

# **Role of Engineering Deptt.**

In meeting Corporate Objectives of

## **Indian Railways**

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This Paper deals with Role of Engg Deptt particularly through N.F.Railway construction in meeting Corporate Objectives of Indian Railways.

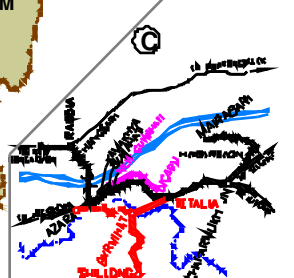
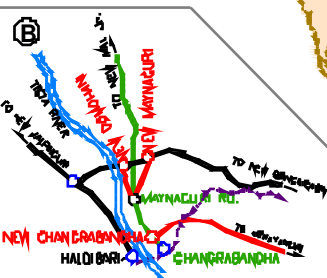
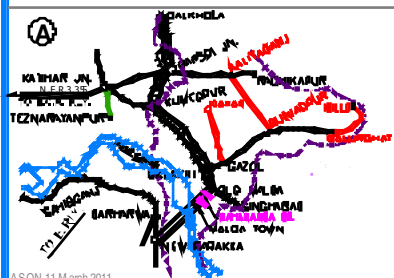
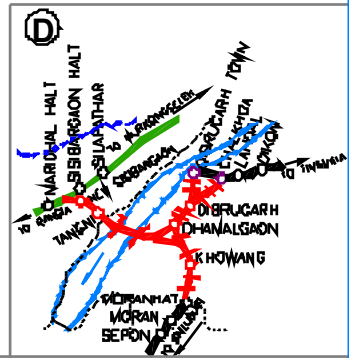
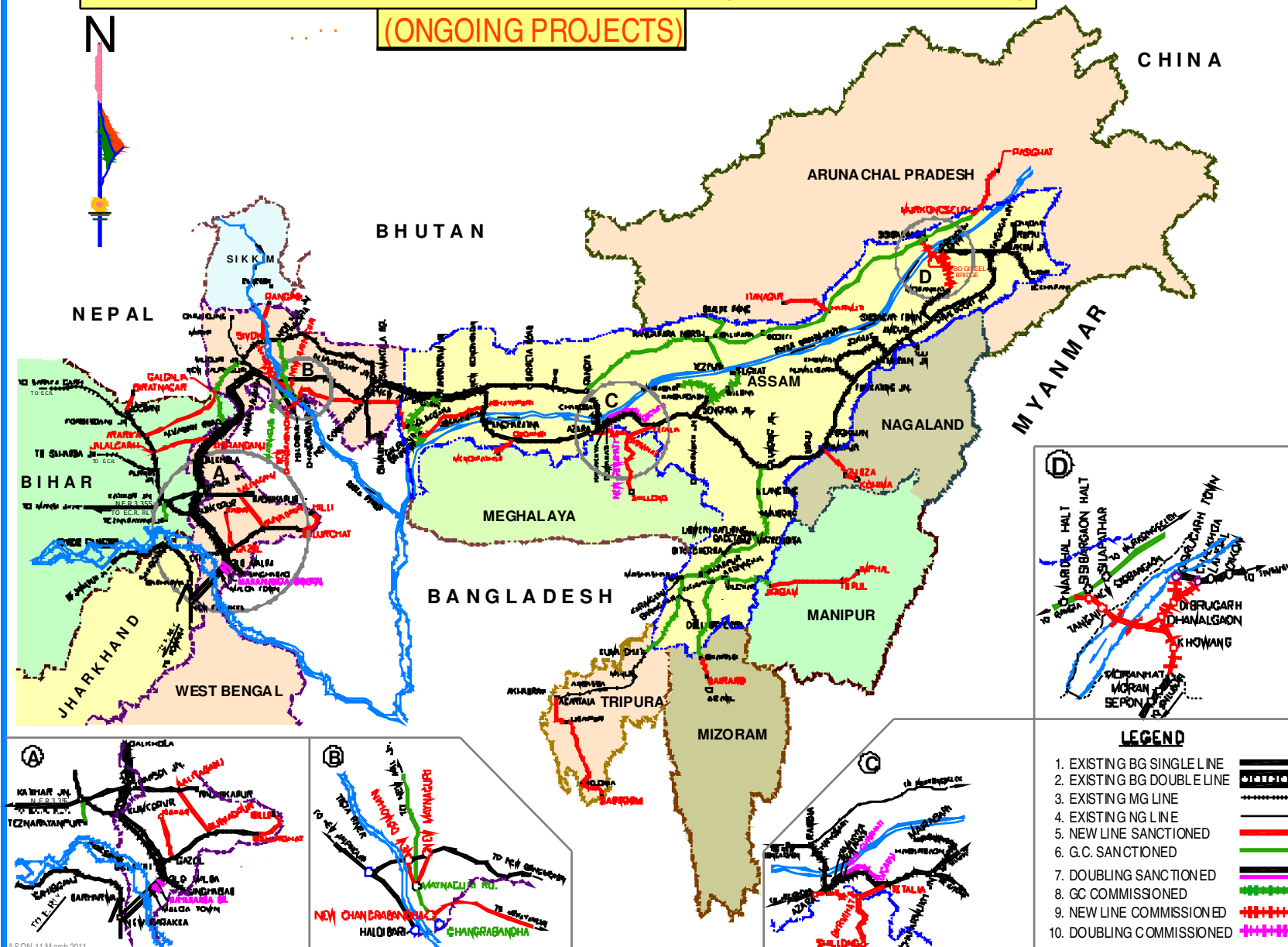
- **The deptt has undertaken rail infrastructure development projects viz. New Lines, Gauge conversion, and Doubling in West Bengal, Bihar and all the States of the North East ,namely Arunachal Pradesh, Assam, Nagaland, Mizoram, Tripura, Manipur, Meghalaya and Sikkim.**

