittwe port in Myanmar with the State of Mizoram in India. This is known as "Kaladan Project". The project is expected to be completed by 30.11.2016. The Authority has received PDC fees of Rs.1950.81 lakh for the Project till date. Out of the above, an expenditure of Rs.2015.18 lakh has been incurred and Internal Receipts of Rs.201.25 lakh including bank interest generated on the project. During the year, an amount of Rs.307.52 lakh (previous year Rs.406.68 lakh) has been incurred as expenditure and an amount of Rs.16.87 lakh (previous year Rs. 24.76 lakh) has been received as Internal Receipts from the project.
16. Authority has taken three policies from LIC for pension, gratuity and leave encashment for IWAI employees. LIC has provided actuarial valuation for all the three policies. As per actuarial valuation as on 31.03.2016, an amount of Rs.9039.00 lakh for Pension (previous year Rs.7754.00 lakh), Rs.884.92 lakh for Gratuity (previous year Rs.897.70 lakh) and Rs.747.09 lakh for leave encashment (previous year Rs. 690.74 lakh) is required.

Authority has established a Trust in the name of "IWAI-Employees Pension fund" with effect from 25.03.2003 for administering and managing the pension/gratuity fund in respect of employees of the Authority. IWAI-Employees Pension Fund and leave encashment is managed by LIC of India. As per IWAI-Employees Pension Fund account, a fund of Rs.5110.27 lakh is available with the Trust for pension and gratuity fund and Rs.747.09 lakh is available with LIC for leave encashment fund. During F. Y. 2015-16, a provision of Rs.1086.25 lakh and Rs.4.99 lakh has been provided towards pension and gratuity respectively after considering Actuarial Valuation and fund available with IWAI employee's Pension fund trust.

For Actuarial Valuation, the assumptions are:

Mortality Rate	:	LIC (2006-08) ultimate.
Withdrawal Rate	:	1% to 3% depending on age.
Discount Rate	:	8% p.a.
Salary Escalation	:	7% p.a.

17. Authority entered into shareholders agreement in three JV projects with three companies namely (i) M/s Royal Logistics (Ship) Ltd., Kolkata (ii) M/s SKS Waterways Ltd., Kolkata and (iii) M/s Vivada Logistics Pvt. Ltd. Kolkata. As per the share holders agreement with M/s Royal Logistics (Ship) Ltd, Kolkata and M/s SKS Waterways Ltd, Kolkata the initial authorized share capital of each company is Rs.5.00 lakh and same is required to be contributed in the ratio of

70% by the J.V. partners and 30% by IWAI. Accordingly, Authority has contributed its share of Rs.1.50 lakh each as initial authorized share capital in M/s Royal Logistics (Ship) Ltd., Kolkata and M/s SKS Waterways Ltd. Kolkata.

18. There are 3 arbitration cases pending before the Arbitrators. Two cases relate to capital dredging works in NW-3 having a contingent liability of Rs.2047.00 lakh and one case relates to construction of vessel involving Rs.1600.00 lakh damages approximately. At present 36 cases related LAR/ LAA with Sub-Court, Kerala are pending having approximately Rs.318.54 lakh were the claim of the petitioners. The list of pending court cases are as under:-

Court	No. of case
Hon'ble Supreme court	03
NGT, Delhi	01
NGT Southern Zone, Chennai	01
Hon'ble High Court, Delhi	03
Hon'ble High Court, Kerala	10
Hon'ble High Court, Patna	04
Hon'ble High Court, Allahabad	09
Hon'ble High Court, Kolkata	08
Hon'ble High Court, Guwahati	06
Hon'ble High Court, Hyderabad	01
District Court, Varanasi	01
Lower Court, Balasore	01
CGIT cum Labour Court, Guwahati	01
Sub Court, Patna	01
CGIT cum Labour Court, Kanpur	01
City Court, Kolkata	02
CGIT cum Labour Court, Kolkata	05
Sub Court, Visakhapatnam	01
Sub Court, Kerala	03
Human Right Commission, Kerala	02
Sub Court, Kerala (LAR/ LAA cases)	36

19. An MOU was entered with M/s ARI, Delhi for setting up Maritime Simulator Centre at NINI, Patna. As per the MOU, the capital cost of simulator is to be shared between IWAI and ARI in the ratio of 50:50 and the net revenue after running expenses shall also be shared. The cost of

simulator unit has been capitalized and the cost of Rs.116.58 lakh (previous year Rs.115.47 lakh) incurred by M/s ARI shown as capital reserve and depreciation has been deducted on the same.

