

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

# Report on Industrial Visit to **B\$NL RAJAHMUNDRY**

For II-Year B. Tech Students on 17.10.2025 & 18.10.2025



#### **About the Visit:**

The Department of Electronics and Communication Engineering organized an Industrial Visit to Bharat Sanchar Nigam Limited (BSNL), Rajahmundry, on **17th and 18th October 2025.** The visit was conducted to provide students with practical exposure to modern telecommunication systems and their real-world applications.

A total of 122 students participated in the visit — 69 students along with 2 faculty members on Day 1, and 53 students along with 2 faculty members on Day 2.

The industrial visit offered students an opportunity to observe and understand the operational aspects of electronic and communication systems used in telecommunication networks, with a special focus on their applications in the aviation sector.

### Agenda:

Date	Time	Schedule for Airport Industrial Visit
	9:30 AM	Start from college
17.10.2025 & 18.10.2025	10:30AM	Reached to BSNL RAJAHMUNDRY
	10:30AM to 11:00AM	Gathered at Conference Hall, Sanchar Bhawan, RMY
	11:00AM to 1:30 PM	Visit of Diifferent Sections in BSNL branch
	1:30 PM to 2:30 PM	Lunch at Outside
	2:30 PM to 3:30 PM	Return to College



Group Photo taken before going to BSNL Rajahmundry Industrial Visit along with Principal, HOD ECE, ECE faculty members and Students





Photo: The Principal and the Head of the ECE Department are gave clear instructions to the students regarding the visit.

### **Objectives of the Visit**

- To understand the functioning of telecommunication networks and their architecture.
- To gain knowledge of the working principles of various communication systems used in BSNL.
- To explore the role of electronic and communication systems in supporting aviation
- To bridge the gap between theoretical learning and practical industrial applications.
- To motivate students toward career opportunities in the telecommunication field.

### **Sections Visited and Key Learnings**

### a) MDF & PP Section (1st Floor)

The Main Distribution Frame (MDF) and Primary Protection (PP) sections form the heart of the wired communication system. Students learned how subscriber lines are terminated and connected to the exchange through jumper wires. The MDF acts as an interface between the external subscriber lines and internal switching equipment, while the PP unit ensures protection against voltage surges and lightning using protective modules.

#### b) STR Section (2nd Floor)

The Subscriber Trunk Dialing (STR) section manages long-distance communication through trunk exchanges. Students were introduced to the working of digital trunk exchanges and routing mechanisms for establishing long-distance calls efficiently. The section also covered how communication links are maintained and monitored for service reliability.

#### c) NGN Section (3rd Floor)

The Next Generation Network (NGN) section demonstrated the integration of traditional telephony with modern IP-based communication. Students learned about the migration from circuit-switched to packet-switched networks and how NGN supports voice, data, and multimedia services over a unified platform. The concept of VoIP (Voice over Internet Protocol) and Softswitch architecture was also explained.

#### d) CDR & IT Section (3rd Floor)

The Call Detail Record (CDR) and Information Technology (IT) section provided insights into network management, billing systems, and data storage. Students observed how customer data and call logs are processed and maintained securely. The importance of IT in automating BSNL's service delivery and performance monitoring was emphasized.

#### e) NIB Room (4th Floor)

The National Internet Backbone (NIB) room showcased the backbone of India's internet infrastructure. Students were introduced to high-speed routers, fiber optic communication systems, and broadband service management. The NIB supports broadband, leased line, and enterprise connectivity across the region. Engineers explained how data traffic is managed, monitored, and optimized to ensure uninterrupted internet services.

### Photo Gallery of the Visit on 17.10.2025























Photo Gallery of the Visit on 18.10.2025



























#### **Outcomes of the Visit**

- Students gained firsthand exposure to telecommunication systems and their components.
- Improved understanding of network design, switching, and routing principles.
- Awareness of NGN and IP-based communication technologies used in modern telecom.
- Insight into real-time monitoring, billing, and IT integration within a telecom setup.
- Enhanced appreciation of the practical applications of ECE concepts in large-scale networks and aviation-related communication systems.

### **Conclusion**

The industrial visit to BSNL Rajahmundry proved to be highly informative and enriching. It provided a clear understanding of how theoretical concepts from the classroom are implemented in real-world telecommunication systems.

The Department expresses sincere gratitude to the BSNL Rajahmundry Team for their warm hospitality, detailed technical demonstrations, and valuable interaction with the students. Their guidance and support made the visit a great success.