- **Engg deptt through N.F.Railway Construction organisation is presently executing 19 New Line, 7 Gauge Conversion and 4 Doubling projects in these States.**
- **11 projects (9 New line and 2 Gauge Conversion) are National projects and all are in Northeast Region.**

- **Engg deptt through N.F. Railway Construction org has contributed 790 km New Line 1670 Km Gauge Conversion and 287 Km Doubling since 1979.**

# NORTHEAST FRONTIER RAILWAY (CONSTRUCTION)

(ONGOING PROJECTS)



### LEGEND

1. EXISTING BG SINGLE LINE
2. EXISTING BG DOUBLE LINE
3. EXISTING MG LINE
4. EXISTING NG LINE
5. NEW LINE SANCTIONED
6. G.C. SANCTIONED
7. DOUBLING SANCTIONED
8. GC COMMISSIONED
9. NEW LINE COMMISSIONED
10. DOUBLING COMMISSIONED

# *RAILWAY NETWORK IN N.F. RAILWAY*

## *(As on 31.3.2010)*

<b>State</b>	<b>Broad Gauge</b>	<b>Meter Gauge</b>	<b>Narrow Gauge</b>	<b>Total</b>
Arunachal Pradesh	-	1.26	-	1.26
Assam	1376.22	1057.12	-	2433.34
Tripura	-	151.40	-	151.40
Nagaland	11.13	1.72	-	12.85
Manipur	-	1.35	-	1.35
Mizoram	-	1.50	-	1.50
Meghalaya	-	-	-	-
Sikkim	-	-	-	-
<b>Total NE Region</b>	<b>1387.35</b>	<b>1214.35</b>	<b>-</b>	<b>2601.70</b>
Bihar	260.85	69.31	-	330.16
West Bengal	781.89	106.14	87.48	975.51
<b>Total N.F. Rly</b>	<b>2430.09</b>	<b>1389.80</b>	<b>87.48</b>	<b>3907.37</b>

## MAJOR NEW LINE PROJECTS COMPLETED

S. NO	PROJECT	LENGTH (KM)	YEAR
1.	New Bongaigaon to Guwahati	164.00	1984
2.	RAILLINKS TON.E.STATES		
	(a) Balipara (Assam) to Bhalukpong (Arunachal Pradesh) – MG line	35.46	1990
	(b) Lalabazar (Assam) to Bhairabi (Mizoram) –MG line	48.15	1991
	(c) Silchar (Assam) to Jiribam (Manipur) – MG line	49.16	1990
	(d) Dharmanagar to Kumarghat (Tripura) – MG line	33.00	1990
	(e) Amguri (Assam) to Tuli (Nagaland)	14.65	1990
3.	Jogighopa to Guwahati	142.54	2000
4.	Eklakhi to Balurghat	87.11	2002-04
5.	Kumarghat to Agartala		
	(i) Kumarghat – Manu	20.573	2002-03
	(ii) Manu – Ambassa	20.00	2008
	(iii) Ambassa – Agartala	69.00	2008
6.	Manihari-Teznanayanpur Restoration of MG line	4.50	2006
7.	Bogibeel Rail-cum-Road Bridge		
	(i) South Bank link from Chalkhoa to Moranhat	44	2009
8	New Coochbehar-Golakganj of New Mainaguri-Jogighopa	58	2011



