Government of India (Bharat Sarkar)
Ministry of Railways (Rail Mantralaya)
(Railway Board)

No. E(MPP)2015/3/22 **New Delhi, Dated 01.04.2019**

Principal Chief Personnel Officer,
All Zonal Railways

Subject: Quality Council India's recommendations/report after assessment the 4 (four) Zonal Railway Training Institutes for evaluating development criteria, assessment, training programs/facilities and grading of all Zonal Railway Training Institutes.

Quality Council India was assigned the task to evaluate development criteria, assessment, training programs/facilities and grading of 4 (four) Zonal Railway Training Institutes.

Accordingly, Quality Council of India (QCI) has assessed 4(four) Zonal Railway Training Institutes i.e ZRTI/ Chandausi, ZRTI/ Udaipur, ZRTI/ Bhusaval and ZRTI/Secunderabad and has submitted report along with recommendations on development criteria, training programs/facilities and grading of Zonal Railway Training Institutes. A copy of the Report submitted by QCI is being sent herewith to be taken as baseline/guideline for development of Multi-DisciplinaryZonal Training Institutes (MDZTIs)/Multi-Disciplinary Divisional Training Institutes (MDDTIs)/Basic Training Centres. Exercise may be undertaken to upgrade the training centres under the Zonal Railways on the basis of various parameters recommended in the Report.

A review will be undertaken in a year to measure the implementation of recommendations suggested by QCI.

D.A: As above

Monica 1/4/2019

(Monica Singh)
Director (MPP)
Railway Board

Scope of service covered in report as per work order No. E (MPP) 2015/3/22 dated Feb 09, 2018

3. Scope of Services:	**Reference as per realigned report**
3.1 Identify input and output parameters for assessment and grading of training centres. · Identify the assessment parameters for various training inputs. · Assess the classroom infrastructure, technology, IT facilities, library, lodging & boarding facilities, facilities for extra-curriculum activities etc. · Identify the parameters to measure the training output of the trainings provided at ZRTIs. · Analyse resource utilization by the ZRTIs including funds.	**Page 31-36**
3.2 Design the matrix of input and output parameters for assessment and grading · Determine and assign weightage to the identified inputs and output parameters for calculation of final grade. · Design the matrix of parameters to enable it to be replicated at other ZRTIs · Prescribe tolerance to deviation from input and output parameters	**Annexxure -1 Criteria of Assessment & Grading**
3.3 Identification of training gaps and ways to address them · Conduct interviews with all the stakeholder viz. trainer, trainees, internal customer, and officers etc. to identify gaps in training. · Collect data from the four ZRTIs to analyse training imparted · Determine data validation process to verify the data provided by ZRTIs · Analyse the quality of trainer, their selection criteria, incentive mechanism etc. · Recommend selection criteria, incentive structure and any other mechanism to attract best quality trainers	**Annexure 1 & Recommendation Page 24, Point 4**
3.4 Develop road map for implementation of assessment and grading parameter for other ZRTIs · Develop a detailed roadmap for implementing the assessment and grading parameters in other ZRTIs across Indian Railways · Suggest phases of implementation	**Page 29 Point 5**
3.5 Prepare the charter of the ZRTI; define the board vision, mission and goal and the way to achieve the same · Prepare a model charter for the ZRTIs · Prepare vision and mission statements , and goal for the ZRTIs	**Page 36, Point 10**
3.6 Determine the Scope for utilization of the ZRTIs for training of external (Non-Indian Railway) customers · Study the Preparedness of the ZRTIs to offer training to external customer. · Develop a brief study to attract external customer on the basis of assessment and grading of ZRTIs.	**Page 35-36 ,Point 9**
3.7 Monitoring and Intervention · Determine the level of monitoring of performance of ZRTIs on various parameters · Suggest categories for grading and threshold for the same · Suggest the intervention strategies for deviation from threshold in various categories	**Page 30-31 ,Point 6**

REPORT
ON
ZONAL RAILWAY TRAINING INSTITUTES

- ZRTI CHANDAUSI
- ZRTI SECUNDERABAD
- ZRTI BHUSAVAL
- ZRTI UDAIPUR

POWERED BY QCI



Acknowledgement

Quality Council of India-National Accreditation Board for Education & Training (QCI-NABET) extends sincere thanks to Senior Officials from Railway Board & Officials of Department of Manpower Planning, Ministry of Railways for sharing their vision, guidance, full support and cooperation for conceptualization of this study. We would also like to extend our sincere thanks to all the ZRTI Principals who participated in the study & provided necessary support to QCI-NABET Team for conducting visits. We truly appreciate and acknowledge the good work done by the Zonal Railway training institutes in accommodating all training requirements requested by Zone/Division and churning out highly trained resources for Indian Railways in spite of various constraints.

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ABBREVIATIONS

S.No	Abbreviations	Description
1	BTC	Basic Training Centre
2	CTIIR	Centralized Training Institutes of the Indian Railways
3	IR	Indian Railway
4	IRTS	Indian Railway Traffic Services
5	IRICEN	Indian Railways Institute of Civil Engineering
6	IRIEEN	Indian Railways Institute of Electrical Engineering
7	IRITM	Indian Railways Institute of Transport Management
8	IRCTC	Indian Railway Catering and Tourism Corporation
9	RI	Railway Institutes
10	NABET	National Accreditation Board For Education & Training
11	PDCA	Plan-Do-Check-Act
12	STC	Supervisor Training Centre
13	QCI	Quality Council Of India
14	TOT	Training of Trainers

1. Executive Summary

Training is an integral part of human resource development programme in almost all organizations. Indian Railway has around 296 training centres including 9 Zonal Railway Institutes (ZRTIs). These centres are imparting compulsory skill and technical training to railway personnel as induction training, promotional training, refresher training and special courses. With a major change and improvement in the education level, experience and exposure of new recruits/staff members who are joining or being promoted in the Indian railways, the Railway Board felt a need for assessing and understanding the requirements of trainings in the present and future context.

There have been considerable efforts from the Ministry of Railways and ZRTIs to enhance the effectiveness of these training institutes. In continuation of the same, the Ministry of Railways sought assistance of QCI-NABET to identify and recommend assessment and grading criteria for the Zonal Railway Training Institutes. After a prelim assessment of 3 institutes in different locations, QCI-NABET submitted a proposal for quality assessment of these training centres. In the first phase (Phase 1), work order for development of criteria and assessment of four (04) ZRTIs namely Chandausi, Bhusaval, Secunderabad and Udaipur was awarded to QCI-NABET via order No. E (MPP) 2015/3/22 dated 09.02.2018. In this context, a study report was to be submitted to the Department of Manpower Planning, Railway Board.

Aim of Study

- To assess & grade the existing ZRTIs and help Indian Railways to keep track of their performance, early signs of operational shortcomings to enable early mitigation, and identify any course correction needed.
- Find out the factual position based on pre-defined criteria.
- To understand the actual constraints which can be addressed on priority at Institute/Zonal/Railway Board Level.

Methodology adopted for Study

A comprehensive methodology was adopted by QCI team for the purpose of the study. An assessment and grading criteria was developed based on six (6) Quality parameters to capture the status of ZRTIs. A Technical Committee then validated the developed criteria based on following parameters-

i. Governance Management
ii. Infrastructure Facility
iii. Faculty and HR
iv. Trainee and Trainer Management
v. Quality Assurance
vi. Innovative practices/Creativity/International Recognition/Social Awareness Activities

An awareness and hand holding session was organized for ZRTI Principals for filling the self-assessment, sharing best practices and sensitization on quality assurance systems. The self-assessed criteria submitted by the ZRTI principals was verified via site visit to each ZRTI, namely, Secunderabad (Moula Ali), Bhusaval, Chandausi and Udaipur by highly experienced

and qualified professionals of QCI. Based on the site visits and analysis of each ZRTI on assessment and grading criteria, a comprehensive report was developed.

Following is an abstract, giving brief on the points of concerns and opportunities along with recommendation for the headway of ZRTIs.

Abstract of Assessment

- **Overall Grade of ZRTIs**

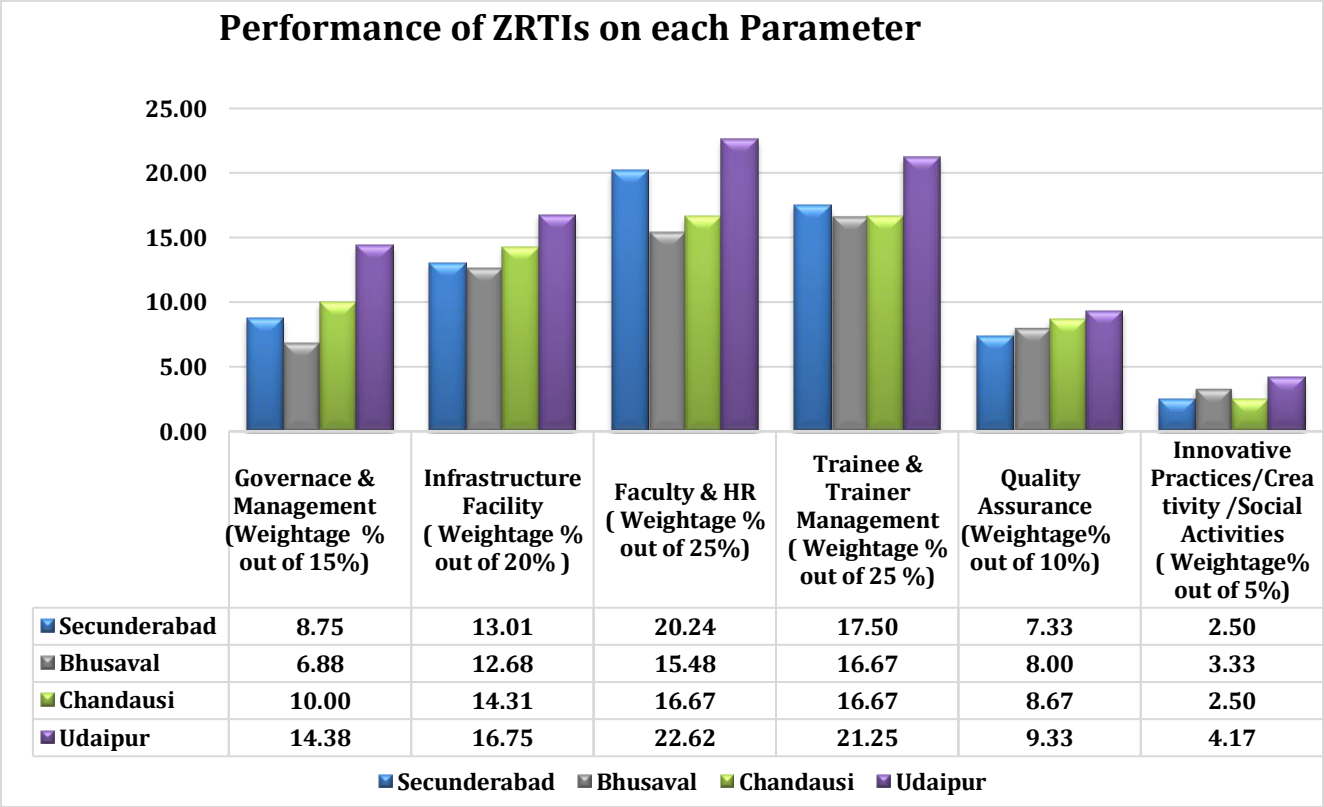
Based on the assessment, following is the overall score and grade awarded to each ZRTI-

ZRTI	Score	Grading
Udaipur	88.49	A
Secunderabad	69.33	B
Chandausi	68.81	B
Bhusaval	63.03	B

*C-Below 60%, B-60% to < 70%, B+-70% to<80%, A- 80% to <90%, A+ -90% and above

- **Performance of each ZRTI against six parameters**

Graph shown below indicates the performance of each ZRTI against six quality parameters–



	Governace & Management (Weightage % out of 15%)	Infrastructure Facility (Weightage % out of 20%)	Faculty & HR (Weightage % out of 25%)	Trainee & Trainer Management (Weightage % out of 25 %)	Quality Assurance (Weightage% out of 10%)	Innovative Practices/Creativity /Social Activities (Weightage% out of 5%)
Secunderabad	8.75	13.01	20.24	17.50	7.33	2.50
Bhusaval	6.88	12.68	15.48	16.67	8.00	3.33
Chandausi	10.00	14.31	16.67	16.67	8.67	2.50
Udaipur	14.38	16.75	22.62	21.25	9.33	4.17

Graph 1: Showing Performance of ZRTIs on six parameters

- **Concern/Constraints and opportunities for improvement in each ZRTI-**

i. ZRTI Secunderabad (Moula Ali)

- ZRTI building requires lot of maintenance like white wash, renovation etc, as seepage was observed at some places of campus.
- ZRTI need to have facilities accessible for differently abled people.
- Cleanliness was one of the concerns in mess, kitchen etc., and requires expansion in sitting capacity, which is currently 204 seats only against 7000 trainee in a year.
- Fire extinguishers were available in few places of ZRTI but no fire alarm exists, a long bell was considered as alarm for fire.
- The classroom did not have proper ventilation; it was crowded and did not have adequate cooling provisions.
- Faculty maintain the website of ZRTI, but none of them has IT expertise. ZRTI need to have dedicated IT staff having knowledge and qualification of both Hardware and Networking.
- Only 52 computers were available for training purpose of UTS, PRS & FOIS. ZRTI also requires an exclusive IT lab with high-speed internet (presently its <2Mbps) with more computers. ZRTI should preferably aim to achieve a complete Wi-Fi and CCTV enabled campus.
- ZRTI needs to form disciplinary and budget estimations committee, need to have proper procedure in place, defining the periodicity etc. A sexual harassment committee was recently formed but no periodicity was defined.
- Zonal auditor in general carries out audit for finance; however, audit is not being done for training part. Internal audit for the training part need to be conducted on regular bases with proper procedures and its finding should be discuss in Zonal head meeting.
- ZRTI has shortage of staff, three (3) posts are lying vacant currently; however, selection process by zonal HQ is under process. No internal staff is available for the maintenance/urgent work and most of the activities are outsourced.
- Only few trainer/faculty have attended training in last 1 year but without any training need analysis. There is need of training on soft skill and teaching methodology for trainer/faculty.
- Trainee/s feedback mechanism was generic in nature and taken at the end of training, no analysis and documentation was done on feedback forms. There is no parameter to assess delivery & effectiveness of training effectiveness.

ii. ZRTI Bhusaval

- ZRTI campus was located in outskirt of Bhusaval town; having its own bus facilities but need other vehicle for emergency, as of now Principal's vehicle was being used.
- Being in digital India/world, complete ZRTI campus should be Wi-Fi and CCTV enabled.
- ZRTI need to form committees like disciplinary, budget estimation, sexual harassment, administrative, mess and examination committee etc. involving persons from different departments and must have proper procedure in place as well as defined periodicity.

- ZRTI building of Bhusaval requires a lot of civil and maintenance work. Old buildings, toilets and hostel need attention towards housekeeping. Hostel and restrooms were dirty and cracks were visible on wall.
- Both classrooms and hostel were overburdened/crowded (might be due to new recruitment by RRB & poor maintenance of some rooms), ZRTI need to expand seating capacity in library along with the hostel and mess.
- As per the fast changing technologies and updated new working practice, Model rooms need upgradation.
- Fire extinguishers were available, however, need to make list of extinguisher with their refiling date and reminder mechanism. Fire alarms need to be installed in Hostel, trainee room, simulation room and other areas of campus.
- ZRTI has 39 vacant posts against 93-sanctioned post. Information regarding the same sent to upper authorities. The post of vice principal was also vacant.
- Presently one set of paper is being designed, there may be examination committee to design three sets of question paper; feedback from the trainee/student can be taken for analysis with respect to examination and if it is conducted in a fair and transparent manner.

iii. ZRTI Chandausi

- Chandausi ZRTI building was constitute in 1925. Except one new recently built hostel, all blocks were old. Rationally, new infrastructure/building may be built, accounting for 10 years planning at least.
- Campus requires lot of maintenance work in old buildings, toilets and hostel. Hostel and restrooms were dirty cracks visible on wall, hence requires lot of civil work. Also, need attention towards housekeeping.
- Since last 3-4 years, there is no permanent Principal in the ZRTI, each hardly stays for maximum less than a year.
- Trainer/faculty were short in number (22/29), even over loaded with additional charges of institute like involvement in mess, hostel, purchase etc. Job responsibilities of faculty need to be define properly.
- ZRTI need to form committees like sexual harassment. Also, need to have the proper documentation & procedure for all other committees. A proper mechanism need to be developed like defining the periodicity.
- Internal Audit for the effectiveness of training needs to be done on regular bases along with proper documentation.
- ZRTI required upgradation of simulation room and SSDC, SSI, UFSBI, ACD Audio-visual training package is less than 50% of course, however, need to standardise & improve these packages.
- The classrooms and hostel were overburdened/crowded, ZRTI need to expand its seating arrangement in library along with hostel and mess.