### Acknowledgment

The Department of Electronics and Communication Engineering extends heartfelt thanks to:

- BSNL Rajahmundry Officials and Engineers for their cooperation and knowledge sharing.
- Faculty coordinators for organizing and accompanying students during the visit.
- Pragati Engineering College management for their continuous support in promoting industry institute interaction.

Report Prepared by Mr. T Sekhar, Asst. Prof.

Faculty Coordinators
Dr. Ch. Venkateswarlu, Assoc. Prof.

HOD-ECE

#### भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED



प्रमुख महाप्रबंधक दूरसंचार का कार्यालय O/o Principal General Manager Telecom

(भारत सरकार का उद्यम A Government of India Enterprise)

नन्नय्या संचार भवन, गोकवरम बस स्टैंड, राजमुंदरी, आंध्र प्रदेश 533104 Nannayya Sanchar Bhavan, Gokavaram bus stand, Rajahmundry, Andhra Pradesh 533104

### PROPOSED SCHEDULE FOR INDUSTRIAL VISIT BY THE STUDENTS OF PRAGATI ENGINEERING COLLEGE, SURAMPALEM

DATE: 17-10-2025 FRIDAY (1st BATCH)

DATE: 18-10-2025 SATURDAY (2 nd BATCH)

TIME OF ARRIVAL: 10:30 AM to Conference Hall, Sanchar Bhawan, RMY.

SN	SECTION/OFFICER	TIME
1	JTO(BLDGS) PAPACHARI	11:00 TO 11:20
2	JTO(NGN) PARVATHI	11:20 TO 11:40
3	JTO(NIB) SRIRAM KUMAR	11:40 TO 12:00
4	JTO(CDR) PARDHA SARADHI	12:00 TO 12:20
5	SDE(STR) NAVEEN	12:20 TO 12:40
6	SDE(C1 O&M) RAJAKUMAR	12:40 TO 13:00

Batch-A	MDF, PP	NGN 3	NIB Room	CDR&IT 3	STR 2 nd	Cell BTS
	1 st Floor	rd Floor	4 th Floor	rd floor	floor	4 th Floor
Batch-B	NGN 3	NIB Room	CDR&IT 3 rd	STR 2 nd	Cell BTS	MDF, PP
	rd Floor	4 th Floor	floor	floor	4 th Floor	1 st Floor
Batch-C	NIB Room	CDR&IT 3	STR 2 nd	Cell BTS	MDF, PP	NGN 3
	4 th Floor	rd floor	floor	4 th Floor	1 st Floor	rd Floor
Batch-D	CDR&IT 3	STR 2 nd	Cell BTS	MDF, PP	NGN 3	NIB Room
	rd floor	floor	4 th Floor	1 st Floor	rd Floor	4 th Floor
Batch-E	STR 2 nd	Cell BTS	MDF, PP 1	NGN 3	NIB Room	CDR&IT 3
	floor	4 th Floor	st Floor	rd Floor	4 th Floor	rd floor

Sub Divisional Engineer (HRD)
% G.M. Telecom.

Rajahmundry.



### PRAGATI ENGINEERING COLLEGE



### (AUTONOMOUS)

### 3-180, ADB Road, Surampalem-533437

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### ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

Date: 16.10.2025

### One day Industrial Visit Report-BSNL, Rajamahendravaram

Submitted by Faculty Coordinator: Dr.Ch.Venkateswarlu

Place: BSNL, Rajamahendravaram, Andhrapradesh, India

Date of Visit: 17-10-2025

Time: 09:00 AM to 03:30 PM

Target Audience: B.Tech- II ECE-I Semester, A& D Sections

Total no. of Students: 69

Total No. Of faculty: 2

Student Coordinators: Chappidi Jayaram, Ms. M. Jayasree Naga Sahithi

#### **Industrial Visit Students List:**

SNO	ROLL NO	STUDENT NAME
1	24A31A0403	CHINTAKAYALA VENNELA
2	24A31A0406	GUDIVADA MOUNIKA
3	24A31A0407	JANGAM GEETHARPANA
4	24A31A0408	KORADA GEETHA MADHURI
5	24A31A0410	MASIMUKKALA ASWINI
6	24A31A0412	NARALA RENUKA
7	24A31A0414	PALLA SOWMYA SRI LAKSHMI KAMALINI
8	24A31A0415	PEDAVEGI RADHIKA SRI
9	24A31A0416	PUDU NAVYA NANDITHA
10	24A31A0418	SANA SATYA ISHWARYA
11	24A31A0419	SESETTI AKSHITHA
12	24A31A0420	TEKUMUDI CHAITANYA PRIYA
13	24A31A0422	VAKKALAGADDA A S K MAHALAKSHMI GAYATHRI