## MAJOR GAUGE CONVERSION COMPLETED

S. NO	PROJECT	LENGTH (KM)	YEAR OF COMMI- SSIONING
1.	Guwahati to Lumding including branch lines	216.50	1995
2	(A)Lumding to Dibrugarh including branch lines (B)Restoration with gauge conversion (i) Senchoa – Silghat Town (ii) Haibargaon to Mairabari	621.66  62 44	1995-2002  2008 2009
3	(A)New Jalpaiguri – Siliguri Jn-New Bongaigaon (Main line) (B) Branch lines from Alipurduar to Bamanhat and Fakiragram to Dhubri (i) Alipurduar – Bamanhat (ii) Fakiragram to Dhubri	280  75 66	2003-2006  2007 2010
4	Jogbani – Katihar—Barsoi-Radhikapur (i) Barsoi – Radhikapur (ii) Katihar – Barsoi (iii) Katihar – Jogbani (iv) Katihar – Manihari (v) Manihari-Tejnarainpur	 53 34 108 24 10	 2006 2007 2008 2010 2011
5	Aluabari-Siliguri	76	2010-11

## MAJOR PROJECTS COMPLETED ( Contd.)

S. NO	PROJECT	LENGTH (KM)	YEAR OF COMMISSIONING
	<b>DOUBLING</b>		
1.	Malda town – Eklakhi-Harischandrapur- Kumedpur	26.10	1991
2	Kumedpur-Barsoi-Dhulabari-New Jalpaiguri	80.81	1993
3	Barsoi-Dalkhola-Dhulabari-Aluabari	34.00	1994
4.	Aluabari Road –Kishanganj-New Jalpaiguri-Ambari Falakata & cabins on Mahananda bridge	40.00	1995
5	Dalkhola - Kishanganj	28.00	2001
6	Harischandrapur - Kumarganj	30	2005 – 06
7.	Kumarganj - Eklakhi	6	2006
8.	Seemapur - Katihar – Katihar yard work	6	2006
9.	Malda Town-Old Malda	1.2	2010
10.	New Guwahati--Digaru	34	2010-11
	<b>MEGA BRIDGES</b>		
1.	Kaliabhomora Road Bridge over river Brahmaputra at Tezpur	3.015	1987 -88
2.	Rail-Cum-Road Bridge across river Brahmaputra at Jogighopa	2.28	1998 - 99
	<b>YARD REMODELLING &amp; RRI WORK</b>		
1.	Katihar –Yard remodeling & Route Relay Interlocking work	-	2008
2.	Kamakhya coaching terminal	-	2010

# AGARTALA STATION





BOGIBEEL BRIDGE PROJECT - VIEW OF DIBRUGARH STATION

# ***ONGOING PROJECTS IN N.F. RAILWAY OVERVIEW***

<b>Plan Head</b>	<b>New Line</b>	<b>Gauge Conversion</b>	<b>Doubling</b>
<b>Projects in progress</b>	<b>19</b>	<b>7</b>	<b>4</b>
<b>Anticipated Throwforward as on 1.04.2011 (Rs. in Cr.)</b>	<b>18628</b>	<b>8704.17</b>	<b>578.98</b>
<b>Length of ongoing Projects as on 1.4.2011 (Km)</b>	<b>1143</b>	<b>1287</b>	<b>97</b>
<b>National Projects (no.)</b>	<b>9</b>	<b>2</b>	<b>-</b>

# ONGOING PROJECTS

S. No	Name of Project	State	Length (km)	Cost (Rs. in Cr.)	Remarks	Target
<b>New Lines</b>						
1	Bogibeel Rail-cum-Road Bridge	Assam	73.0	3230.02	National Project	Dec'14
2	New Maynaguri-Jogighopa	Assam W.Bengal	245.68	1655.80	-	Mar'14
3	Tetelia-Byrnihat	Meghalaya, Assam	22.36	384.04	National Project	Mar'14
4	Dudnoi-Mendipathar	Meghalaya, Assam	21.75	86.22	-	Mar'13
5	Byrnihat – Shillong	Meghalaya	108.40	4083.02	National Project	Mar'17