- Benches and desk along with plastic chair were used in classrooms/training rooms. Plastic chair were being used in the walkways of the classroom to accommodate trainees. Proper seating arrangements need to be made.
- The classroom should have proper ventilation and cooling facilities.
- Fire extinguishers were available however need to make list of extinguishers with their refilling date and reminder mechanism. Fire alarms was available in corridors, need to install in Hostel and other areas of campus.
- Proper signage of electrical circuitry need to be displayed in the simulation room.
- Feedback form was very general; no feedback is taken from trainee on course knowledge, delivery, and training methodology.
- Every trainer/faculty require Training of Trainer program with in the 1 year of joining as instructor. After that, no training need identification & training done, only 25% trainers trained.
- ZRTI need improvement in its quality assurance mechanism, like procedure for Feedback system, complaint re-dressal system, review of training material, record maintaining etc. for exhibiting transparency in system.

iv. ZRTI Udaipur

- ZRTI building in Udaipur was beautiful and quite clean comparative to other ZRTIs; however, maintenance and repair work is required in the bathrooms of hostels.
- ZRTI need to form and define the periodicity of committees like disciplinary, budget estimation, sexual harassment, administrative, mess and examination committee etc. including the person from different departments.
- As a good practice and for exhibiting transparency in system, proper documents, records, agenda, attendance and minutes of meeting need to be maintained.
- Website of ZRTI Udaipur needs to be designed in a structured manner/format, providing all the information like contact address and other details.
- ZRTI needs to expand its seating arrangement in library and mess, as the Library was overburdened.
- Benches along with plastic chair were used in classroom. Proper seating arrangement needs to be made. Chair and desk in the classroom should be ergonomic, suitable for long duration of sitting.
- Fire alarms were present at few places of campus like in corridors, mess etc., however, not available in hostel. Fire extinguisher were available in premises, however need to develop proper evacuation plan marking assembly point and exit path.
- Live size model with full access for technical upgradation of trainee was provided in ZRTI, however, audio-visual training package is for less than 35% of course. Also, need to standardise and improve these packages.

- Presently, 8 posts are vacant that need to be filled at the earliest.
- Trainers were qualified as per railway procedure and possess good technical knowledge but lack computer knowledge and teaching techniques. Every trainer must have to go for TOT with in the 1 year of joining as instructor, based on training need identification & training done.
- Feedback form is very generic in nature and no analysis of the same is being carried out hence need improvement. There is no parameter to assess delivery & effectiveness of training.

Beside these points of concern and opportunities for ZRTIs, following are some common key observations and recommendations for all ZRTIs, though detail has been provided for each parameter in the report.

- **Common key observations in ZRTIs**
  - Inconsistent occupancy pattern across the calendar was observed in classrooms and hostels of ZRTIs.
  - The occupancy pattern varies from 50 % to 120%.
  - Shortage of faculty due to vacant positions in ZRTIs.
  - Very old infrastructure leading to high maintenance requirements.
  - Delay in approvals and their implementation due to multiple nodal points for ZRTIs.
  - Incoherent trainer, trainee feedback system and quality assurance mechanism.
  - Trainers not updated with modern technologies, soft skills due to lack of TOT programs.
  - No standardised audio-visual training content available with the ZRTIs.
  - The setup of the projector and focus was poor and not visible on the white marked area, old presentations were being used.

- **Common Recommendations for ZRTIs**
  - ZRTI building should be constructed in all respects for the intended use as per the local building byelaws related to Institutional Buildings and if local buildings byelaws are not available then the building should conform to the byelaws prescribed for Institutional buildings in National Building Code (N.B.C) of India (Refer to Part 3, Part 4, Part 8 and Part 9).
  - The new infrastructure may be build keeping in account at least 10 years of ahead planning and requirement. The seating capacity per trainee in classroom should not be less than 0.75 m^2 (Refer NBC Vol 1)
  - Beside the old method of training, railways may look for partial training through e learning to reduce the training period. The learning modules can be prepared and made available on website; however, examination can be conducted at ZRTI or any common place.
  - The IT lab should not be less than 25 m^2 for 10 computers and additional 2.5 m^2 for each additional computer. There is a need to strengthen the I.T department of all the four ZRTIs.

There is a considerable need to increase both the terminals (computers) and internet speed in IT labs. The current speed of internet and terminals are not adequate for providing proper exposure to the trainees. The ZRTIs should move towards adopting Wi-Fi in campus with proper monitoring and checkpoints (Firewalls can be installed). The website should be designed considering the guidelines for Indian websites (https://web.guidelines.gov.in/).

- Chair and table in the classroom should be designed ergonomically, be suitable for long sitting and classroom should be have proper ventilation and cooling facilities.
- The ZRTI occupancy matrix is prepared enclosed as **Annexure 2**. The same can be used for identifying the requirements of staff, courses, class accommodation, hostel and others. *For example, matrix showing the requirements for ASM cadre trainee may be referred for estimation for other training programs too.*
- It is recommended that all the four ZRTIs should have quality assurance system procedure for continually improving the content, delivery and effectiveness of training. It could be based on ISO 9001:2015 & ISO 29993:2017 - Learning services outside formal education standard.
- To exhibit transparency in system, proper documents, records, agenda, attendance and minutes need to be maintained by ZRTIs.
- To address the gap of vacant posts and to attract best trainers in ZRTIs, training allowance for ZRTI instructors may be considerably increased. ZRTI may follow the norms as per AICTE w.r.t faculty requirements *i.e.* 1:20 or 1:30 *i.e.* 1 faculty for 20 or 30 trainees.
- Re-employment may be offered to ZRTI Instructors up to the age of 65 years, (e.g.: as in educational institutions) only to those who have served as faculty for 5 years in RI.
- One time Infrastructure Development Fund to be allocated to all ZRTIs. A "Spot Purchase /Infrastructure Development Committee" may be constituted to considerably improve their existing facilities.
- Create separate Head of accounts for ZRTIs so that the budget allocated to division can be used exclusively for ZRTI operations only.
- Identify a central agency responsible for overall mentoring, administration, course updating, Training of Trainer etc. for all the ZRTIs like CTIIR (IRITM, IRISET etc.). An annual meeting with all ZRTI Principals must be conducted to discuss issues and best practices.
- Develop a good quality assurance system and an efficient feedback mechanism for both the instructors and trainees.
- There is an urgent need to strengthen the sexual harassment committees and developing facilities and course material for differently abled trainees across all the four ZRTIs.
- Existing Mess Committee fund of ZRTIs may be renamed as "Facilities upgradation and maintenance fund" and should be used for emergency repair, maintenance and upgradation of existing facilities.

2. Project Overview

ZRTIs have been setup in different zones, across different regions and geographical locations. This diversity may lead to variations in the training output offered by these Institutes. The Ministry of Railways is trying to offer a uniform training input across all the Zonal Railway Training Institutes thereby ensuring continuous improvement and effectiveness of the training programs being offered to the railway personnel.

There is a considerable improvement in the education level, experience and exposure of new recruits/staff members who are joining or getting promoted in the Indian railways. In order to cater to this, a need for assessing and understanding the requirements of trainings in the present and future context was felt by the Railway Board. In this regard and on behalf of Ministry of Railways, QCI-NABET and senior officers/officials of training department of Railway Board shortlisted 3 different types of institutes in different locations to understand the basic conditions of training centres and requirement of ongoing training programmes.

QCI-NABET team, on pro bono basis, visited 3 training centres namely ZRTI Chandausi, Supervisor Training Centre (STC) Bangalore, Regional Welding Training Institute & Basic Training Centre Kharagpur in August 2016 and a visit report was submitted to the Ministry of Railways including key observations and recommendations. On the basis of this report and a subsequent proposal submitted by QCI-NABET, in the First Phase (Phase 1) work order for development of criteria and assessment of four (04) ZRTIs namely Chandausi, Bhusaval, Secunderabad and Udaipur was awarded to QCI-NABET via order No. E (MPP) 2015/3/22 dated 09.02.2018.

2.1 Role of QCI-NABET

QCI-NABET as an independent third-party has developed a suitable & relevant criteria and conducted assessment of 4 Zonal Railway Training Institutes. The procedure adopted for self-assessment and third party evaluation mechanism shall help a forward-looking organization like Indian Railways to keep track of performance of the existing ZRTIs, provide early sign of operational shortcomings, early mitigation and identify any course correction needed. The assessments have been conducted by highly experienced and qualified professionals.

2.2 Scope of Work

(a) Development of Assessment and Grading Criteria

Zonal Railway Training Institutes have many stakeholders and these stakeholders drive the various sections of training. This, clubbed with the wide diversity of geography and culture, makes it an extremely challenging task to come up with a criteria that is suitable for all ZRTIs. A considerable amount of effort of nearly 3 months was spent on developing a draft assessment

and grading criteria for ZRTIs. Senior/retired officials from Indian railways, education & training professionals were identified, personal meetings and brainstorming sessions were held with them to seek their valuable suggestions & inputs. Observations from earlier visits to railway training Institutes conducted by QCI-NABET team in August 2016 were also of great help in developing a transparent and credible assessment & grading criteria.

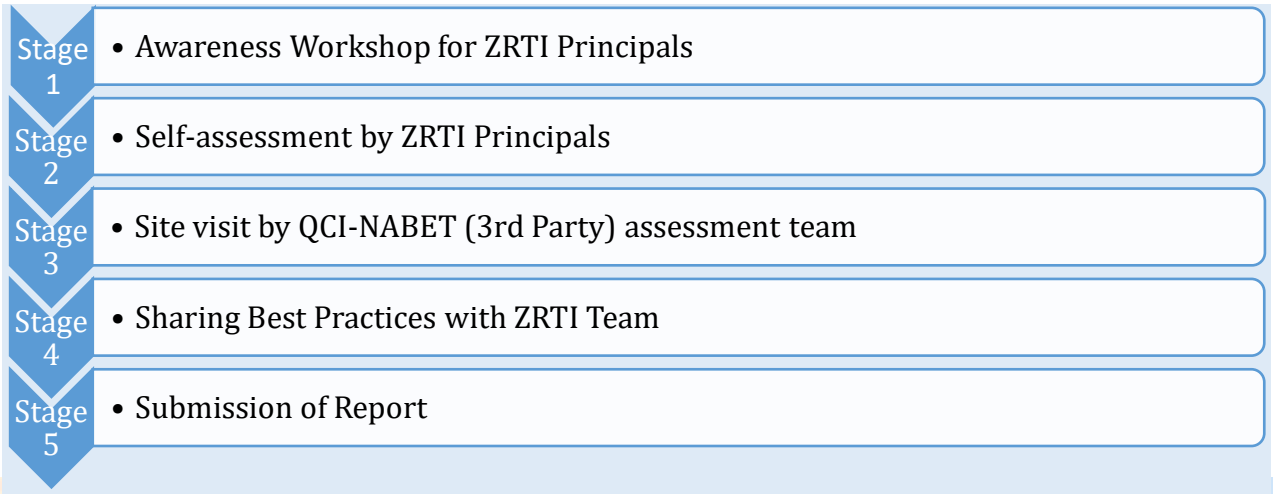
A Technical committee comprising of qualified and experienced members from Indian railways along with experts from education and training background was constituted for their guidance and inputs on the draft assessment & grading criteria. In order to identify the constraints faced by the ZRTIs with respect to space, faculty, infrastructure and other administrative limitations, it was essential to separate and assess all the areas of functioning of ZRTIs individually. The enormous task of bringing all the evaluation parameters in clearly categorized sections was most exhaustive, best practices have also been included in the criteria which can be adopted by the ZRTIs in the near future for continuous improvement.

The Criteria (Refer Annexure –I) is designed to capture the current status of the Institutes w.r.t quality, effectiveness and continual improvements of trainings which depends on primarily following 6 parameters (covered in detail in the criteria):

1. Governance and Management
2. Infrastructure Facility
3. Faculty and HR
4. Trainee and Trainer Management
5. Quality Assurance Procedures
6. Innovative practice Creativity/International Recognition/Social Awareness Activities

(b) Assessment of 4 ZRTIs

Assessment was completed in a phase manner to get the true picture on the status of ZRTIs. The assessment process of ZRTIs was conducted in 5 stages:



Stage Wise flow

Stage 1– Awareness workshop was conducted by the QCI-NABET Team at ASCI (Administrative Staff College of India) Hyderabad for ZRTI Principals. The aim of the workshop was attributed

to self-assessment process, highlighting quality processes and legal requirements of training institute, handholding Principals on assessment and grading mechanism, discussing the 6 important parameters which impact the performance of the Institutes, highlighting the benefits of PDCA Cycle and expectation from Principals during the assessment.

Stage 2 -Self-assessment was done by the ZRTI principal/team of their respective institute. Self-assessment is a constructive strategy for improving the effectiveness of service. It is a powerful technique for improving the capabilities of ZRTIs. The aim of self-assessment was to encourage the ZRTI team to analyse their performance, identify gaps and areas that require immediate attention.

Stage 3- Verification of self-assessment score was done via site visit to ZRTI, interaction with ZRTI faculty, trainees and other stakeholders by QCI-NABET assessment team. The following activities which were a part of the assessment plan were covered by the assessment team during the field visit.

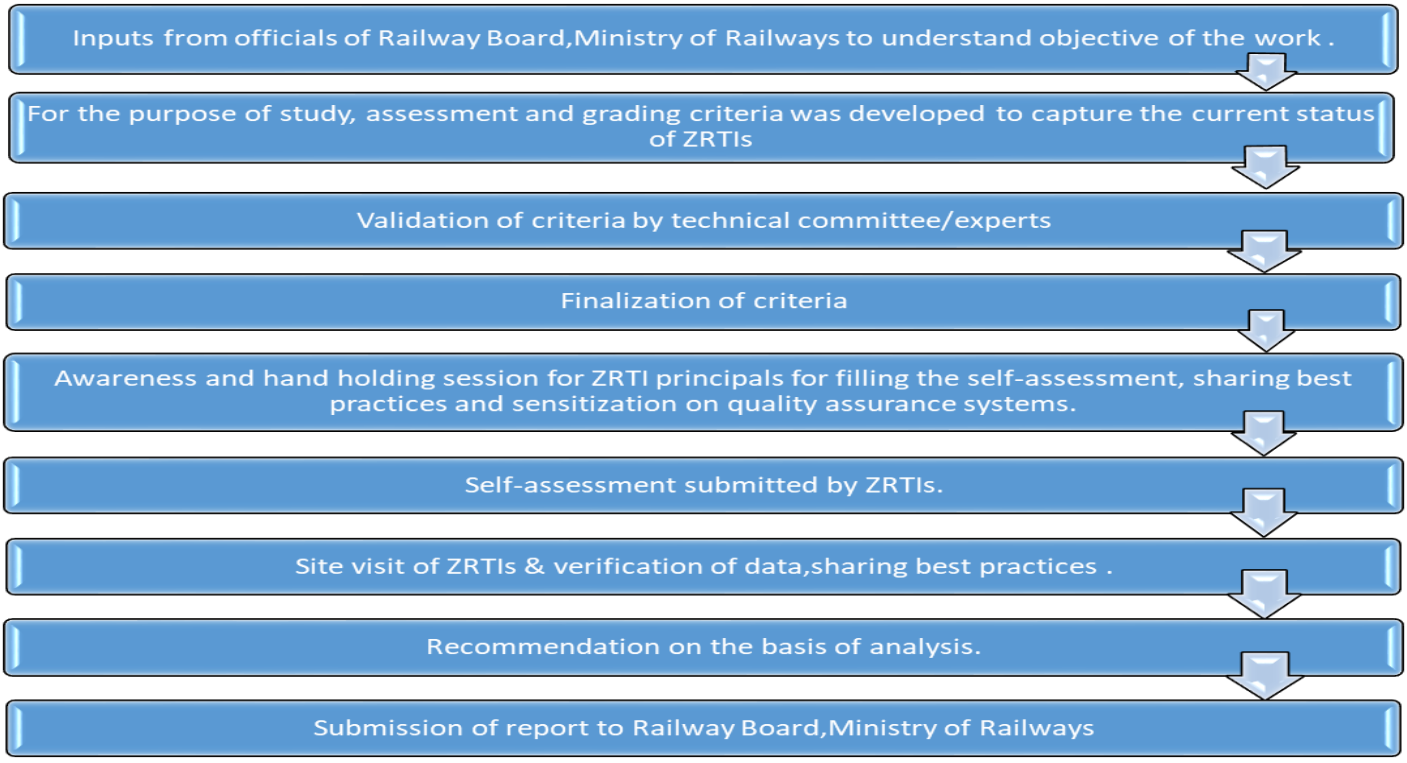
- Official opening meeting wherein a formal introduction of assessment team and ZRTI staff was organized. The ZRTI staff members were appraised about the objective and process of assessment.
- Site visit of complete ZRTI including assessment of facilities like Classrooms, Simulation/Training /Technology Rooms, IT Lab, Hostel, Mess and Facilities used for extra-curricular activities.
- As part of the field visit, QCI-NABET team randomly attended classroom lectures for different courses to observe the training/learning environment.
- The quality of food provided to the trainees was assessed by the team by preferring a working lunch/dinner in the hostel mess itself.
- Interactions/discussions/interviews were conducted with both the trainer as well as trainees to identify the gaps in the training.
- A separate session for open discussions, seeking inputs from trainers regarding motivation, improvements in training methodology, standardization of delivery of training etc. was conducted.
- Feedback from trainees w.r.t to training and infrastructural facilities was informally assessed.
- Reference documents, Office orders, minutes of meetings with respect to the relevant parameters were checked on sampling basis during the assessment.
- Session to share positive findings, opportunities for improvement, assurance with respect to confidentiality of the information shared by the ZRTI and to seek feedback/suggestion on the complete assessment process.
- A closing meeting with the ZRTI staff was conducted to sum up the assessment activity.