14	24A31A0424	VASAMSETTI NAGADEVI
15	24A31A0425	VELAMALA MOUNIKA
16	24A31A0431	CHAPPIDI JAYARAM
17	24A31A0432	CHIKKAM DURGA VENKATESH
18	24A31A0444	KAPU NAGA VENKATA SOMA SAI NIKHILESH
19	24A31A0447	KAVIKONDALA AADITYA VARDHAN
20	24A31A0453	NAKKA LOKESWARARAO
21	24A31A0454	NALAM DARSHAK
22	24A31A0462	SRIKANTAM SRI BHARATH
23	24A31A0465	VENKATA GANGA MAHESH KURUMALLA
24	24A31A0466	YADAVILLI SUBHASH KARTHIKEYA
25	25A35A0401	CHIKKAM VEERA VARSHITHA
26	25A35A0403	RAVADA ROJITHA
27	25A35A0404	SETTY OJASWITHA
28	25A35A0405	G.BALA TEJA
29	25A35A0406	MD.ABDUR RAUOOF
30	24A31A04J9	APPARI SRAVYA AKSHITHA
31	24A31A04K0	AVULA PURNIMA
32	24A31A04K1	AYNALA BHAGAVATHI SUMEDHA
33	24A31A04K4	BYREDDI BALA
34	24A31A04K5	CHINTA MOUKTHIKA
35	24A31A04K6	DASARI SARITHA
36	24A31A04K7	DEVARAKONDA ELIZIBETH RANI
37	24A31A04K8	DHULIPUDI DURGA MANISHA
38	24A31A04K9	GIDUGU SAI SANDHYANA PRANEETHI
39	24A31A04L0	GUNDA SWATHI
40	24A31A04L1	JAKKAMPUDI JYOSTNA ANJALI
41	24A31A04L2	JETTI KOWSHIKA
42	24A31A04L4	KARRI VARA DEEKSHITHA
43	24A31A04L5	KAVITAPU LAKSHMI PRASANNA
44	24A31A04L6	KESANA SRI VIJAYA MAHA LAKSHMI DEVI
45	24A31A04L8	MASAVARAPU JYOTHSNA BHANUSRI

46	24A31A04L9	MOTHIKI JAYASREE NAGA SAHITHI
47	24A31A04M0	NADIMPALLI BAVITHA KRISHNA SRIJA
48	24A31A04M1	ODURI SYAMALA DEVI
49	24A31A04M2	PENUBOINA HARSHITHA
50	24A31A04M3	PITLA VENKATA NOOKA RENUKA
51	24A31A04M4	POKALA NARAYANI PRIYA HASINI
52	24A31A04M5	SATIVADA NEHA
53	24A31A04M6	SYED SAYYADA AMBAR SALEEM
54	24A31A04M9	ARIGELA VENKATASAICHINNA KARTHIK
55	24A31A04N9	KARANAM SUMANTH
56	24A31A04D5	BEPINA ANITHA
57	24A31A04D7	DONGA SUVARNA
58	24A31A04E2	MAGAPU DEEPIKA
59	24A31A04E3	MORTHA HADHASSA
60	24A31A04E6	PEDDISHETTI BHANU SATYA SRI
61	24A31A04E8	POLEPALLI HARSHA MEGHANA
62	24A31A04E9	PURAM MERCY
63	24A31A04F0	RAMIREDDY HARSHITHA
64	24A31A04F2	SUVVADA MADHAVI
65	24A31A04O0	KESANAKURTHI SRI TRINADH
66	24A31A04O2	MADHURA JASON
67	24A31A04O7	NANISETTI SRI SAI CHETAN
68	24A31A04Q0	SEGU VENKATA SIVA NAGA SAI RUTHESH
69	24A31A0437	GANTA SUBHA GANGADHAR

### Faculty coordinators:.

S.No	Faculty Name	Department
1	DR.CH.VENKATESWARLU	ECE
2	MRS.B.VASANTHA LAKSHMI	ECE