20. Authority received Rs.32191.00 lakh as Grant under different budget heads of Plan and Non-Plan during F. Y. 2015-16. During the year, Rs.913.87 lakh was refunded to Ministry of Shipping towards Internal Receipt of Authority in F. Y. 2014-15. Also, capital expenditure of Rs.18902.37 lakh and revenue expenditure of Rs.13510.35 lakh was incurred by the Authority includes a provision of Rs.1086.25 lakh and Rs.4.99 lakh for Pension and Gratuity contribution respectively in F.Y. 2015-16. During the year, Authority generated Internal Receipts of Rs.1249.12 lakh. The same has been shown as liability since the amount is payable to Government of India as per directions of MoS vide their letter no. G-20017/7/2013-IWT dated 06.12.2013. Summarized details are as under:-

Abstract of Grant as on 31.3.2016

(Amount in lakh)

Particulars			Total
Grants received in F.Y. 2015-16			
(a) Plan	29,552.00		
(b) Non-Plan	2,639.00		32191.00
<u>Less:- Expenditure charged and amount refunded to Government during the year 2015-16</u>			
(a) Internal Receipt F. Y. 2014-15	913.87		
(b) Deficit as per annual accounts F.Y. 2014-15	3220.30	4134.17	
(c) Revenue expenditure	13510.35		
(d) Capital expenditure	18902.37	32412.72	36546.89
Deficit Grant as on 31.03.2016			<u>4355.89</u>

21. An amount of Rs.7899.87 lakh has been released as advance to District Land Acquisition Officer and Deputy Commissioner, Sahibganj for acquisition of 187 acres of land for construction of multi-modal terminal at Sahibganj till 31.03.2016. For the said land acquisition, Rs.200.00 lakh and Rs.7699.87 lakh has been released during F. Y. 2014-15 and F. Y. 2015-16 respectively against the demand from State Government of Jharkhand.
22. Depreciation on fixed assets has been provided on SLM method over the useful life prescribed in schedule II to the Companies Act, 2013 after considering salvage value of five percent of original cost. The depreciation has been charged for the whole year in the year of purchase and no depreciation will be charged in the year of disposal/sale.
23. Bank Guarantees valued at Rs.2616.35 lakh (previous year Rs.1985.74 lakh) have been received from contractors / suppliers towards security deposit, earnest money and mobilization advance against the works/ contracts awarded to them till 31st March 2016.

24. Annual Accounts of the Authority has been prepared in the format approved by the Ministry of Shipping in consultation with Comptroller & Auditor General of India.
25. Re-grouping and re-classification has been done where considered necessary.
26. All the figures are rounded off to the nearest rupee and figures in () indicate negative figures.

(A. K. Gupta)
Chief Accounts Officer (I/c)

(Pravir Pandey)
Vice Chairman/ Member (Finance)

(Amitabh Verma)
Chairman

For and on behalf of the Authority

SCHEDULE – VIII**INLAND WATERWAYS AUTHORITY OF INDIA****ACCOUNTING POLICIES****1. TREATMENT OF EXPENSES**

Expenditure on hydrographic survey, techno - economic study, bandalling, bottom - panelling, dredging, temporary structure in channel marking and maintenance of vessels, etc. is treated as revenue expenditure whereas expenditure on permanent structures in channel marking, cost of vessels, survey launches, tugs, barges, dredgers, etc. is treated as capital expenditure.

2. DEPRECIATION

Depreciation has been provided on straight line method on the basis of rates in Schedule XIV of the Companies Act 2013. Depreciation on library books has been charged @ 100 % on straight line method. Figures shown in brackets () in column 5 and 9 of Schedule II indicate deduction from Gross Block and Depreciation respectively. Depreciation is charged for the whole year in the year of purchase and no depreciation is charged in the year of disposal/sale.

3. CAPITAL WORK IN PROGRESS

The work in progress is accounted on actual cost basis and includes payments made to contractors for work done and certified.

4. STORES, SPARES AND TOOLS

Stores, spares and tools are valued at lower of cost and net realizable value.

5. PRIOR PERIOD ADJUSTMENTS

Income and expenditure in excess of Rs.1,000/ - each for item relating to previous year/years is credited/debited as the case may be to this account.

6. PROVISIONS

- (i) Provision for known liability is created in respect of any expenditure if the value exceeds Rs.1,000/-.
- (ii) Provision for leave encashment on retirement in respect of regular employees is created as per Accounting Standard 15 issued by Institute of Chartered Accountants of India.
- (iii) Provision for bonus is created on adhoc basis as declared by Central Government in previous year in respect of autonomous bodies.
- (iv) Provision for pension contribution /gratuity has been made as per IWAI Employees Pension Fund Regulations, 1993.