Stage 4 –At the end of the assessment, benefits of documentation, collective decision making, effective information sharing mechanism, recommendations, suggestions and best practices were shared by QCI-NABET assessment team with the respective ZRTIs. Following have been suggested to ZRTI Principals in order to ensure total quality assurance in the ZRTIs:-

- Innovative & modern methods of pedagogy which can be adopted by the respective ZRTI.
- Various opportunities for improvement in existing ZRTIs.
- In case of exceptional performance, next level benchmarking was suggested.
- Identifying ways of Intra-institutional knowledge transfer among the existing ZRTI's.
- Identifying the ways of evaluating the trainees & giving feedback that is accepted by all.

Stage 5-On the basis of field visits, assessment of facilities of existing ZRTIs and interactions with various stakeholders, a detailed report with recommendations, suggestions will be submitted to the Railway Board, Ministry of Railways, Government of India, New Delhi.

Chart 1: Process Flow Chart adopted for Assessment & Grading



3. ASSESSMENT ANALYSIS OF 4 ZONAL RAILWAY TRAINING INSTITUTES

3.1 Identifying Assessment Parameters & their Weightage

Members of Technical committee, comprising of qualified and experienced professionals from Railways, education & training background identified that the quality and effectiveness of training imparted by a Zonal Railway Training Institute depends primarily on the following 6 parameters.

S.No	Parameter	% Weightage
1.	Governance and Management	15
2.	Infrastructure Facility	20
3.	Faculty and HR	25
4.	Trainee and Trainer Management	25
5.	Quality Assurance	10
6.	Innovative practices /Creativity/International Recognition/Social Awareness Activities	5

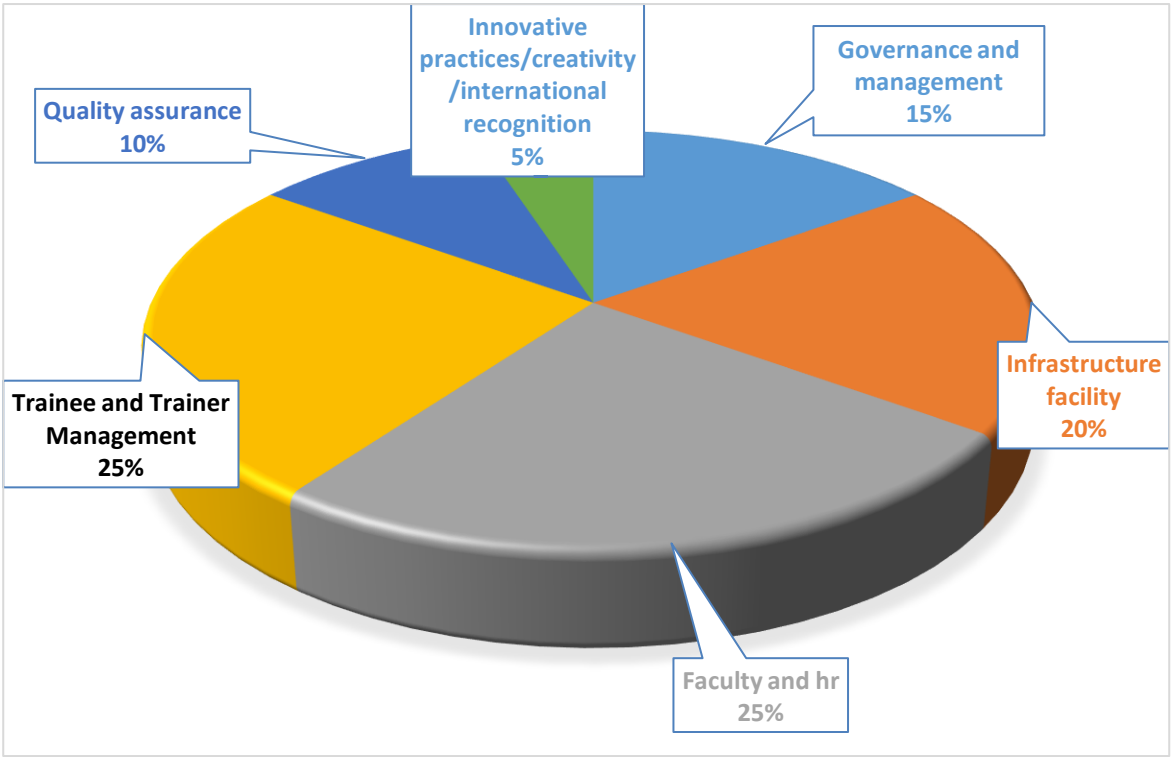
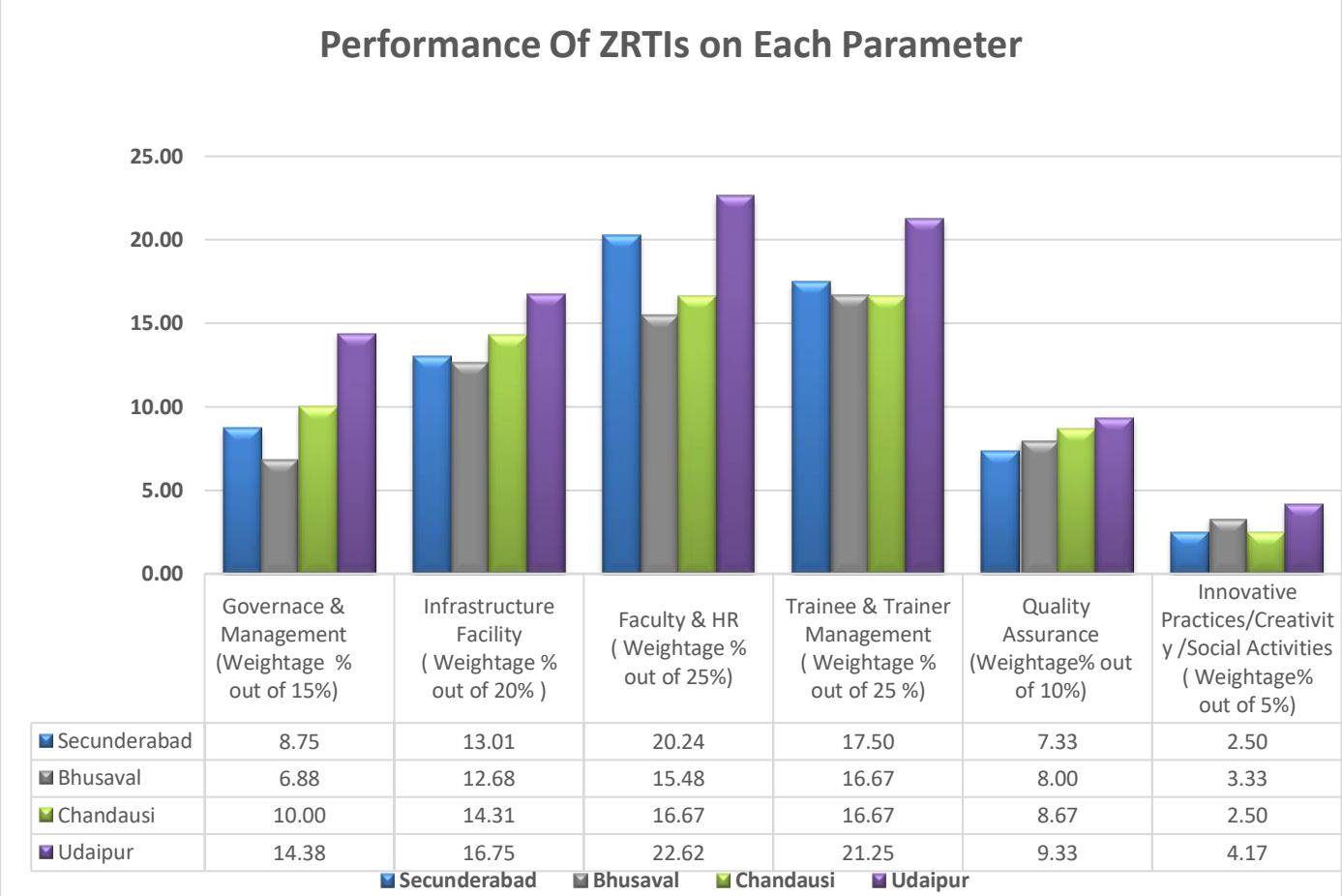


Chart 2- % Weightage of each parameter

The weightage of marks assigned to each parameter has been decided in context of the training quality, effectiveness and continual improvement of railway training Institute

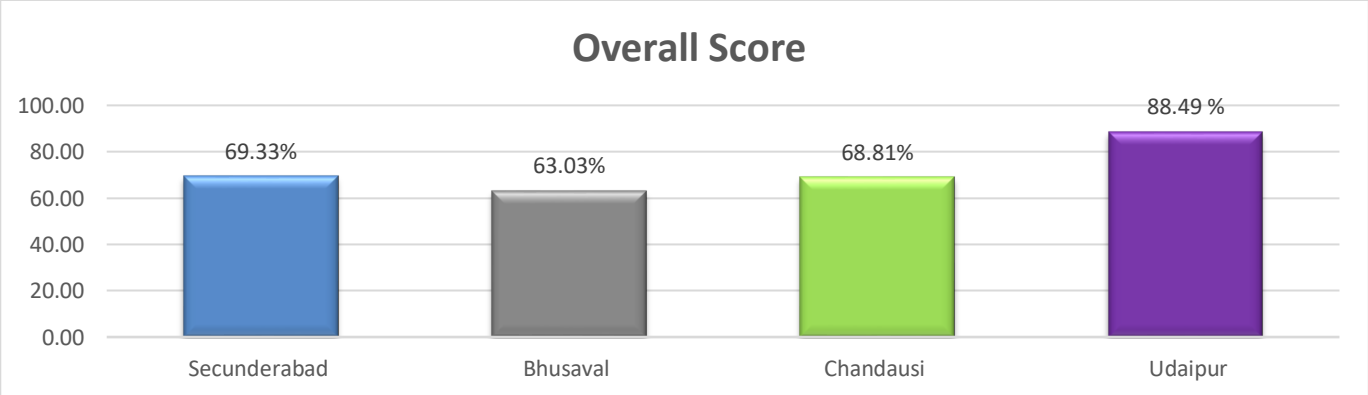
3.2 Performance of 4 ZRTI as per Assessment & Grading Criteria.

The performance and score of each ZRTI as assessed on the assessment & grading criteria has been depicted below in Graph 1 and Graph 2 respectively.



	Governace & Management (Weightage % out of 15%)	Infrastructure Facility (Weightage % out of 20%)	Faculty & HR (Weightage % out of 25%)	Trainee & Trainer Management (Weightage % out of 25 %)	Quality Assurance (Weightage% out of 10%)	Innovative Practices/Creativity /Social Activities (Weightage% out of 5%)
Secunderabad	8.75	13.01	20.24	17.50	7.33	2.50
Bhusaval	6.88	12.68	15.48	16.67	8.00	3.33
Chandausi	10.00	14.31	16.67	16.67	8.67	2.50
Udaipur	14.38	16.75	22.62	21.25	9.33	4.17

Graph 1: Showing Performance of ZRTIs on 6 parameters



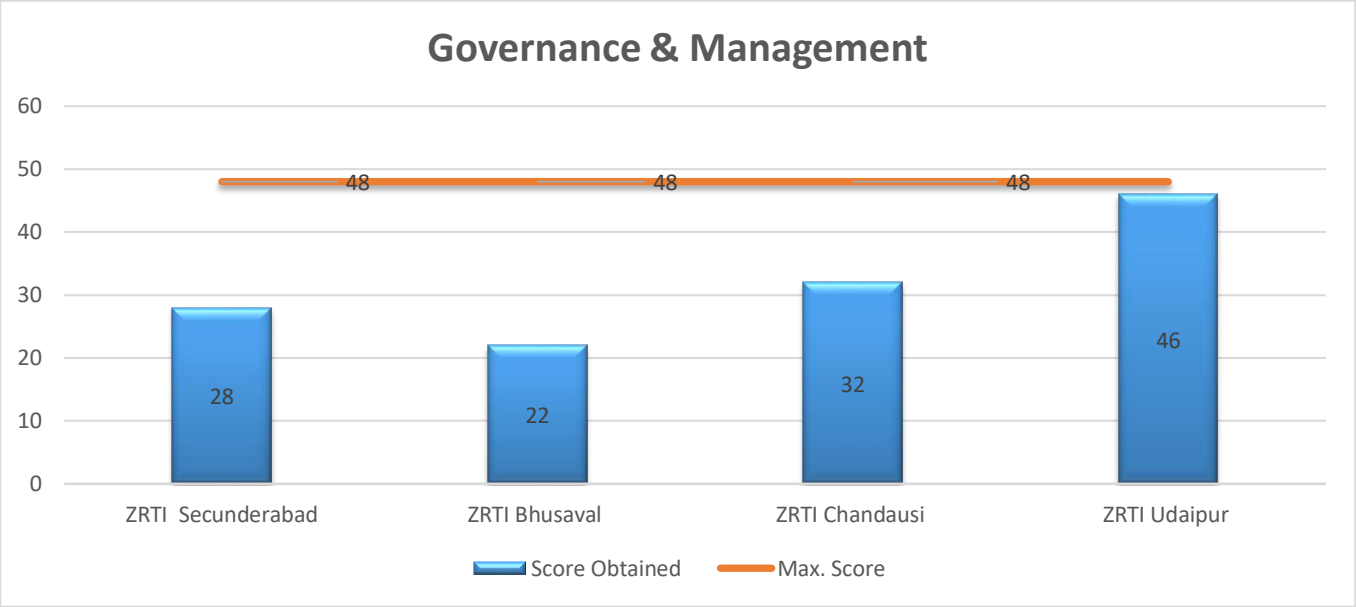
Graph 2: Overall Score of ZRTI

The graph-2 shows that ZRTI Udaipur with 88.49% is leading among all the 4 ZRTIs in terms of the 6 quality parameters of assessment & Grading, followed by ZRTI Secunderabad at 69.33%, ZRTI Chandausi at 68.81% and ZRTI Bhusaval scoring 63.03%.

The assessment, suggestions/recommendations for each ZRTI on the 6 quality parameters have been explained in detail:

3.2.1 Governance & Management:

The aim of governance & management is to provide the Principal/Registrar/faculty member/management committee members an understanding of their roles, responsibilities, duties and to ensure that there is a common understanding among the group for smooth functioning of the institution.



Graph 3: Score of ZRTIs on Governance & Management

Governance and Management, being an important parameter for the basic functioning of an Institution, was allotted 16 questions and 48 maximum marks.

ZRTI Udaipur has a comparatively robust governance mechanism in place. It has a documented & structured organization system with committees for administration, discipline and sexual harassment (though recently formed). A transparent information sharing system both online and through e-dak is in place, the system is well connected with the division & concerned authorities. ZRTI Udaipur also has a defined budget estimation process and effective periodic budget utilization review mechanism.