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### ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT

Date: 16.10.2025

### One day Industrial Visit Report

Submitted by Faculty Coordinator: Dr.Ch.Venkateswarlu

Place: BSNL, Rajamahendravaram, Andhrapradesh, India

Date of Visit: 18th October, 2025

Time: 09:00 AM to 03:30 PM

Target Audience: II B.Tech- ECE-I Semester, B& C Sections

Total no. of Students: 53

Total No. of faculty members: 2

Student Coordinators: Mr. S. Santhosh Kumar & Ms. Betha Purna Sri Valli Naga Sai

### **Industrial Visit Students List:**

SNO	ROLL NO	STUDENT NAME
1	24A31A0467	ALLADA RAMYA MEGHANA
2	24A31A0468	BETHA PURNA SRI VALLI NAGA SAI
3	24A31A0471	CHINAGUDABA SRAVANI SAI
4	24A31A0472	DUDA PALLAVI DURGA
5	24A31A0473	GADI MADHULATHA
6	24A31A0475	GARA AKSHAYA
7	24A31A0476	GUDDANTI THANU SREE
8	24A31A0477	KAKI VEERA VENKATA NAGALAKSHMI
9	24A31A0478	KAMADI BHARGAVI
10	24A31A0479	KANURI GOVARDHANA LAKSHMI
11	24A31A0480	KARRI BALA DURGA GOWRI DEEPIKA
12	24A31A0481	KATARI LEKHA SIVA SOWNDARYA

13	24A31A0482	KATTU LILLY
14	24A31A0483	MATTA BHAVYA REETHIKA
15	24A31A0484	MITTANA SIRISHA TEJA
16	24A31A0485	PINAPOTU KAVYA SRI
17	24A31A0487	SANIVARAPU VIJAYA DURGA
18	24A31A0488	SARVASUDDI ASWINI
19	24A31A0489	SHAIK SAMEERA
20	24A31A0490	SOMISETTI NAGA VYSHNAVI
21	24A31A0491	TELUGU DHANYA VARSHINI
22	24A31A0494	YALLA VEENA MAADHURI
23	24A31A0499	BODA ABHILASH
24	24A31A04A0	BODDU ARUN KUMAR
25	24A31A04A2	CHALLA GANESH
26	24A31A04A5	CHINTALA KISHORE SAI
27	24A31A04A8	DONIPATI SHASHANK
28	24A31A04B5	KODURU SHANMUKHA
29	24A31A04B6	KURRA TRISHUL VEERA NAGENDRA
30	24A31A04B7	LATCHUPATULA VASANT KUMAR
31	24A31A04C2	MERALA SRISHANTH
32	24A31A04A2	CHALLA GANESH
33	24A31A04C8	TATI KONDA VYDYANATH
34	24A31A04C9	VASAMSETTI SRI SATYA KUMAR
35	24A31A04D1	YARRAMREDDY KASI SRINIVASA REDDY
36	24A31A04D2	YERRARAPU SAI VAMSI
37	25A35A0407	K.SUSHMITHA
38	25A35A0408	K.PRASANNA
39	25A35A0409	P.ANUSRI
40	25A35A0410	D.SURYA PRAKASH
41	25A35A0411	K.SAI VENKAT
42	25A35A0412	P. KRANTHI KAMAL
43	24A31A04G1	ANUKULI SALMAN RAJU

44	24A31A04H1	JONNADA DURGA KARTHIKEYA
45	24A31A04H3	KANCHARLA RATHNA KUMAR
46	24A31A04H6	KARTHA PREETHAM HARSHAVARDHAN
47	24A31A04H9	KORUKONDA RAVI KUMAR
48	24A31A04I2	KOTTAMSETTI KUMAR SWAMY
49	24A31A04I3	KUPPA VENKATA BHAGAVAN
50	24A31A04I4	LAKAMANA VEERA VENKATA RAM CHARAN TEJA
51	24A31A04I7	NALLAMILLI VENKATA SURYA
52	24A31A04J1	RAYUDU ARAVIND
53	24A31A04J5	TAMILISETTI VENKATA SURI SUBBI REDDY

### Faculty coordinators

CNO	Faculty Name	Department
S.NO	DR.CH.VENKATESWARLU	ECE
1	MRS.P.RAMYA KRISHNA	ECE
2	MRS.P.RAMYA KRISHNA	202

HOD-ECE