# ONGOING PROJECTS

S. No.	Name of Project	State	Length (km)	Latest P.B.Cost (Rs. In Cr.)	Remarks	Target
	<b>NEW LINES(Contd.)</b>					
6	Harmuti-Naharlagun(Itanagar)	Arunachal, Assam	21.75	254.29	-	Mar'12
7	Bhairabi- Sairang (Aizwal)	Mizoram	50.9	619.34	National Project	Mar'14
8	Jiribam-Tupul (Imphal)	Manipur	84.0	3056.85	National Project	Mar'14
9	Dimapur-Zubza (Kohima)	Nagaland	88.0	850.0	National Project	Mar'15
10	Sivok - Rangpo	Sikkim, West Bengal	44.39	1339.48	National Project	Dec'15
11	Agartala- Sabroom	Tripura	111.79	1141.75	National Project	Mar'14
12	Kumarghat-Agartala	Tripura	109.0	984.98	National Project	Completed

# ONGOING PROJECTS

S. No.	Name of Project	State	Length (km)	Latest PB Cost (Rs. In Cr.)	Remarks	Target
	<b>NEW LINES(Contd.)</b>					
13	<b>Eklakhi-Balurghat &amp; Gazole-Itahar &amp; Raiganj - Itahar</b>	<b>W.Bengal</b>	<b>136.91</b>	<b>415.23</b>	<b>Eklakhi-Balurghat completed</b>	<b>Not fixed</b>
14	<b>Balurghat-Hilli</b>	<b>W. Bengal</b>	<b>29.0</b>	<b>242.22</b>	<b>-</b>	<b>Not fixed</b>
15	<b>Kaliyaganj-Buniadpur</b>	<b>W. Bengal</b>	<b>33.13</b>	<b>222.21</b>	<b>-</b>	<b>Not fixed</b>
16	<b>Araria-Galgalia (Thakurganj)</b>	<b>Bihar</b>	<b>100.0</b>	<b>529.88</b>	<b>-</b>	<b>Not fixed</b>
17	<b>Jalalgarh-Kishanganj</b>	<b>Bihar</b>	<b>50.0</b>	<b>359.86</b>	<b>-</b>	<b>Not fixed</b>
18	<b>Jogbani-Biratnagar</b>	<b>Bihar &amp; Nepal</b>	<b>18</b>	<b>238.83</b>	<b>-</b>	<b>Not fixed</b>
19	<b>Murkongselek - Pasighat</b>	<b>Assam &amp; Arunachal Pradesh</b>	<b>30.62</b>	<b>165.82</b>	<b>-</b>	<b>Not fixed</b>



# *ONGOING PROJECTS*

S. No.	Name of Project	State	Length (km)	Latest PB Cost (Rs. In Cr.)	Remarks	Target
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## Gauge Conversion

1	Lumding-Silchar-Jiribam & Badarpur-Kumarghat, Baraigram – Dulabchara & Karimganj - Mahishasan	Assam, Tripura, Manipur	408.24	4255.37	National Project	Dec'13
2	Rangia-Murkongselek alongwith linked fingers	Assam, Arunachal Pradesh	510.33	1556.23	National Project	Mar'14
3	Katakhal-Bhairabi	Assam, Mizoram	84.15	223.01	-	Dec'13
4	Lumding – Dibrugarh including Senchoa – Silghat & Haibargaon – Mairabari Branch lines	Assam	628	956,29	Completed	-
5	New Jalpaiguri-Siliguri-New Bongaigaon including Alipurduar-Bamanhat & Fakiragram-Dhubri branch lines and Material Modification for Chalsa – Naxalbari - NL	W. Bengal & Assam	433	1237.50	Completed	-

# ONGOING PROJECTS

S. No.	Name of Project	State	Length (km)	Latest PB Cost (Rs. In Cr.)	Remarks	Target
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## Gauge Conversion(Contd.)