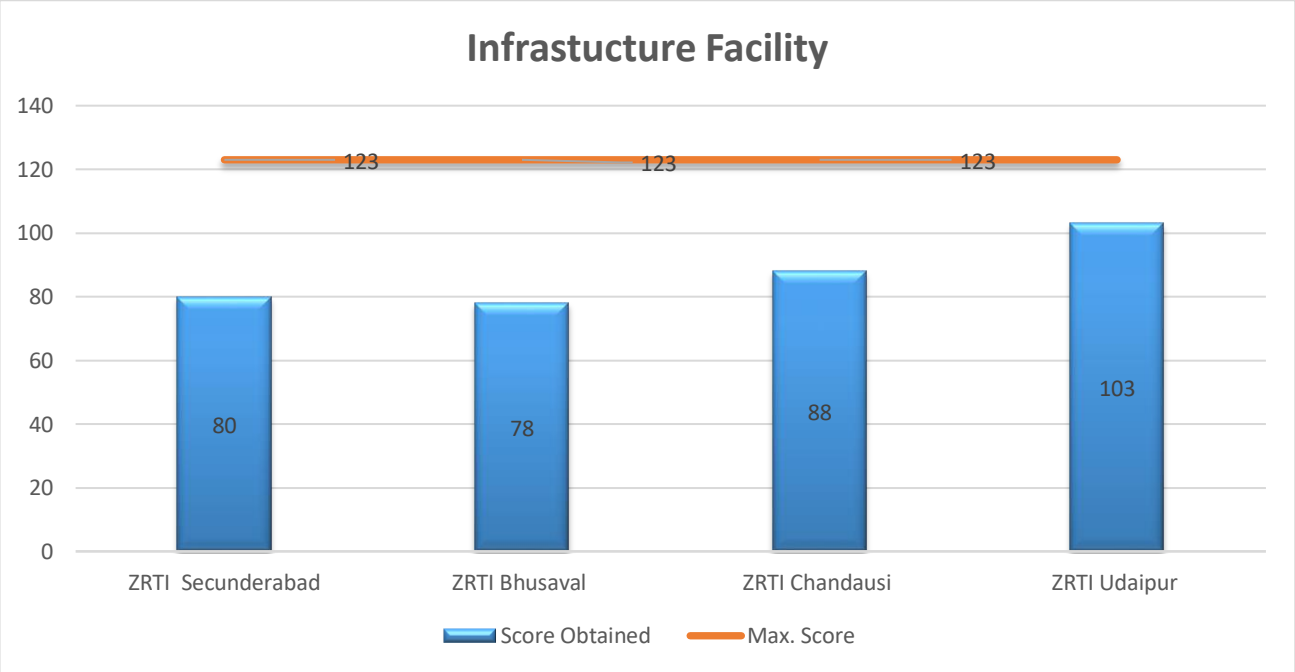
ZRTI Chandausi, ZRTI Secunderabad and ZRTI Bhusaval need to improve on governance and management parameter. These institutes have a formless organization mechanism and there is scope of improvement w.r.t discipline & sexual harassment committees. All these 3 ZRTIs have a relatively weak complaint registration and redressal system as compared to ZRTI Udaipur. Budget estimation, periodic review, internal & external audit systems also need improvement.

3.2.2 Infrastructure

Infrastructure forms the core of any training institute. To optimize investments in training outcome, it is essential to observe the significant role of infrastructure in interacting with other essential training inputs and to be able to undertake comprehensive proposals that together, improve the quality of training.

Quality infrastructure for training institute must at least comply with the following parameters:

- **Comfort for Trainee, Trainer and administrators**: Adequate space for trainer and trainee, proper ventilation & lighting in all classrooms, workshops /model rooms and hostels.
- **Facilities for skill up gradation of the trainee –** library, workshops, simulator room, lab etc.
- **Recreational Facilities for overall development of Trainee -** entertainment, sports, meditation etc.



Graph 4: Score of ZRTIs on Infrastructure Facility

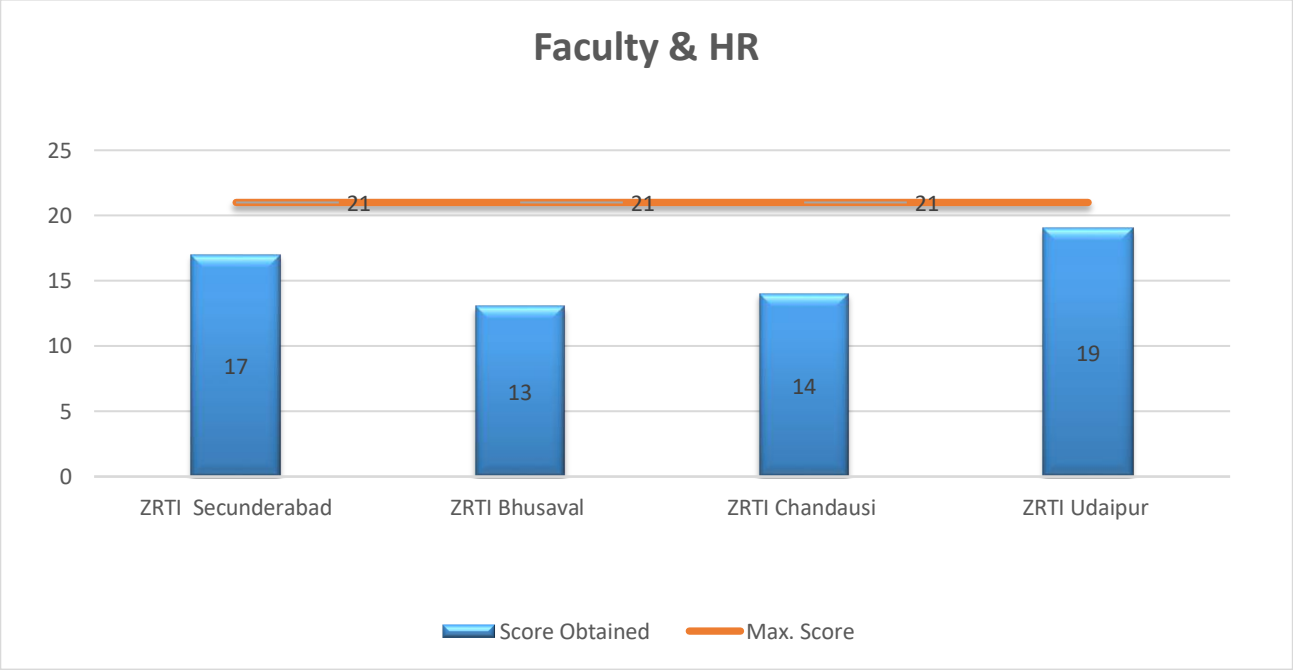
The assessment criteria has 45 questions on this parameter and the maximum marks that any ZRTI could score was 123. ZRTI Udaipur manages to cross the 100 mark and scores 103. In terms of adequate and comfortable infrastructure facilities, ZRTI Chandausi, Bhusaval and Secunderabad

scored less than 90 marks. It is worth mentioning that all the 4 ZRTIs are trying their best to accommodate the extra load of new trainees.

3.2.3 Faculty & HR

All Heads of the Department are required to exercise leadership, demonstrate vision and empower others in order to deliver the agreed departmental strategy within the faculty. It is recognised that the methods by which Heads of Department carry out their duties and the extent of delegation depends on factors such as the size and nature of the departments and the personal approach of the individual Head of Department & faculty.

Head of the institution is required to lead, manage and develop the institute to ensure it achieves the highest possible standards of excellence.



Graph 5: Score of ZRTIs on Faculty & HR

The above graph shows the performance of ZRTIs on Faculty and HR parameter. 7 questions were asked in this section and the ceiling limit for maximum marks was 21.

ZRTI Udaipur scored 19 marks close to the maximum marks which can be awarded followed by ZRTI Secunderabad, ZRTI Chandausi and ZRTI Bhusaval which scored 17, 14 & 13 marks respectively.

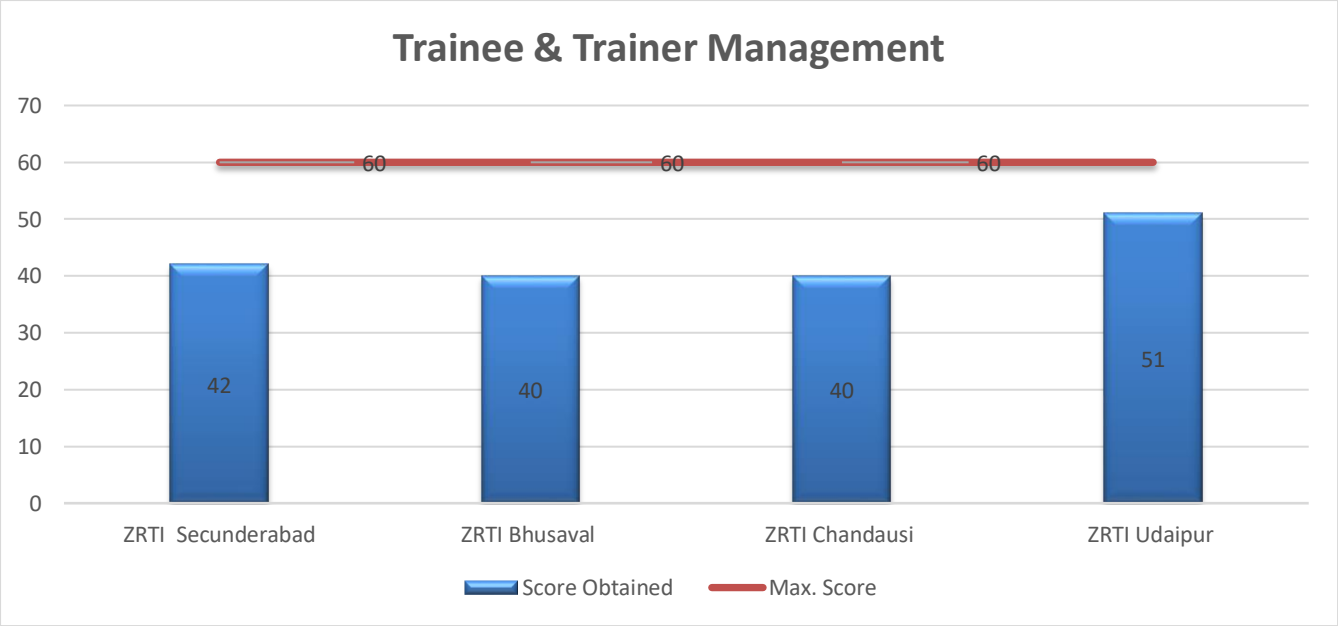
It is worth mentioning that the Head of institution of all the 4 ZRTIs are leading by example and are trying to achieve the highest possible standards in all their activities.

It was observed by the assessment team that shortage of faculty/vacant positions & insufficient Training of Trainer (TOT) programs had direct effect on low scores on this parameter. The performance variation on this parameter may also be linked to completion of full tenure of a qualified & competent Principal at the helm of the affairs. A relevant example of the same was observed at ZRTI Udaipur where previous Principal, an IRTS officer had completed his full 4 years term as ZRTI Principal and was able to create well defined systems and processes which in turn are being maintained and improved by the current Principal. Contrary to this, the systems and processes in other 3 ZRTIs are not streamlined as the previous principals did not complete their full tenure and were not able to strictly enforce the required processes due to their short stay.

3.2.4 Trainer & Trainee Development

In order to ensure that employees are equipped with the right kind of skills, knowledge and abilities to perform their assigned tasks, training and development plays a crucial role towards the growth and success of any organization. To meet current and future railway demands, training and development process has assumed its strategic role and both trainer & trainee need to upgrade their set of skills.

It is important to realize that trainers need two separate sets of skills and knowledge. First, they need to know the topic they are teaching (subject matter expertise). Second, they need to know how to effectively transfer that information to the trainees (instructional expertise).Trainer & Trainee development needs can be addressed by adopting best practices -Latest Training methods for trainee,



Graph 6: Score of ZRTIs on Trainee & Trainer Management

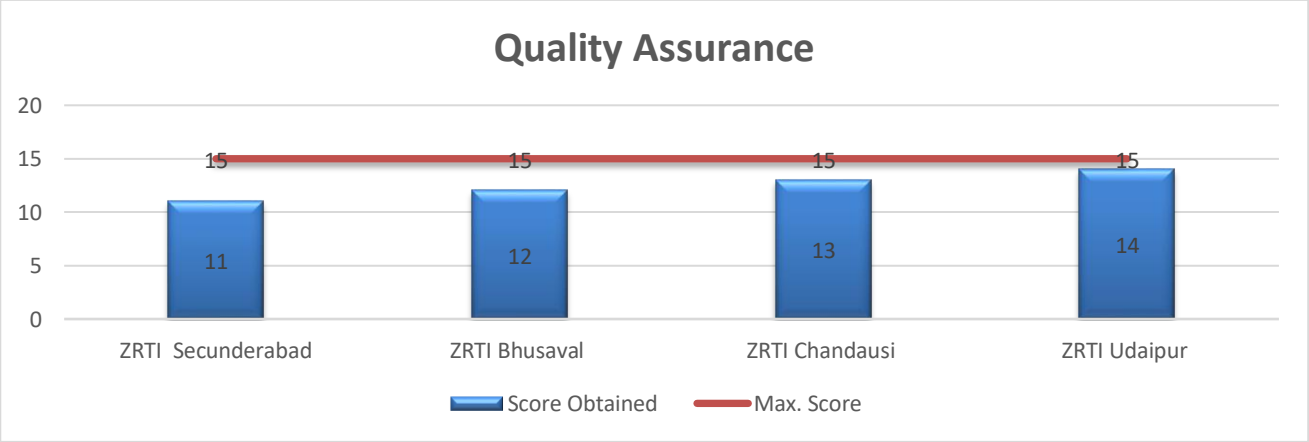
procedure of their evaluation (pre & post training), preparation of training schedule, calendar, course content for training, training need identification of both trainer & trainees, periodically monitoring of training, process of examination (transparency of examination process) trainee motivation , appraisals and performance monitoring.

The above graph shows the performance of 4 ZRTIs on their trainee & trainer management mechanism, 23 questions were asked in this section with a maximum score of 60. ZRTI Udaipur scored 51 marks. ZRTI Secunderabad came a distant second scoring 42 marks followed by ZRTI Chandausi and Bhusaval which were in the same marks category and scored 40 marks each .

3.2.5 Quality Assurance Procedures

Quality Assurance procedures define the application of quality concepts for strategic planning, development, implementation, evaluation and continuous improvement of processes.

Training is a combination of various processes & procedures i.e., the design and development of courses, the selection and appointment of trainers, the selection of trainees, course delivery mechanism, assessment and awarding of trainees, the provision of trainee support services and administration & management of the system as a whole. The quality procedures should be developed on the lines of Quality Management Systems (QMS) as followed in ISO 9001 and ISO 29993.



Graph 7: Score of ZRTIs on Quality Assurance Procedures

All the ZRTI are expected to follow the Railway Board guidelines and procedures. The procedures and guidelines are being followed across all the ZRTIs but they are not being implemented in a uniform and streamlined manner. 10 questions were asked in this section with maximum score of 15 marks.

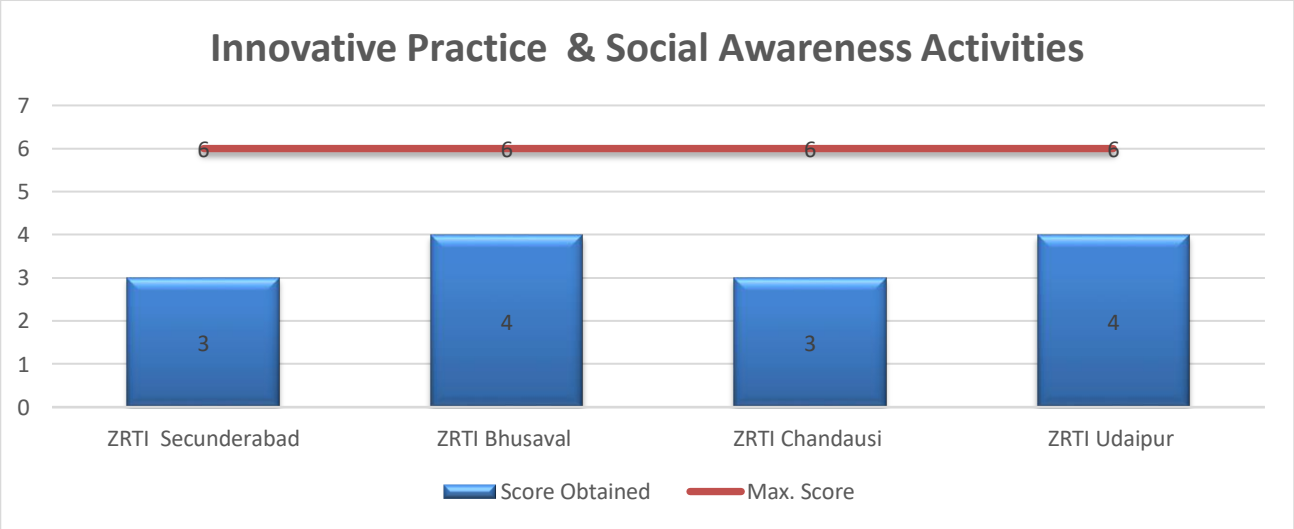
The above graph shows that ZRTI Udaipur leads the pack scoring 14 out of maximum 15 marks on this parameter. It had well written quality assurance procedures, but has a scope of improvement and should aim for perfection by periodic reviewing & monitoring of their quality procedures. ZRTI

Chandausi, ZRTI Bhusaval, ZRTI Secunderabad are trailing with 13, 12, and 11 marks respectively. These ZRTIs need to improve their processes w.r.t implementation of the guidelines and procedures. The focus should be on implementing robust Q.A mechanism to track feedback & evaluation of the content delivery and effectiveness of training programs.

3.2.6 Innovative Practices /Creativity /International Recognition/Social Awareness Activities:

Innovative practice /Social Awareness activities at ZRTI will help in both building a brand and a proactive & positive reputation for Indian Railways. It helps in lowering operational costs, better financial performance and bestows a sense of social responsibility among the trainees towards the society. It also helps in attracting talent and retaining staff for the institution.