7. TREATMENT OF GRANTS

The Authority will have no revenue generation except for grant from the Government till such time National Waterways become fully operational for public use and tariff rates, levies and fees are fixed. As such, out of grants received from the Government, expenditure incurred on revenue account is classified as revenue grant, payments towards assets are classified as capital grant and balance, if any, are treated as grants received in surplus (under current liabilities).



(A. K. Gupta)
Chief Accounts Officer (I/c)



(Pravir Pandey)
Vice-Chairman/ Member (Finance)

For and on behalf of the Authority



(Amitabh Verma)
Chairman

AUDIT REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA ON THE ACCOUNTS OF INLAND WATERWAYS AUTHORITY OF INDIA FOR THE YEAR ENDED 31 MARCH 2016

We have audited the attached Balance Sheet of Inland Waterways Authority of India (Authority) as at 31 March 2016 and the Income and Expenditure Account for the year ended on that date under section 23 of the Inland Waterways Authority of India Act, 1985 (IWAI Act, 1985) and Rule 28(3) of the Inland Waterways Authority of India Rules, 1986 (IWAI Rules, 1986) as amended in 2002 vide Notification No. GSR 449 dated 10 October 2002. These financial statements include the accounts of units/branches of the Authority. These financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principle used and significant estimates made by management as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

Based on our audit, we report that;

- i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;
- ii. The Balance Sheet and Income and Expenditure Account dealt with by this report have been drawn up in the format approved by the Government of India under Section 34(2)(g) of the IWAI Act, 1985 and Rule 28(2) of the IWAI Rules, 1986;
- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Authority as required under Section 34(2)(g) of the IWAI Act, 1985 in so far as it appears from our examination of such books except that:
 - (A) **Balance Sheet**
 1. **Capital & Liabilities**
 - Current Liabilities & Provisions**
 - (a) **Current Liabilities - ₹ 63.08 crore**
The above does not include liability of ₹ 2.65 crore (excluding VAT and Service tax, if any) for 1st stage payment of keel laying by the supplier of Survey cum inspection vehicle. This has resulted in understatement of Current Liabilities and Capital Work in Progress by ₹ 2.65 crore.
 - (b) **Provisions (Schedule I) ₹ 48.32 crore (read with Note No. 16 of Schedule VII)**
The above does not include provision of ₹ 4.52 crore, required for employees' retirement benefits viz. pension, gratuity and leave encashment. This has resulted in understatement of Provisions and Expenditure by ₹ 4.52 crore.
 2. **Property & Assets**
 - Current Assets, Loans & Advances**
 - Deposits, Loans & Advances ₹ 185.43 crore**
The above does not include ₹ 2.11 crore, being amount recoverable from Ministry of External Affairs (MEA) on account of service tax reimbursement to the Authority for work done by it in the Multi Modal Transit Transport Project being implemented by MEA in Myanmar. This has resulted in understatement of Deposits, Loans & Advances and Income by ₹ 2.11 crore.

(B) Note Forming Part of Accounts- Schedule VII

Note No. 18 pertaining to the contingent liability is deficient to the extent that in two cases related to capital dredging works in NW-3 there is contingent liability of ₹ 43.09 crore instead of ₹ 20.47 crore being shown in the abovesaid note.

(C) Management Letter

Deficiencies, which have not been included in the Audit Report, have been brought to the notice of the Chairman of the Authority through a management letter issued separately for remedial/corrective action.

- iv. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet and Income and Expenditure Account dealt with by this report are in agreement with the books of accounts.
- v. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts and subject to the significant matters stated above and other matters mentioned in Annexure to this Audit Report give a true and fair view in conformity with accounting principles generally accepted in India:
- In so far as it related to the Balance Sheet, of the state of affairs of the Authority as at 31 March 2016; and
 - In so far as it relates to the Income and Expenditure Account, of the income/expenditure for the year ended on 31 March 2016.

**For and on behalf of the
Comptroller and Auditor General of India**



**(Neelesh Kumar Sah)
Principal Director of Commercial Audit
& Ex-Officio Member, Audit Board-I,
New Delhi**

Place: New Delhi

Dated: 29 December 2016

Annexure

(to the Audit Report on the Annual Accounts of IWAI for the year 2015-16)

1. Internal Audit System

The system to monitor the findings/compliance to the findings of internal auditor needs to be strengthened. Internal auditor did not submit any separate report in respect of Jal Marg Vikas Project though it was required under its scope of work. Further, the internal audit report does not provide any formal assurance regarding the adequacy and effectiveness of internal control over the financial reporting.