6	Aluabari-Siliguri	W.Bengal & Bihar	76	415.50	-	Mar'11
7	Jogbani – Katihar – Barsoi – Radhikapur , Katihar – Tejnarayanpur and Material Modification for Raiganj - Dalkhola	Bihar & W.Bengal	283.23	1041.791	Completed except Raiganj- Dalkhola	Mar'11

# ONGOING PROJECTS

S. No.	Name of Project	State	Length (km)	Latest PB Cost (Rs. In Cr.)	Remarks	Target
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## Doubling

1	New Guwahati-Digaru	Assam	29.81	137.50	-	Mar'11
2	Malda Town-Old Malda	W. Bengal	1.2	33.05	Completed	-
3	Ambari Falakata – New Maynaguri	W. Bengal	36.52	257.90	New Work	Not fixed
4	New Coochbehar – Samuktala Road	W. Bengal	29.02	190.40	New Work	Not fixed

# ***RAIL CONNECTIVITY TO STATE CAPITALS OF NORTH EAST REGION***

<b>S. No.</b>	<b>State</b>	<b>Capital</b>	<b>Name of Project</b>	<b>Remarks &amp; Target date</b>
<b>1</b>	<b>Assam</b>	<b>Guwahati (Dispur)</b>		<b>Already connected.</b>
<b>2</b>	<b>Arunachal Pradesh</b>	<b>Itanagar</b>	<b>Harmuti-Naharlagun (Itanagar)</b>	<b>March'2012</b>
<b>3</b>	<b>Manipur</b>	<b>Imphal</b>	<b>Jiribam-Tupul</b>	<b>Jiribam-Tupul: March'2014 Tupul- Imphal: March'2016</b>
<b>4</b>	<b>Nagaland</b>	<b>Kohima</b>	<b>Dimapur-Zubza</b>	<b>March'2015 Extn. to Kohima will be processed after detailed survey.</b>

# ***RAIL CONNECTIVITY TO STATE CAPITALS OF NORTH EAST REGION***

<b>S. No</b>	<b>State</b>	<b>Capital</b>	<b>Name of Project</b>	<b>Remarks &amp; Target date</b>
<b>5</b>	<b>Mizoram</b>	<b>Aizwal</b>	<b>Bhairabhi-Sairang</b>	<b>March'2014</b>
<b>6</b>	<b>Tripura</b>	<b>Agartala</b>	<b>Kumarghat- Agartala</b>	<b>Commissioned (Oct.'2008)</b>
<b>7</b>	<b>Meghalaya</b>	<b>Shillong</b>	<b>Tetelia-Byrnihat &amp; Byrnihat-Shillong</b>	<b>Tetelia-Brynihat – March'2014</b>
<b>8</b>	<b>Sikkim</b>	<b>Gangtok</b>	<b>Sivok-Rangpo</b>	<b>Sivok-Rangpo taken up. –Dec"2015. Proposal of Rangpo- Gangtok processed.</b>

## PLAN SUMMARY FOR 2010-11 & 2011-12

SN.	Plan Head	2010-11	2011-12
		Revised Gran (Rs. In Cr.)	Pink Book Outlay (Rs. In Cr.)
1	New Line	584.01 ABS: <u>670.08</u> 1254.09	1633.00
2	Gauge Conversion	495.32 ABS 576.62 Dep: <u>0.62</u> 1072.56	729.01
3	Doubling	39.90	30.54
	<b>TOTAL:</b>	1119.23 ABS 1246.70 Dep: <u>0.62</u> 2366.55	2392.55

**Dep:** Deposit Fund    **ABS:** Addl. Budgetary Support for National Projects

- The New Lines, Gauge Conversions and Doublings already commissioned are playing great role in meeting the transportation needs of the common man.
- The numbers and frequency of coaching trains has increased considerably after Gauge Conversions and Doublings, resulting better public mobility and comfort.
- The connectivity of these areas with other parts of the country has been established.

- It has brought people of remote areas of North East into the national mainstream of development.
- These lines are serving as a critical infrastructure facilitator for the carriage of goods.
- Rolling Stocks are running with essential goods on these lines to remote places. In fact these rail lines are playing a great role in transportation of food grains to N.E.States.



- Regarding Connectivity to the State capitals of North East Region, capital of Assam is already connected, that of Tripura has been connected in 2008 and work is in progress for connectivity to or near the capitals of Arunachal Pradesh, Manipur, Nagaland, Mizoram, Tripura, Meghalaya and Sikkim .

- Due to execution of ongoing projects of the tune of about Rs. 2366 Cr. per year, considerable number of employment has been generated in the region.
- It has contributed over all economic growth of the people of theregion.
- The outcome of all these activities will be Expansion of Rail Network and creation of capacity.

From above deliberations we see that Engg Deptt is playing a great role in meeting Corporate Objectives of Indian Railways.

**THANK YOU**