Total 6 Questions were asked in this section with a maximum score of 6. The marks were awarded on the basis of different activities/techniques adopted by the ZRTI such as Installation of renewable techniques (solar panel, rain water harvesting, energy conservation, green campus) any social awareness activity (safety, cleanliness awareness drives), ISO certification or any other recognition w.r.t research & development.



Graph 8: Score of ZRTIs on Innovative practice & Social Awareness Activities

ZRTI Bhusaval Scored 4 marks as it is equipped with roof top solar system, Rain water harvesting system, Biogas plant, organises cleanliness and blood donation camps on regular basis and conducts motivational seminars for trainers & trainees. Mohd. Izhaar, Instructor at Zonal Railway Training Institute Bhusaval also participated in a documentary by BBC on World Busiest Railway (http://youtu.be/sONv3nr7dlU).

ZRTI Udaipur has also scored 4 marks. It is equipped with renewable techniques (solar panel), green campus, environmental club with approx. 1000 trees in the campus, it organizes blood donation camps, cultural programs, and donated RO plant in a nearby Govt. school.

ZRTI Chandausi scored 3 marks in this section. It has rainwater harvesting system , LED Lights in all common facilities, lush green campus with clear sign boards including railway technical instructions for remembrance, organizes seminar for trainees on child trafficking identification & rescue, organises cleanliness drives and awareness programs for school children.

ZRTI Secunderabad scored 3 marks in this section. It has rain water harvesting system, solar panel system. ZRTI Secunderabad has developed a dynamic android based mobile application by name ZRTI MLY .This app can be downloaded from google play store for free. It contains information about railway rules, day to day circulars, important JPOs, animated videos on train operation, power point presentation on various projects, safety slogan for the day & course schedule etc.

4. Recommendations & Observations on 6 Parameters

Present study has been carried out through physical verification of 4 Zonal Railway Training Institutes by QCI-NABET. The results of study have indicated areas to be addressed by various stakeholders in terms of policies, improving the conditions/working and ensuring overall improvement in training offered by the Zonal Railway Training Institutes.

Some key recommendations w.r.t the 6 quality parameters have been defined below.

4.1 Governance & Management

1. For emergency situations, repairs & maintenance and for improvement of infrastructure (including facilities in mess) etc.an emergency fund be placed at the disposal and discretion of the Principal of respective ZRTI. Most of the ZRTIs have a 'Mess Committee Fund', used for this purpose. The nomenclature of this fund may be changed to "Facilities Upgradation & Maintenance Fund". Use of this fund may be widened to cover all aspects of training, hostel, mess, class room maintenance, and infrastructure improvement in the ZRTIs.
2. Skeleton support staff with authority should be earmarked for proactive & regular maintenance of ZRTIs, thereby reducing the high dependence on divisional resources.
3. To motivate the ZRTIs to reach external customers for training and generating revenue, ZRTIs should be allotted a part of these funds as welfare fund on sharing basis of 60:40. Currently all the funds generated by external trainings(for example trainings offered to DMRC, Konkan Railways etc. by ZRTI Udaipur) are directly sent to their respective divisions.
4. There should be a central nodal point (agency) responsible for monitoring the administration and management of all the ZRTIs. Multiple nodal points (as observed during the assessment) are slowing down the process of approvals and implementation.

5. As head of the institutions, the ZRTI Principals should ensure that the committees responsible for discipline, addressing sexual harassment, administration and budget review are transparent and credible in nature.
6. ZRTI Principals should also ensure that the records of the meetings like agenda, MOM should be well maintained and archived properly so that the same are readily available during self-assessment and future audits.
7. Complaint escalation matrix chart should be prepared by the respective ZRTI and should be displayed on the notice boards of campus as well as hostel. The practice shall encourage the trainees to approach the competent authorities without any hesitation and shall also help in reducing the complaint redressal response time.

4.2 Infrastructure

1. All the classrooms especially in ZRTI Chandausi and Bhusaval were found to be functioning with around 120% occupancy. To address this variation, may refer to occupancy estimation matrix (**Annexure -2**). Proper cooling arrangements (Water Coolers/Air-conditioners) should also be made available in the class room to ensure a comfortable learning environment.
2. The occupancy of hostels in 2 ZRTIs namely Chandausi and Bhusaval is also relatively high and stands at more than 120%. Keeping in view this high occupancy, there is an immediate need of construction of new hostels in both these institutions. The new infrastructure should be created taking into account at least 10 years ahead planning and requirement.
3. There is scope of improvement w.r.t housekeeping of ZRTI, cleaning & maintenance of toilets & bathroom of the hostels in all the 4 ZRTIs. In order to keep track of cleanliness activities of these facilities, "Cleaning checklists" should be displayed and reviewed on regular basis by ZRTI staff. It is also recommended that the housekeeping facility in all the 4 ZRTIs may be outsourced to professional housekeeping agencies.
4. Due to overcrowding, the shortage of furniture was quite evident especially in ZRTI Chandausi. Immediate procurement of comfortable furniture (benches) for trainees is recommended .The same can be procured by a committee under the DRM consisting of ZRTI Principal, senior officials. The committee must have strict timelines and discretion to make purchases as per the needs of the training institute.
5. With the recruitment of differently abled personnel in Indian Railway, It is recommended that both the infrastructure & training facilities be developed for these personnel.
6. Modern/new generation simulators and working models (like latest USFB, signalling blocks etc.) should be made available as they provide real time experience to trainees especially for courses like loco pilot and traffic. It is recommend that ZRTIs should develop in-house working models with the help of instructor and technical support staff from division.

7. There is a need to strengthen the I.T department of all the 4 ZRTIs. There is a need to considerably increase both the terminals (computers) and internet speed in the IT lab. The current speed of internet and quantity of terminals is not adequate for providing proper exposure to the trainees. The ZRTIs should move towards adopting Wi-Fi campus with proper monitoring and checkpoints (Firewalls should be installed).
8. One common trend which was observed was that a considerable amount of time and energy of the principal is spent on managing the affairs of the ZRTI mess facility. This facility is either run by the institution through a mess management committee or is outsourced to a third party. It is recommended that either the mess for all the 4 ZRTIs should be handed over to a department like IRCTC or it may be outsourced to third party vendors empanelled by railway board.
9. Best practices like providing smart cards to trainees for availing the mess facilities, as available in ZRTI Bhusaval should be adopted by other 3 ZRTIs as well.
10. As part of ensuring safety for both the trainees and trainers, first aid box must be installed in workshop/simulator room/model rooms and visual charts w.r.t safety guidelines/Dos and Don'ts must be displayed.
11. Formal documented, safety drills and awareness programs should be made a part of the trainee induction program itself.
12. Accident registration system of all the 4 ZRTI is very weak. No record of accidents, near miss is maintained. Proper documented record of the same needs to be maintained by the concerned staff and reviewed by the ZRTI principal for implementing suitable safety precautions.
13. One time lump sum amount should be allocated for upgrading the existing infrastructure of all the 4 ZRTIs and thereafter the ZRTI should be self-reliant for maintenance of its infrastructure.

4.3 Faculty & HR

1. In order to attract the best quality trainers and to fill up the vacant posts a substantial training allowance should be offered to the instructors. With the abolition of sumptuary allowance and revision of training allowance by the railway board in July 2017, the current training allowance for ZRTIs stands at 12% of the basic pay as compared to 24% of the basic pay which is offered to Centralised Training Institutes like IRICEN, IRIEEN and IRITM etc. The difference between 2 categories of institutions is huge and it is suggested that the training allowance of ZRTI instructors should be increased considerably if not at par with the CTIIR.
2. In order to address the gap of vacant posts and to attract best trainers in ZRTIs, Re-employment may be offered to ZRTI Instructors up to the age of 65 years (e.g.as adopted in educational institutions). The opportunity for re-employment should be given to those who have served as an instructor/chief instructor in railway institute for minimum 5 years.

Vacancies filled through re-employment should be capped at maximum 10-15 % of the total vacancies.

3. Though the tenure for both the head of the institution and instructors has been fixed by the railway board, but the practical implementation of the same on the ground for at least the principal is still a challenge. Being the head of the institution, a visionary in his own capability, the minimum tenure of principal fixed by the railway board should be enforced strictly. The position of head of the institute should preferably be offered to highly competent IRTS officers only.
4. Vacant posts of instructors/admin/support staff should be filled on immediate basis as it is a major concern with respect to the quality of training offered by the 4 ZRTIs. Though the institutes are trying their best to cope with the shortage of instructors, additional responsibilities being given to them apart from teaching has lead to a gap in training.
5. Guest faculty (Retired Railway Professionals/Chief instructors/Technical Subject Matter Experts) can be engaged on honorarium as a stop gap arrangement to tackle the shortage of instructors. An internal committee constituted by the ZRTI principal and senior officials from the respective division shall be responsible for designing a procedure for selection of the guest faculties in transparent manner.

4.4 Trainee and Trainer Management

1. Continuous upgradation of their trainers is a prime need of Indian railways which is moving towards modern technology and has to cater to a new set of trainees with improved skill set and knowledge. Currently the training of trainer programs conducted by ZRTIs are not sufficient. TOT Programs should be conducted on regular basis for existing instructors of ZRTI, the frequency of these programs should be fixed at least once in 2 years for each faculty. The aim of the programs should be to upgrade both the soft as well as technical skills of the trainer.
2. Inter knowledge transfer among all the 4 ZRTIs is most important, faculty exchange programs (at least for one month) should be planned for ZRTIs. The same shall help in sharing the best practices adopted by the faculty of each ZRTI.
3. The process of paper setting and evaluation should be standardized across all the ZRTIs. In some ZRTIs, the papers are being set and evaluated internally within the institute while in others the respective division is responsible for the same. A centralized examination system will ensure transparent and robust trainee evaluation.
4. During the visits, some gaps in training w.r.t to the training delivery were observed. There is no standard audio-visual module which is followed across all the ZRTIs. Individual presentations and videos on the basis of the knowledge of the respective faculty is prepared and delivered. A standard audio-visual training package for the all the courses should be

developed by the Centralised Training Institutes of Indian railways (IRITM, IRICEN, IRIEEN, etc.) /competent central agency and the same be delivered across the ZRTIs.

5. To ensure homogeneity and standardization in the training material this nodal agency should meet all the ZRTIs least once in a year.
6. There is a scope of improvement in all the 4 ZRTIs w.r.t towards ensuring a robust feedback mechanism for both the instructors and trainees. Currently, different trainee feedback forms are being used to track the performance of the instructor. A centralized feedback system is recommended to track and analyse the performance of instructors of all the ZRTIs. Feedback of the trainee from the division where he is posted should also be captured after the training.
7. Sessions for motivation and stress management should be scheduled for both trainee and trainer.

4.5 Quality Assurance Procedures

It is recommended that all the 4 ZRTIs should have quality assurance system procedures for continually improving the content, delivery and effectiveness of training. It could be based on ISO 9001:2015 & ISO 29993:2017 –Learning services outside formal education standard, however quality assurance procedure of the institutes should have the following procedures:

1. Procedure for evaluating, selecting and appointing instructors.
2. Procedure for organizing and conducting training programmes.
3. Procedure for collecting feedback, analysis and evaluation of feedback for improving the content, delivery and effectiveness of future trainings.
4. Procedure for addressing complaints, suggestions and conflict of interest.
5. Procedure for periodic review of case studies accidents, near miss incidents the curriculum and training materials.
6. Procedure for maintaining records and documents related to training.

4.6 Innovative Practices/Creativity/International Recognition/Social awareness activities

Best practices of one ZRTI w.r.t Innovative practices/Creativity/International recognition and social awareness activities should be acknowledged, appreciated by Railway Board and same should be adopted by other ZRTIs. For example a mobile application for the purpose of training & technical upgradation of Railway Personnel and information dissemination was developed by ZRTI Secunderabad. ZRTI Chandausi organizes seminar for trainees on child trafficking identification & rescue, it organises cleanliness drive and awareness program for school children. With respect to innovation, Incubation centre/research facilities should be set up, the focus of these facilities should be to encourage both the staff and Trainees to get their research work registered, patented and copy right. The focus should be on conducting other social activities like

Blood donation camps, disaster management training, hygiene & sanitation training programs etc.to improve the public visibility of the existing ZRTIs.

5. Proposed Road Map for Implementation of Assessment & Grading Parameters For Other 5 ZRTIs in 2nd Phase

Implementation of assessment & grading parameters for other ZRTIs will be done in 6 phases.

Phase I: Awareness program & interaction with ZRTI Principals regarding objective of assessment & grading program. Phase 1 covers the awareness & handholding session for Principals of ZRTI for filling self-assessment, sharing best practices and sensitizing on quality assurance system.

Phase II: Submission of self-assessment by ZRTI Principals to QCI-NABET. A desktop assessment of submitted self-assessment will be done by QCI-NABET officials. Any shortcoming found in self-assessment will be communicated to respective ZRTIs.

Phase III: After complete study of self-assessment reports of all ZRTIs, site assessment on the basis of submitted self-assessment will be planned by QCI-NABET. A tentative plan for on-site assessment of ZRTIs will be shared with respective ZRTIs for their readiness & consent. Site assessment of respective ZRTIs will be conducted to validate their self –assessment.

Phase IV: On the basis of site assessment a detailed report will be compiled covering actual facts & findings of assessment. The reports shall also include key recommendations for improving the performance of ZRTIs.

Phase V: Final submission of the report with key recommendations & detailed study to the Railway Board, Ministry of Railway, Government of India.

Phase VI: Periodic surveillance assessment will be carried out after completion of one year.

Timeline for Mentioned Phases:

S.No	Implementation Phases	Time Frame
1	I	2 Weeks
2	II	2 Weeks
3	III	4 Weeks
4	IV	4 Weeks
5	V	2 Weeks
6	VI	Periodic Surveillance assessment after one year

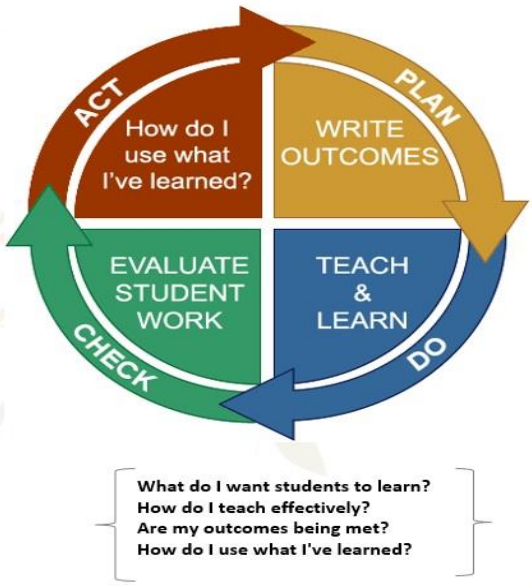
List of ZRTIs to Be Covered:

S.No	ZRTI
1	Zonal Railway Training Institute -Bhuli (ER)
2	Zonal Railway Training Institute-Muzaffarpur (ECR)
3	Zonal Railway Training Institute-Alipurduar Jn(NFR)
4	Zonal Railway Training Institute-Trichy(SR)
5	Zonal Railway Training Institute-Sini(SER)

6. Monitoring & Intervention

Monitoring & evaluation intervention are integral and individually distinct parts of programme preparation and implementation. They are critical tools for forward-looking strategic positioning, organizational learning and for sound management.

Both monitoring and evaluation are meant to influence decision-making, including decisions to improve, reorient or discontinue the evaluated intervention or policy; decisions about wider organizational strategies or management structures; and decisions by national and international policy makers and funding agencies. A mechanism of periodic monitoring & evaluation of ZRTIs is necessary to track the performance of ZRTI on quality, governance, training, trainer & trainee development, infrastructure and other performance effective parameters. PDCA (Plan do Check & Act) Cycle (as explained in Chart-3) should be adopted internally by the ZRTI to track their effectiveness.



PDCA stands for Plan-Do-Check-Act, it's a cyclical method for continuous improvement of processes.

Plan: Write well defined teaching outcomes in the improvement plan(Eg: Training Calendar, adopting modern methods of Pedagogy ,Trainee Feedback etc.)

Do: Execute the improvement plan i.e. Teach and Learn and stick to the plan .

Check: Evaluate the Student/Trainee learning .

Act: Find the learnings and Integrate a process improvement plan into the system

Chart-3 PDCA Cycle

Along with the PDCA cycle, a 3 level monitoring mechanism should also be enforced by the Railway board to track the effectiveness of ZRTIs. The 3 levels are explained below.

Level 1: Internal assessment (By internal/inter- departmental staff of ZRTI) to be conducted quarterly.

Level 2: Departmental assessment (By team of higher Railways divisional Official/Railway board Official) to be conducted bi- annually.

Level 3: Independent 3rd party assessment once a year.