2. Internal Control System

Internal Control System needs to be strengthened further in view of the following deficiencies observed in the internal control system of the Authority:

- Authority awarded the work for supply of 2 nos. of Survey cum Inspection Vessel in the name of the lead partner of a joint venture, though the bids were submitted in the name of the joint venture.
- An amount of ₹ 0.09 crore, towards unsettled advance, was lying with contractors for more than five years.
- Timely action for renewal of bank guarantees was not being undertaken.
- Discrepancy in the amount TDS recoverable shown in the books of accounts and that indicated in the income tax returns filed for the years 2008-09 to 2015-16 was noticed, which needed to be reconciled in a time bound manner.

3. System of physical verification of Fixed Assets

Test check of records revealed the physical verification of fixed assets was not conducted at Head Office, Noida. Further, fixed assets register was not being maintained properly at Head Office, Noida, RO Guwahati and RO Koehi.

4. System of Physical verification of Inventory

There is no system to assess the net realizable value of the inventories. Further, the system of physical verification of inventories needs to be further strengthened as some items of inventory were not verified/valued at the Head Office, Noida.

5. Regularity in payment of Statutory Dues

Worker's Welfare Cess, Work Contract Tax and Tax Deducted at Source were not being properly deducted and deposited with the Statutory Authorities.

Management Reply on Comments contained in C&AG Audit Report on Annual Accounts for the year ended 31st March, 2016

(A) Balance Sheet

**1. Capital & Liabilities
Current Liabilities & Provisions**

(a) Current Liabilities – Rs.63.08 crore

As per Contract agreement, the 1st stage payment is due to contractor on submission of invoice alongwith Bank Guarantee of the equivalent amount. In this case, the contractor had not submitted invoice and Bank Guarantee of equivalent amount. Hence, the amount was not due to the contractor at 1st stage as per contract. Corrective action will be taken in F. Y. 2016.17.

(b) Provisions (Schedule I) - Rs.48.32 crore (read with Note No. 16 of Schedule VII)

The LIC has provided Actuarial Valuation Certificate with the assumption of Salary escalation @ 7%. It is observed, that in F. Y. 2014-15, the same is considered @ 6%. Due to above higher assumption the valuation of Pension, Gratuity and Leave Encashment has been increased with higher amount as compared to previous year. LIC of India has provided the Actuarial Valuation certificate very late. Due to shortage of time, the same could not be rectified. In F. Y. 2016-17, Actuarial Valuation certificate will be obtaining from LIC with correct assumption for valuation.

**2. Property & Assets
Current Assets, Loans & Advances
Deposits, Loans & Advances Rs.185.43 crore**

It is to mention that MEA conveyed the approval of Cabinet vide communication dated 21.10.2015 that provision of Rs.3.50 crore for service tax has been approved by the Cabinet. However, the payment of actual expenditure by IWAI on account of service tax to be paid by MEA was possible only after amendment in the Principal Agreement made with MEA. The Supplementary Agreement to the Principal Agreement was finalized and signed by IWAI with MEA only on 28.04.2016 and the claim of IWAI on account of service tax reimbursement order was released by MEA on 20.06.2016.

Based on the fact and evidence that MEA agreed in-principle to reimburse the service tax to IWAI only on 28.04.2016, the same cannot be shown as recoverable in the books of account during the financial year 2015-16. Necessary correction will be incorporated in F. Y. 2016-17.

(B) Notes Forming Part of Accounts - Schedule VII

Noted for compliance, factual position will be disclosed in Note forming part of Accounts in F.Y. 2016-17.

Annexure**1. Internal Audit System:**

The compliance of Internal Audit reports will be monitored more effectively. Internal Auditor has been directed to submit separate report on Jal Marg Vikas Project and provide formal assurance regarding adequacy and effectiveness of Internal control over the financial reporting.

2. Internal Control System:

- The notification of award for supply of 02 nos. of survey cum inspection vessels has been modified in the name of Joint Venture.
- The adjustment of outstanding advances having age of more than five years will be pursued for adjustment in F. Y. 2016-17.
- For Bank Guarantee extension, the Authority issues letters to concerned Banks alongwith copy to Contractor. The request letters were also sent through e-mails to Banks. The Banks were asked to extend validity of Bank Guarantee or in case the same was not done, letter may treated as invocation notice. The Banks have extended Bank Guarantees accordingly from the date of its expiry. In future advance action will be taken as observed.
- Necessary reconciliation of account will be made in F. Y. 2016-17.

3. System of physical verification of Fixed Assets:

Instruction has been issued to conduct physical verification of Fixed Assets as on 31.03.2017. For Head Office, Noida, RO-Guwahati and RO-Kochi has been instructed to maintain fixed assets registers properly in compliance with observations of audit.

4. System of Physical verification of Inventory:

Instruction to all offices has been issued during current F.Y. 2015-16.

5. Regularity in payment of Statutory Dues:

The views of Tax Experts have been obtained on applicability of such tax and same has been complied by all offices.