7 .Categories of Grading & Threshold

A 5 level grading mechanism has been adopted to evaluate the performance of ZRTIs

S .No	Grade	Percentage Range	Grading Description
1	C	Below 60%	Significant improvement needed on all parameters. Needs high Attention.
2	B	60%- <70%	Quality of work is satisfactory, improvement needed on minimum 3 parameters
3	B+	70% -<80%	Overall quality of work good but improvement needed on 1 or 2 parameters.
4	A	80%-<90%	Overall quality of work very good. Scope of improvement to achieve excellence.
5	A+	90% and above	Overall quality of work is excellent . Institute should aim to achieve world class level.

Grading Matrix

8. Grading Criteria for Assessment Showing Input, Output Parameter and Process Parameters

S.No	Grading Parameter	Type of Parameter
1	**Governance & Management**	
1.1	Organizational structure	Process
1.2	Discipline Committee (to look into academic misconduct/ violations of rules and regulations of ZRTI)	Process

1.3	Sexual Harassment Committee	Process
1.4	Administration Committee to ensure transparent administration	Process
1.5	Information Sharing mechanism (to ensure transparency)	Input
1.6	Is the complaint redressal mechanism in place?	Input
1.7	Complaint redressal response time	Output
1.8	Annual Activity plan/ chart for Training Activities and review (Training, Trainee, Trainer/ Faculty/Staff)	Input
1.9	Publication of Annual Report/Annual Magazine/Journal	Output
1.10	Website of ZRTI	Output/Input
1.11	Budget estimation process.	Process
1.12	% Budget Utilization in last three year	Output
1.13	Availability of budget for local/routine maintenance activities of ZRTI	Input
1.14	Periodic review of budget utilization	Process
1.15	Internal & External Audit	Process
1.16	Internal Revenue generation Plan	Input
2	**INFRASTRUCTURE**	
2.1	**Institute**	
2.1 .1	Location & Connectivity of the ZRTI	Input
2.1.2	General Ambience (SWACH ZRTI)	Input
2.1.3	Institute building & it's maintance	Input
2.1.4	Toilets (Separate Staff, Trainee , Boys , Girls)	Input
2.1.5	Drinking Facilities	Input
2.1.6	Power Back up	Input
2.1.7	Medical Facilities	Input
2.1.8	Occupancy Of Classroom, Workshop & Lab	Output
2.1.9	Library	Input
2.1.10	Reading room seating capacity	Input
2.1.11	No. of Computer in computer lab (Course ,Training)	Input
2.1.12	Availability of internet	Input
2.1.13	Legal System And application Software	Input
2.1.14	Model/Simulation Room	Input
2.1.15	Audio –Visual Trainings package as per training	Input
2.2	**Hostel**	
2.2.1	Hostel building & it's maintenance	Input
2.2.2	Separate Hostel /Accommodation for both boys & girls Trainee	Input
2.2.3	Hostel occupancy	Output
2.2.4	Availability of full time Hostel warden	Input
2.2.5	Availability of toilets & bathrooms in hostels	Input

2.2.6	Light & Ventilation of Hostel rooms	Input
2.2.7	Upkeep / hygiene of hostel and rest room	Process
2.2.8	Accident registering system and availability of first aid	Input
2.2.9	Fire safety and emergency preparedness	Input
2.2.10	Availability of notice board for circulars	Input
2.2.11	Common room with provision of TV, Railway magazines, Sports magazines, newspaper, journals and recreational game	Input
2.2.12	Housekeeping (Housekeeping staff: trainee ratio)	Output
2.2.13	Mess Management Committee	Input
2.2.14	Mess facilities suitable as per no. of trainees	Output
2.2.15	Food preparation and Serving method	Input
2.2.16	Ventilation and light in the kitchen	Output
2.2.17	Number and condition of utensils	Output
2.2.18	Replacement procedure of utensils and its implementation	Process
2.2.19	Dining area ventilation and light	Output
2.2.20	Hygiene of Kitchen & dining area (unhealthy smells, cob webs, garbage lying around, rodents, general upkeep of the area)	Output
2.2.21	Dinning arrangement for trainees	Process
2.2.22	Mess Complaint & Feedback	Process
2.2.23	CCTV in institute (Examination hall, Mess, Hostel common area, corridors etc.)	Input
2.2.24	Fire alarm	Input
2.2.25	Warden's residential facility	Input
2.2.26	Common room with provision of TV, sports magazines, newspaper, journals and recreational game	Input
2.2.27	Menu display – including diet chart, quantity of nutrition in grams and calories, entitlement as committee	Input
2.3	Sports Facilities	Input
2.4	Yoga Hall/ Meditation Facility	Input
2.5	Fitness Centre/Gym Facility	Input
3	**FACULTY AND HR**	
3.1	Head of Institutes (Principal)	Input
3.2	Staff Record	Process
3.3	Trainer/faculty positions vacant against sanction post	Output
3.4	Measures taken to overcome staff shortage	Process
3.5	Qualification of Trainers/Faculty	Input
3.6	Competency of Trainer/Faculty	Process
3.7	Experience of Trainer /Faculty in Railway (other than training) *Other specific Module	Input

4	**TRAINEE AND TRAINER MANAGEMENT**	
4.1	Defined Method of Training	Process
4.2	Trainee (s) Pre- Evaluation/Defined Prerequisite	Output
4.3	Trainee (s) Evaluation.	Output
4.4	Transparency in conducting Examination	Process
4. 5	Preparation of Training Calendar	Input
4.6	Course content Material	Input
4.7	Feedback From Trainee(s)	Output
4.8	Procedure for creating awareness regarding Service rules and regulations for trainees and trainers	Process
4.9	Attendance record of trainees	Process
4.10	Evaluation & Assessment of Trainee	Output
4.11	Record of performance of trainees	Output
4.12	Procedure of Appraising trainees for their exceptional performance	Output
4.13	Training need identification for Trainer & faculty	Input
4.14	Trainings attended by Trainer/faculty in last one year per discipline	Process
4.15	Trainee counselling and motivation	Process
4.16	Monitoring of the training program	Process
4.17	Trainee feedback on trainer performance	Output
4.18	Trainee Outing & Refreshment tour during training	Input
4.19	Pass Out Rate	Output
4.20	Performance review after training From concern departments on job	Output
4.21	Achievement And upgradation of skill after training	Output
4.22	Annual Function	Process
4.23	Convocation Ceremony of Institution pass out	Process
5	**INSTITUTE QUALITY ASSURANCE MECHANISM**	
5.1	Procedure for evaluating, selecting and appointing faculty members for the training institute.	Process
5.2	Procedure for organizing and conducting training program	Process
5.3	Procedure for collecting feedback regarding delivery and effectiveness of training program	Process
5.4	Procedure for analysis and evaluation of feedback for improving the content, delivery and effectiveness of future training program	Process
5.5	Procedure for addressing complaints, suggestions and conflict of interest.	Process

5.6	Procedure for periodic reviewing the curriculum and training materials	Process
5.7	Procedure for maintaining records and documents related to training.	Process
5.8	Procedure of Internal assessment and documents related to training at different Workshop /Onsite /On Job etc.	Process
5.9	Procedures adopted to maintain impartiality	Process
5.10	Procedures adopted to exhibit transparency	Process
6	**Innovative Practices /Creativity/International Recognition/Social Awareness Activities**	
6.1	Use of renewable techniques in campus (Solar panel, rainwater harvesting, Energy conservation Green campus etc.)	Input
6.2	Special Achievements	Output
6.3	Demand Driven Research & Development , innovation	Input
6.4	ISO Certification	
6.5	Any Patent Register	Output
6.6	Social/ Awareness Activities (contribution by ZRTI towards social cause example Cleanliness drive, Railway safety awareness for local residents etc.)	Output

9. Proposed Scope of Utilization of the ZRTIs for Training of External (Non-Indian Railways) Customer

The scope of external training for existing ZRTI is being recommended on the basis of their assessment and grading, their location, educational institutions and industrial units around these ZRTIs. External trainings which can be conducted are as follows –

1. 3 to 6 Months summer training programs for Engineering Students (Mechanical, Electrical, Electronics & Communication, and Civil) can be conducted for engineering colleges which are located within 10 km radius of the ZRTIs.
2. Training programs on EHS (Environment, Health & Safety) and Industrial Safety - ZRTI Bhusaval has a huge potential to conduct these training programs for Thermal Power Station, Ordnance Factory Bhusaval and Orient Cement Grinding unit.
3. Training on Quality Improvements in Schools/ITIs/Polytechnics.
4. Training programs on Safety for Rail Users.
5. Training programs on Energy Conservation for Industrial Units (MSMEs)/Residential welfare associations.
6. Training programs for Metro Rail Corporations, example-training programs conducted by ZRTI Udaipur for DMRC.

7. Training Programs for Technical Staff/Engineers of Railway Contractors
8. Training Programs for Staff of Dockyard/Container yard working closely with Indian Railways
9. Training programs on Food Safety and Sanitation for IRCTC.
10. Training programs on Catering Inspections specially designed for IRCTC staff.
11. Training programs on Lean and 5S for MSME Units.
12. Training programs on Quality Management Systems.

10. Proposed Model Charter of the Zonal Railway Training Institutes

10.1 Vision – To empower railway personnel with multi-disciplinary skills by investing in the state of art technology with the aim of improving the safety, reliability and efficiency of Indian Railways.

10.2 Mission- To develop an apex institute for training, catering to the dynamic professional & technical needs of Railway Personnel; aligned with the vision of modernisation of Indian Railways.

10.3 Goal

- To Train railway personnel for smooth and efficient operations of multi-disciplinary & composite system of Indian Railways with ultimate goal of ensuring safety of passengers, Railway personnel and Railway property.
- Foster a learning environment in which the values, goals, and learning styles of all trainees are recognized and supported.
- Imparting theoretical and practical training to fresh recruits and refreshing the knowledge of existing working employees to improve their professional competence.
- To motivate and educate the ZRTI staff at all levels to develop their innovation skills for effective teaching.
- To inculcate discipline, habits of cleanliness with weekly" shramdan" promoting team spirit and values of collective effort for institute's social and environmental need.
- Keeping pace with changing technology trends and enhancing traditional instruction with technology to prepare the trainees for success on the field.
- To identify, based on an informed perception of Indian Railways, Zonal/Divisional needs, areas of specialization upon which the institute can concentrate.

ANNEXURE 1

Criteria for Assessment & Grading

Zonal Railway Training Institute

Grading Criteria

Developed by National Accreditation Board for Education and Training

Under Quality Council of India

Zonal Railway Training Institute Grading Criteria

Name of the ZRTI:

Date of Self-Assessment: Date of On-Site Assessment:

Grading from score 0-3 marks.

0 denotes non-availability and 3 denotes the highest ranking.

0 denotes lowest & 1 denotes highest ranking, (Wherever there are two options of score of 0 & 1 only)

EVALUATION SUMMARY

EVALUATION RESULT=

NABET

ZRTI Grading Breakup

S.No	PARAMETER	No. of Questions	Weightage Assigned (%)
1	GOVERNANCE AND MANAGEMENT	16	15%
2	INFRASTRUCTURE FACILITY	45	20%
3	FACULTY AND HR	7	25%
4	TRAINEE AND TRAINER MANAGEMENT	23	25%
5	QUALITY ASSURANCE	10	10%
6	INNOVATIVE PRACTICES/CREATIVITY/ INTERNATIONAL RECOGNITION/SOCIAL AWARENESS ACTIVITIES	6	5%
	TOTAL	**107**	**100 %**

NABET

GENERAL INFORMATION:

S.No.	Information required	Relevant information
1	Name of ZRTI:	
2	Governing/Controlling Division :	
3	Date of establishment:	
4	Institution In charge	
5	Charter of establishment	
6	Defined Mission:	
7	Defined Vision:	
8	Objective of Institutes	
9	List of stakeholders in the establishment and administration of the Training Institute	
10	No. of Sanctioned posts in ZRTI (Faculty , Administration , Management)	
11.	No. Of Vacant post in ZRTI	
12.	No. of Courses offered/conducted in 2017-2018	
13.	No. of Courses planned in 2018-2019	
14.	Total No of trainees trained from 2017 to till date	

GRADING MATRIX

S. No.	Activity/Item	Allocation criteria	Documentation related to marks (Indicative list for guidance)	Self - assessment score by ZRTI	Verification of Self-assessment score via field visit by Assessment Team	Ref.doc. / Remarks
1		**GOVERNANCE AND MANAGEMENT**				
1.1	Organizational structure	0= organizational structure not defined/not available. 1= organizational structure available and staff hierarchy defined. 2= organizational structure with staff hierarchy available and list of key Management staff with their contact detail is on display board/public domain 3= organization structure with well-defined management policies, roles and responsibility of each staff defined in accordance to the institution.	Organization Chart. *InDocumentation Form * Document Stating Roles & Responsibility of Organization and Stake holder and member			
1.2	Discipline Committee (to look into academic misconduct/ violations of rules and regulations of ZRTI)	0=no such committee(s) exist 1= Committee with representation from all the stake holders is in place and meets at least once every year 2=Committee meets every six months in a structured manner 3= Committee meetings are held every quarter, as and when required, whichever is earlier and findings are reviewed.	*List of members, Agenda communicated, MOM etc.			

1.3	Sexual Harassment Committee	0=no such committee(s) exist 1= Committee with representation from all the stake holders is in place and meets at least once every year 2=Committee meets every six months in a structured manner 3= Committee meetings are held every quarter, as and when required, whichever is earlier and findings are reviewed	*List of members, Agenda communicated, MOM etc.			
1.4	Administration Committee to ensure transparent administration	0=no such committee(s)or subcommittee(s) exists 1=committee with representation from all the stakeholders ,well-defined (Terms of reference) is in place and meets once in a Year 2= the committee meets/review status every 6 months 3=committee meets/reviews status in a structured manner every 6 months and even earlier as and when the requirement arises	*List of member of committees *MOM of last 3 meetings. *Evidence Implementation of meeting outcome. *Action Taken			
1.5	Information Sharing mechanism (to ensure transparency)	0=no mechanism to share the information with management and stakes holders 1= Information Sharing mechanism is in place and information shared with management & various stakes holder through mail, letter or website/public domain etc. 2= Information system includes announcement of the various schemes/events/issues/courses/activities on ZRTI /Zonal Railway website 3=In addition to the above information sharing mechanism, a system to share information	*Official Letters *Website notification * Communication with various division			

		regarding course implementation and selection of Trainee with all the divisions is also in place.				
1.6	Is the complaint redressal mechanism in place?	0=No such written procedure /mechanism exists 1=Written procedure /mechanism is there to redress complaints. 2= Categorization of complaint/ misconduct w.r.t nature of violation is well defined and a committee is there to review into various complaints and complaint categories 3= Complaint registered , action taken by the committee and reports communicated to concerned person/division/Authorities	List of member of committees *MOM of last 3 meetings. *Evidence Implementation of meeting outcome. *Action Taken * Complaint Escalation matrix chart			
1.7	Complaint redressal response time	0=usually more than a month* 1=within 1 week* 2=within 3 days* 3=within 24 hrs* *depending upon the nature & category of complaint as mention in redressal system (for e.g. Matter of misconduct, serious complaints , clear cut violations)	*Complain record /Register *Level of complain *Documentation (letters, MOM)regarding complain action and Redressal *Copy of Procedure listing nature of complaint and corresponding response time allotted to it.			

1.8	Annual Activity plan/ chart for Training Activities and review (Training, Trainee, Trainer/ Faculty/Staff)	0=Activity plan/chart not available. 1=Annual activity chart developed for all the trainings in consultation with stakeholders 2= Activity review system also in place and monthly review done by all the members in accordance to a Plan (As per training Man-days) 3= Optimum feasibility analysis done and more than 90% adherence to the Annual Activity Plan/Chart achieved by the ZRTI.	*documentation of Annual Plan, For annual activities. *Optimum feasibility analysis of activity plan * monthly review plan and format is available for all the staff and activities * Notice Boards (Admin Block; Hostel; Guest House)			
1.9	Publication of Annual Report/Annual Magazine/Journal	0=no annual report ever published/ annual report was published once is last 3 years 1= Annual report is under publication and is published at least once every two years 2=Annual report published every year. 3=Annual report published every year contain all information about course completed, no. of trainees trained, evaluation analysis of training activities , Achievement of institutes, latest Innovation, new courses announced.	*Documents of Annual Reports /Magazine *Distribution List of it.			
1.10	Website of ZRTI	0=Website for ZRTI not available /Non – Functional 1= The Information/Link w.r.t ZRTI website is available on the divisional or zonal railway website	*Website observation, AMC Contract of Vendor			

		and the same is updated and maintained on regular basis. 2= The ZRTI has its own dedicated website with full information of institute , infrastructure , facilities, Faculty & Hr detail , Courses detail ,activities, RTI and contacts. 3= Website for ZRTI is regularly updated and monitored by a dedicated IT Personnel/Cell with well-defined roles & responsibility.	Name of the Official handling the maintenance of the website with previous log requests.			
1.11	Budget estimation process.	0=budget estimation is not carried out whatever the Division allots is accepted by the ZRTI 1= budget estimation is carried out at ZRTI admin level every year and submitted to Division. 2=budget estimation is carried out at ZRTI admin level every year in consultation with various stakeholders and depending on current requirements and future plans the same is submitted to Division. 3= Budget estimation submitted by ZRTI every year shows continual improvement	*list of member of budget estimation committee *MOM of last 3 meetings *Step taken for implementation of committee decisions			
1.12	% Budget Utilization in last three year	0=budget utilization is 30% or less of approved budget 1= budget utilization is 31-50% of approved budget 2= budget utilization is 51-70% of approved budget 3= budget utilization is more than 70% of approved budget	*Documentation in support of shortfall			
1.13	Availability of budget for	0=No maintance budget available in the ZRTI, all requests are routed to respective division for necessary action.	*Supporting Documents			

	local/routine maintenance activities of ZRTI	1= maintenance budget is earmarked and is used as and when needed for maintenance activities of the ZRTI. 2= maintenance budget and a skeleton staff is assigned for maintenance activities of the ZRTI. 3=along with maintenance budget and dedicated staff, a committee setup by the principal monitors requirements, activities and expenses of the budget.				
1.14	Periodic review of budget utilization	0= review of utilization is not carried out at all. 1= Budget review committee is in place and review meeting takes place in every six months 2=budget is reviewed quarterly by the review committee 3= budget is reviewed monthly by review committee	*records of budget utilization *utilization certificates *Regular budget utilization internal review report MOM ,Agenda ,MR			
1.15	Internal & External Audit	0= No such audit takes place 1=Internal Audit done by institute audit team once in a year 2= Audit done by railway board official team (Other than institutional) at least once in a year 3= Audit done by railway board official team at least once every year and independent third party audit once in two year.	*list of auditor in internal/external audits *MOM Of audits * reports of audits			
1.16	Internal Revenue generation Plan	0=No internal revenue generation plan available. 1=Potential customers for revenue generation identified. 2= Institutes capability with respect to available resources analysed and action plan developed.	*MOM *Action plans & step taken			

		3=Foreseeing the future opportunities and developing an evolving revenue model with risk analysis				
2		**INFRASTRUCTURE**				
2.1	**Institute**					
2.1 .1	Location & Connectivity of the ZRTI	0=more than 5 km outside of the city limits 1= ZRTI is situated in the city or well connected to city. 2= ZRTI has Transport facilities appreciably as per strength of institutes (Own & Rented) for better connectivity. 3=ZRTI has Separate Transport Facilities for student & staff	*Supporting Documents			
2.1.2	General Ambience (SWACH ZRTI)	0= ZRTI is not well maintained, walls are damp, in need of whitewashing, proper plastering, inadequate hygiene and cleanliness. 1= ZRTI is maintained with respect to basic facilities and hygiene. 2= ZRTI is well maintained, neat and clean corridors and reception, adequate availability of dustbins, proper signage board and paved approach road. 3= ZRTI is well maintained, neat and clean corridors and reception, adequate availability of dustbins, proper signage board ,paved approach road ,well maintained Garden/Lawn with dedicated/part time Gardener .	*Visual Verification & documentation			

2.1.3	Institute building & it's maintance	0= No Building and maintenance Team/ Committee constituted to oversee the building condition & it's maintance 1= Subcommittee /Team /Committee in place to oversee the building condition & its maintenance with records of planning for new /renovation /maintance of building available. 2 = committee in place and all building drawings, maintance plan, details of assigned maintance staff are available. 3=Committee in place and Building Completion Certificate by the competent authority/Building safety certificate/compliance as per building safety rules /certificate from competence Authorities available with the ZRTI	*Committee information *Updated building certificate & other documents. MOM of committee meeting			
2.1.4	Toilets (Separate Staff, Trainee , Boys , Girls)	0=Facilities are available for usage at a single point of time for up to 3% of total trainee & staff strength. 1= Facilities are available for usage at a single point of time for 4%-8% of total trainee & staff strength 2= Facilities are available for usage at a single point of time for 8%-12% of total trainee & staff strength with proper Cemented /tiles floor /plastered walls /tap water facilities and availability of disabled friendly Toilets	*Visual Verification & documentation • Availability of Ramps for disabled friendly Toilets. • Availability of Proper support near the Toilet Seat.			

		3= Facilities are available for usage at a single point of time for more than 12% of total trainee & staff strength with proper Cemented /tiles floor /plastered walls /tap water facilities and availability of disabled friendly Toilets	• Proper cleanness schedule and AMC available with fully supported staff.			
2.1.5	Drinking Facilities	0=Basic drinking water facilities available. 1=Treated Drinking water facilities with water coolers and filters available but not proportional to staff & trainee. 2=Drinking water facilities with water coolers, UV & RO facilities available and proportional to staff & trainee. 3= Drinking water facilities with water coolers, UV & RO facilities available and proportional to staff & Trainee .The Facilities are regularly serviced ,maintained and monitored	*Visual Verification & documentation AMC of Water Purifier ,Service Bills and Documents .Suitable Position /Easily accessible			
2.1.6	Power Back up	O= No power back up available 1= Power back up for Offices and classroom only 2= Power back up for all institutional building (All blocks , Labs , workshop & all rooms, hostel mess & common room) 3= Power back up for all institutional building (All blocks , Labs , workshop & all rooms)& Hostel building (All Rooms)	*Visual Verification & documentation • Record of separate wiring wherever back up connection is available.			
2.1.7	Medical Facilities	0= No medical Facilities available 1=Only first aid facilities & ambulance available(Owned or Tie Up with nearby Hospital) 2=Medical facilities available(tie up with nearby hospital (Pvt or Govt.) or with a visiting doctor)	*Visual Verification & documentation • Medical emergency numbers on			

		3=In-house medical facility available with the ZRTI (Dispensary, Clinic with at least a MBBS qualified doctor)	display on notice boards. • First Aid Kit • Help Manual for Staff/Students on usage of First Aid Kit.			
2.1.8	Occupancy Of Classroom, Workshop & Lab	0= if less than 50% or above 120% (As per Training man day) 1 = if more than 50% <70% 2= if more than 70%<90 3= if more than 90%<120% *(Marks for More than 100% occupancy will be allotted subject to availability of extra infrastructure for Trainees)	*Visual verification *Course Occupancy • Classroom capacity and allotted no's of trainee ratio record. • Availability of Study Desk • Desk Conditions • Utilization per month.			
2.1.9	Library	0= No library facility available 1 = Fully equipped library with reference books, Course books, and Journals available. 2= Fully equipped library with both national and International publications, courseware, Case studies, success stories, railway Journal, posters and magazines available. 3= Fully equipped library with both national and International books, courseware, railway Journal	*Visual verification of Library. *Book issuing register *Books inventory * List of books			

		and magazines available along with Digital Subscription(E- journal) for at least 30:1 trainee ratio .				
2.1.10	Reading room seating capacity	0= if no reading space 1= if reading space is 10% of total trainee 2= if reading space is 11%-25% of total trainee 3=if reading space is >25% of total trainee	*Visual Verification *List of furniture and student attendance report of library			
2.1.11	No. of Computer in computer lab (Course ,Training)	0= If student to computer ratio is less than 100:10 of total trainee strength. 1= If student to computer ratio is 100:10 but <100:20 of total trainee strength 2= If student to computer ratio is 100:20 but <100:30 of total trainee strength. 3= If student to computer ratio is 100:30 or more of total trainee strength	*Visual verification *List/Records of computer, computer classes.			
2.1.12	Availability of internet	0= No internet connection available/internet speed less than 2 mbps 1= Internet connection available with 2-4mbps speed 2= Internet connection available with 4-8 mbps speed. 3= Secured Wi-Fi enabled ZRTI campus with more than 8 mbps internet speed with internal /external firewall for restriction of access to unwanted content or websites by the Trainees .	*Verification of internet speed *Internet service provider contract/documentation /Bills			
2.1.13	Legal System And application Software	0= if no legal software /pirated software used 1= legal software(system & application)	*Visual Verification & documentation			

2.1.14	Model/Simulation Room	0=No such room or Simulation equipment available 1=If Model & Simulation is there 2=Model & simulation room is updated with latest /present techniques w.r.t railway 3=live size model, working of model with full access for technical upgradation of trainee. (*Required as per training programme)	*Model Room /Simulation room verification. *Working condition of Model *Technology on which model based on			
2.1.15	Audio –Visual Trainings package as per training	0=If no training package available. 1= if training package is available for 10-15% of courses 2=if training package is available for 16-35%of courses 3= if training package is available for more than 50% of courses	*Visual Verification & documentation			
2.2	**HOSTEL**					
2.2.1	Hostel building & it's maintance	0= No Building and maintance committee constituted to oversee the building condition & it's maintance 1= committee in place to oversee the building condition & its maintenance with records of planning for new /renovation /maintance of building available. 2 = committee in place and all building drawings, maintance plan, details of assigned maintance staff are available. 3=Committee in place and Building Completion Certificate by the competent authority/Building safety certificate/compliance as per building safety	*Visual Verification & documentation			

		rules /certificate from competence Authorities available with the ZRTI				
2.2.2	Separate Hostel /Accommodation for both boys & girls Trainee	0=No separate hostel facility available 1=Separate hostel facility for both boys & girls available	*Visual Verification & documentation			
2.2.3	Hostel occupancy	0= if less than 50% or above 120% (As per Training man day) 1 = if more than 50% <70% 2= if more than 70%<90 3= if more than 90%<120% *(Marks for More than 100% occupancy will be allotted subject to availability of extra infrastructure for Trainees)	• Availability of Table .Chair ,Amirah • Availability of Lockers for Trainee • Room Capacity occupancy a key parameter to ensure the grading. • Availability of Proper Beds and Mattresses for Trainees			
2.2.4	Availability of full time Hostel warden	0= if no hostel warden available in hostel 1= Additional charge of hostel warden given to an existing staff (lives outside/ inside the Campus) 2= full time hostel warden available (stays outside the hostel campus) 3= full time separate male /female hostel warden available (stays within the hostel campus)	• Appointment order of warden. • Accommodation allotment order of warden			

2.2.5	Availability of toilets & bathrooms in hostels	0=Facilities are available for usage at a single point of time for up to 3% of total trainee strength. 1= Facilities are available for usage at a single point of time for 4%-8% of total trainee strength 2= Facilities are available for usage at a single point of time for 8%-12% of total trainee strength with proper Cemented /tiles floor /plastered walls /tap water facilities and availability of disabled friendly Toilets. 3= Facilities are available for usage at a single point of time for more than 12% of total trainee & staff strength with proper Cemented /tiles floor /plastered walls /tap water facilities and availability of disabled friendly Toilets	• Adequate Facilities available floor wise. • Physical verification of facilities ,usage, Water availability			
2.2.6	Light & Ventilation of Hostel rooms	0= rooms do not get direct sunlight during any time of the day nor do they have any windows 1= rooms are well lit by the natural light and have sufficient sunlight at least for an hour every day. Each room has one window 2=rooms are airy and well-lit and get sufficient sunlight every day 3=rooms have good cross ventilation and sunlight and enough light for night also	• Visual verification with documentation /photographic evidence			
2.2.7	Upkeep / hygiene of hostel and rest room	0=poor with lot of seepage, broken, patched and civil work requirements 1=good with no civil works requirements but there is seepage 2=facility is functionally maintained, No dark spots, stain free etc. 3=very good maintenance	• Cleanness chart, with schedule of cleaning • Daily record register with supervisor			

			signature to overlook & check hygiene & cleanness as per schedule			
2.2.8	Accident registering system and availability of first aid	0=does not exist 1= first aid is available with warden under lock and key 2=basic first aid is available with warden and watchman/guard for emergencies 3=first aid kit is available in Common room as well as warden and a register is maintained where such cases are entered along with usage of first aid used	• Accident record register. • Accident recorded & preventing action regarding it. • First Aid kit fulfilment, medicine issue record, Expire dates on first aid contents.			
2.2.9	Fire safety and emergency preparedness	0=no fire extinguishers in hostel and training area 1=fire extinguishers & fire alarm are present in all areas, procedure, display in fire & safety training 2= fire extinguishers & fire alarm are present in all areas and fire safety drill is done for every batch. 3= Fire extinguishers , Fire alarms are present in all areas ,Do's and Don'ts with safety procedures ,safety exit routes are well displayed in each corridor and Fire safety drill is done every year for every batch	• Notice board procedure • Emergency Charts display. • Fire & emergency board display			
2.2.10	Availability of notice board for circulars	0=no notice boards, not well maintained notice board /no lock & key arrangement. 1=notice boards are only in admin area of office block	• Visual verification of noticeboard			

		2=notice boards are in admin block and hostel area 3=notice boards are in admin block, hostel area and playing fields area all with lock & key arrangement				
2.2.11	Common room with provision of TV, Railway magazines, Sports magazines, newspaper, journals and recreational game	0=no common room facility 1=there is a common room for recreation in the hostel 2=Common room has TV and recreational games 3= Common room has TV, recreational games and reading material like magazines etc.	*Visual Verification & documentation			
2.2.12	Housekeeping (Housekeeping staff: trainee ratio)	0=the ratio of housekeeping staff is equal to or greater than 1:90 1= the ratio of housekeeping staff is more than 1:60 but less than1:90 2= the ratio of housekeeping staff is more than 1:45 but less than1:60 3= the ratio of housekeeping staff is more than 1:30 but less than1:45	*Visual Verification & documentation			
2.2.13	Mess Management Committee	0=If no such committee available 1=Committee available and comprises of Management staff, Faculty Staff, Warden , Mess in charge and trainee	• List of representatives • List & Roaster of representative responsible for inspection of food quality.			

2.2.14	Mess facilities suitable as per no. of trainees	0=space ratio is not specified 1=space ratio is specified and as per requirement	*Visual Verification & documentation			
2.2.15	Food preparation and Serving method	0= No such described method or No discipline /rule for getting meals/food /services 1=Conventional System used for preparation and serving of food. 2=In addition to new methods of food preparation like chapatti making machines, Coupon /Slip methods adopted by the ZRTI. 3= In addition to new methods of food preparation ,Smart Card system(pre-paid or post-paid)or new preparation/serving methods which reduce time and food wastage adopted by the ZRTI.	• System Verification • Physical verification of methods,systems,equipments installed			
2.2.16	Ventilation and light in the kitchen	0=Source of natural light and fresh air not available, need artificial light during daytime as well. 1=Kitchen is well ventilated & well-lit through natural light and fresh air (windows, doors etc.) 2= Kitchen is well lit and well ventilated with availability of exhaust fan/chimney as well. 3=Kitchen is well lit and well ventilated with availability of exhaust Fan/chimney which is regularly cleaned and maintained.	Lights/Exhaust fan/Chimney /electrical wiring properly shelled. • Exhaust fan/chimney clean not greased.			
2.2.17	Number and condition of utensils	0=insufficient 1=as per laid down ratio but condition is poor 2=as per specifications and in good condition 3=more than sufficient and well maintained	• Purchase order of utensil. • Bills of utensil, storage records			

			• Visual verification			
2.2.18	Replacement procedure of utensils and its implementation	0=no such procedure exists 1=it is well defined and adhered to	• Store record			
2.2.19	Dining area ventilation and light	0=poor lighting and ventilation; need artificial lights during lunch hour also 1=room is well ventilated but poor lighting 2=room is well ventilated and well lit	*Visual Verification & documentation			
2.2.20	Hygiene of Kitchen & dining area (unhealthy smells, cob webs, garbage lying around, rodents, general upkeep of the area)	0=No cleanliness schedule is maintained 1= Cleanliness schedule available but not fully implemented. 2= Cleanliness schedule fully implemented along with routine pest control every 3 months. 3=Kitchen & Dining area is clean(No unhealthy smells, cob webs, garbage lying around, rodents, general upkeep of the area)and no pests are visible , the AMC for pest control is also in place	• Cleanness schedule, record, etc. • Visual verification.			
2.2.21	Dinning arrangement for trainees	0= if seating capacity is for less than 10% of total hostel strength at same time 1= if seating capacity is for 11% to 25% 2= If seating capacity is for 26% to 50% 3= if Seating capacity is above 50%	*Visual Verification & documentation			
2.2.22	Mess Complaint & Feedback	0=no such provision exists 1=a complaint/feedback register is maintained 2=complaint committee exists which looks into the complaints every month	• Past record of complaints and their solutions			

		3=trainees can submit complaints/feedback to higher authorities and these are addressed every time they are raised	• Mess feedback register. • Records on significant changes of mess.			
2.2.23	CCTV in institute (Examination hall, Mess, Hostel common area, corridors etc.)	0=no CCTV installed 1=Surveillance of at least one of the facility through CCTV (Common room/Mess /Corridors/Examination Hall, Hostel) 2= Surveillance of at least two of the facility through CCTV with one mandatory facility of Examination hall (Common room/Mess /Corridors/Examination Hall, Hostel) 3= Surveillance of complete ZRTI through CCTV cameras (Common room/Mess /Corridors/Examination Hall, Hostel)	• Detail of CCTV Installation: documents, records. • AMC records			
2.2.24	Fire alarm	0=no alarm 1=present in corridors only. 2=present in corridors, Common room, mess seating area. 3=Present in all campus , rooms corridors, mess , bathrooms & identified the risk area	• Visual verification. • Working condition of alarms. • Fire incident documentation & record			
2.2.25	Warden's residential facility	0=warden's residence is not in campus 1=only male/female warden resides on campus 2= both wardens reside on campus	• Allotment letter			
2.2.26	Common room with provision of TV, sports	0=no common room facility 1=there is a common room for recreation in the hostel	• Room verification			

	magazines, newspaper, journals and recreational game	2=Common room has TV and recreational games 3= Common room has TV, recreational games and reading material like magazines etc.	• Purchase & billing records • List of games , timing records , recreation room ,common room record register			
2.2.27	Menu display – including diet chart, quantity of nutrition in grams and calories, entitlement as committee	0=no display of any menu chart 1=weekly menu is displayed and implemented 2=weekly menu monitored by mess committee 3=Suggestion from the trainees, mess committee are implemented on regular basis.	• Menu documents • Mess committee MOM records			
2.3	Sports Facilities	0= if no such facilities/or no space provided 1=Only indoor facilities 2=Indoor & Outdoor facilities 3=Indoor & Outdoor facilities with proper coach and all equipment	• Purchase & billing records. • List of games, timing records. • Coach appointment letter			
2.4	Yoga Hall/ Meditation Facility	0=no yoga facility/provision 1=Facility is available and Yoga trainer is outsourced for on call as per requirement/selected from the staff/trainees 2=Yoga trainer is outsourced and regularly visits the ZRTI for Yoga sessions for all trainees and trainers	• Supported Documents. • Trainer appointment letter. • Yoga infrastructure			

		3=in house Yoga trainer and the sessions are held as per schedule. Attendance and monitoring of the same are done on a regular basis	bills records (Yoga Mats etc.)			
2.5	Fitness Centre/Gym Facility	0=no gym in the ZRTI 1=tie-up with local gym/basic facilities for fitness available in the institute 2=In house gym facility is there and all trainees visit it on regular basis and their attendance is monitored. 3= In house gym facility is there with qualified gym instructor (in house /visiting) and all trainees visit it on regular basis and their attendance is monitored	• Supported documents • Gym infrastructure bills records (Bills of Gym equipment's like t etc.)			
3	**FACULTY AND HR**					
3.1	Head of Institutes (Principal)	0=Seat is vacant 1=the post of principal is filled through contact or deputation. 2=the post of principal is filled up through permanent recruitment and a fixed tenure is defined. 3= the post of principal is filled up through permanent recruitment and average stay of principal in the ZRTI is minimum 3 years or more.	• Appointment order of principal • Principal record.			
3.2	Staff Record	0=No staff record is maintained	• Staff record register			

		1=Record of Principal, vice principal, Instructor and administrative staff for last 5 years is maintained. 2= Record of all staff along with the no. of days a particular position was vacant is also captured and recorded by the institute. 3= Record of all staff along with the no. of days a particular position was vacant and no. of days a staff had continued their service beyond deputation is also captured and recorded by the institute.	• Appointment letters/deputation order of staff • Office orders			
3.3	Trainer/faculty positions vacant against sanction post	0= if 20% and above posts are vacant 1= 10% to less than 20% posts are vacant 2= 5% to less than 10%posts are vacant 3=less than 5% posts are vacant	• Appointment order of trainers/faculty . • Order of any additional charge • Documents of total section posts			
3.4	Measures taken to overcome staff shortage	0-= Staff shortage identified but no action taken 1=Informed higher authorities about staff shortage and waiting for guidance (Regularly) 2=Informed higher authorities about staff shortage and steps taken internally to overcome the shortage 3= Vacant posts fulfilled with guest or visiting faculties from other railway institute/Industries.	• Regarding Documents			
3.5	Qualification of Trainers/Faculty	0= if Qualification of trainers /faculty is not as per Norms.	• Qualification Norms • Qualification certificates of			

		1=If Qualification of all the trainer/faculty is as per Norms. 2=if More than 20% of Qualified trainer/faculty holds specialized subject specific trainings certificate. 3=If More than 20% of Qualified trainer/faculty holds a master degree in addition to the specialized subject specific trainings certificate	trainers/ Faculty			
3.6	Competency of Trainer/Faculty	0=If no such procedure to check the competency of trainer/faculty. 1= Competency of trainer checked on his/her Professionalism & technical expertise. 2= Competency of trainer checked on his/her facilitation & Instructional methods. 3=Competency of trainer checked on his/her evaluation, assessment techniques, proficiency with computer and MS office (Word ,Excel, Power Point)	• Documented procedures for competency checking. • Interaction with Trainer /Faculty • Tests conducted for trainer/faculty on computer skills			
3.7	Experience of Trainer /Faculty in Railway (other than training) *Other specific Module	0 = If less than 10% of total trainer have experience in other railway department (other than training division) 1 =If 11% to 30% of total trainer have experience in other railway department (other than training division 2 = If 31% to 60% of total trainer have experience in other railway department (other than training division	• Documentation regarding experience			

		3 = If more than 60% of total trainer have experience in other railway department (other than training division)				
4	**TRAINEE AND TRAINER MANAGEMENT**					
4.1	Defined Method of Training	0= If only convention method of training used 1=Training is done with Lectures and Conferences with involvement of trainee & faculty both. 2= trained in a prototype environment on specific jobs for railways. 3=Training through Simulation, Case Study, Role Playing, Management Games, Team Building, on job- training .	• Documentation of training. • Formats of training, Course contents etc.			
4.2	Trainee (s) Pre-Evaluation/Defined Prerequisite	0=No Procedure in place to Ensure Pre –Evaluation of Candidates 1= Minimum Pre-requisite/Pre-Evaluation Procedure has been defined by the ZRTI for trainees in order to attend the training Program. 2= A Pre-Evaluation/ Pre-requisite module is developed by ZRTI for all the Training Programs and is sent to the Division .It is mandatory for all the trainees to go through the module before attending the Training Program at ZRTI. 3= A Pre-Evaluation/ Pre-requisite module along with a Competency Test has been developed by the	• Certificate of Previous training. • Training Certificate of Prerequisite program			

		ZRTI and the same is forwarded to the Division. The Result of Competency Test along with the list of trainees is thereafter forwarded to the ZRTI by the respective division.				
4.3	Trainee (s) Evaluation.	0=If level of Continuous trainee evaluation not defined and documented regularly 1= If Trainee continuous evaluation done only orally through queries during or in between training sessions. 2=If Trainee continuous evaluation done through written test during, PPT, lectures or in between training session and documented. 3=If Continuous Trainee evaluation done through written test and group discussion during or in between training session and documented.	• Documentation regarding training evaluations. • Methods or Procedure of evaluations. • Documentation supports			
4.4	Transparency in conducting Examination	0= no defined procedure to conduct examination 1= procedure is defined and a single set of question paper is designed for examination by the examiner. 2= a committee is constituted for conducting examination and at least 3 sets of examinations (enclosed in sealed envelopes) are designed by the committee 3= At least 3 sets of examinations (enclosed in sealed envelope) are designed by the examination committee and student feedback/complaint is also recorded to ensure the examination is conducted in a fair and transparent manner.	• Copy of set of previous examination papers			
4. 5	Preparation of Training Calendar	0=If no Procedure is available for seeking suggestions/feedback from divisions before the training Calendar is finalized by ZRTI.	*Visual Verification & documentation			

		1=A tentative training Calendar is forwarded to the respective divisions for their suggestions/feedback. 2= The training Calendar is developed in close co-ordination with the respective divisions, keeping in view the minimum trainee reserve which needs to be maintained by the Division before nominating the Trainees .For Example :-6% Trainee reserve . 3=The suggestions/feedbacks from divisions are incorporated in the training calendar and in addition the calendar is developed by ZRTI in a manner that overdue refresher trainings belonging to safety category are given priority.				
4.6	Course content Material	0=If course content is conventional type 1=If course content contains Introduction, Rational & Objective, technical & basic information in only printed form. 2= If course contents contain Introduction, Rational & Objective, technical & basic content in both printed and in the form of soft copy. 3=If course content contains Introduction, Rational & Objective, technical & basic, trainee activities involvement ,exercise to practise , assessment & feedback both in hard & in the form of soft copy .	• Documentation verification as per marks			
4.7	Feedback From Trainee(s)	0=If no procedure is available for feedback 1=Trainee's feedback on trainer only 2=Trainee's feedback on training method and content also. 3= Trainee's feedback on trainer, training content, methodology, institutional facility and same is analysed and acted upon by the administration.	• feedback form from trainees • Notified changes implemented as per feedback.			

4.8	Procedure for creating awareness regarding Service rules and regulations for trainees and trainers	0=If no well-defined procedures 1=if such information is available online and trainer/faculty and trainees share amongst each other on regular basis 2=If such awareness programs are conducted every year 3=If such awareness is part of training in every course.	• Documents verification regarding marks			
4.9	Attendance record of trainees	0= No attendance record is maintained 1= Attendance is compulsory during every session and the same is maintained. 2=Attendance is biometrically recorded during every session of training and record is available only with the institute. 3=Adhaar linked or Central server linked attendance system is maintained.	• Documentation verification of attendance records. • Biometric working • Adhaar linkage			
4.10	Evaluation & Assessment of Trainee	0= If only conventional examination system is present 1= If trainee is evaluated or assessed by trainer only. 2= If trainee is evaluated on the self-assessment, classroom, technical, practical, group discussion & Interview by trainer or internally institution staff only. 3= If Evaluated & Assessment done by team complies of subject experts & External railway experts.	• Evaluation Formats • Documents • Procedure			
4.11	Record of performance of trainees	0=no record is maintained 1=performance of all trainees is maintained after completion of the course	• Supporting Documents			

		2= performance of all trainees is monitored after 50% of course completion 3=performance of all trainees is maintained, monitored and analysed after every module of the course				
4.12	Procedure of Appraising trainees for their exceptional performance	0=No such procedure is available. 1= exceptional performers recognized and their names displayed on notice boards, circulated to other division 2= exceptional performer facilitated in annual function, events and their names printed in annual publication with their achievement. 3= the names of exceptional performers recommended to railway board for increment , appraisal, promotion which ever deemed appropriate as per railway board HR policies	• Supporting Documents			
4.13	Training need identification for Trainer & faculty	0=no mechanism to identify such needs 1=training needs for Faculty /Trainer identified and a training budget for training of trainer (TOT) allocated separately but no training conducted since last 1 year 2=training needs identified but only 25% Trainer could be trained in last 1 year 3=training needs of all the Trainer have been identified and all have been trained in the last 2 years	• Supporting Documents. • MOM, Training Requisition form			
4.14	Trainings attended by Trainer/faculty in last one year per discipline	0=no training conducted 1=Minimum 10% of trainer attended training in the last 1 year 2=Minimum 25% or more trainer/faculty attended training in last 1 year	• Supporting Documents			

		3= Minimum 40% or more trainer/faculty attended training in last 1 year				
4.15	Trainee counselling and motivation	0=no procedure to identifies the counselling and motivation need of the trainee available. 1= Trainee counselling and motivation conducted by internal staff. 2= Trainee counselling and motivation conducted by external experts 3= improvements recorded with respect to further evaluation of the trainee.				
4.16	Monitoring of the training program	0=If no monitoring mechanism is in place. 1=Procedure to monitoring training program is in place but the activity is restricted to institutional level monitoring only. 2=Training program evaluated and rated by the monitoring committee and the report send to the zonal head 3= Training program evaluated and rated by the monitoring committee and the report send to the railway MPP& Training. division	• Supporting Documents			
4.17	Trainee feedback on trainer performance	0=Procedure to take trainee feedback on trainers is not available 1=Feedback formats available to the trainee regarding trainer's technical competence only 2=Regular feedback is taken from trainees regarding the trainer technical competence, trainer behaviour and interaction with trainees. 3= Regular feedback is taken from trainees on course knowledge, delivery and training method.	• Supporting Documents Feedback formats • Records of feedback • Implementation on feedback			
4.18	Trainee Outing & Refreshment	0=No such tour is done during training	• Supporting Documents			

	tour during training	1= Study tour is arranged only for educational purpose for experience & exposure. 2= Both study & Refreshment tour is arranged for trainees 3=Study & Refreshment tour is arranged which include outdoor games for team building, industry tour.				
4.19	Pass Out Rate	0= No monitoring/review of course pass out rate 1=Periodic review of course pass out rate	*Pass out with below 50% *Pass out with 51-70% *Pass out with above 70%			
4.20	Performance review after training From concern departments on job	0=No such mechanism is developed 1=Mechanism for performance review from department during job is in place. 2=Achievements is highlighted and circulated in all the division/zone.	• Supporting Documents			
4.21	Achievement And upgradation of skill after training	0= No such mechanism is developed 1= Mechanism developed for appreciation the achievement and skill upgradation after training	• Supporting Documents			
4.22	Annual Function	0=No annual function 1=Annual Function organized with involvement of staff & trainee.	Supporting Documents			
4.23	Convocation Ceremony of Institution pass out	0=No convocation ceremony of institution held. 1=convocation ceremony of pass out students is done regularly.	Supporting Documents			
5	**INSTITUTE QUALITY ASSURANCE MECHANISM**					

5.1	Procedure for evaluating, selecting and appointing faculty members for the training institute.	0=If No procedure is available 1=All the faculty/trainers are posted from railway board and procedure are present with institute. 2=Procedures are present and implemented by the institution for all its selection, evaluation & appointing its faculty.(internally)	*Guideline documentation of evaluating, selecting and appointing faculty members for the training institute. *Faculty record as per its procedure.			
5.2	Procedure for organizing and conducting training programme	0= If No procedure is available. 1= Procedure are defined by railway board. 2= Defined procedures are available with the institution and implementation of training is done as per it. 3= Guideline is available with institute, modification & upgradation is done by institute from time to time.	*Guideline documents. *Documentation of implementation			
5.3	Procedure for collecting feedback regarding delivery and effectiveness of training programmes	0 =If No procedure is available. 1= Procedures are defined as per railway board guideline available with the institute and implementation of training is done as per the same.	*Guideline documents *Documentation of implementation			
5.4	Procedure for analysis and evaluation of feedback for improving the	0 =If No procedure is available. 1= Procedures are defined as per railway board guideline available with the institute and implementation of training is done as per the same	*Guideline documents *Documentation of implementation			

	content, delivery and effectiveness of future training programmes					
5.5	Procedure for addressing complaints, suggestions and conflict of interest.	0 =If No procedure is available. 1= Procedures are defined as per railway board guideline available with the institute and implementation of training is done as per the same	*Guideline documents *Documentation of implementation			
5.6	Procedure for periodic reviewing the curriculum and training materials	0 =If No procedure is available. 1= Procedures are defined as per railway board guideline available with the institute and implementation of training is done as per the same	*Guideline documents *Documentation of implementation			
5.7	Procedure for maintaining records and documents related to training.	0 =If No procedure is available. 1= Procedures are defined as per railway board guideline available with the institute and implementation of training is done as per the same	*Guideline documents *Documentation of implementation			
5.8	Procedure of Internal assessment and documents related to training at different	0 =If No procedure is available. 1= Procedures are defined as per railway board guideline available with the institute and implementation of training is done as per the same	*Guideline documents *Documentation of implementation			

	Workshop /Onsite /On Job etc.					
5.9	Procedures adopted to maintain impartiality	0 =If No procedure is available. 1= Procedures are defined as per railway board guideline available with the institute and implementation of training is done as per the same	*Guideline documents *Documentation of implementation			
6	**Innovative Practices/Creativity/International Recognition/Social Awareness Activities**					
6.1	Use of renewable techniques in campus (Solar panel, rainwater harvesting, Energy conservation Green campus etc.)	0=no such techniques adopted. 1=Energy conservation technique implemented through the campus (solar panel, rain harvesting system etc.)	• Visual & documentation verification			
6.2	Special Achievements	0=no noticeable achievement 1= If any achievement regarding training , training institute , Trainee achievement over all railway institute	• Visual & documentation verification			
6.3	Demand Driven Research & Development , innovation	0=no such innovation, research/development or innovation 1=noticeable research and development/innovation done at ZRTI	• Visual & documentation verification			

6.4	ISO Certification	0=ZRTI has not applied for any ISO Certification 1=Applied for ISO Certification /in process/ISO certified ZRTI	• ISO Certificate , visual & documentation verification			
6.5	Any Patent Register	0=no patent registered 1=patent registered by the ZRTI	• Visual & documentation verification			
6.6	CSR/ Awareness Activities (contribution by ZRTI towards social cause example Cleanliness drive, Railway safety awareness for local residents etc.)	0=no such activity/awareness conducted by ZRTI 1=noticeable work done by ZRTI towards social cause.	• Events Photographs, Records & documentation verification.			

*All precautions have been taken while drafting this grading and assessment criteria, if any discrimination is found please inform us .We will be happy to improve it.

Assessor 1 Assessor 2 Signature of ZRTI Principal

ANNEXURE 2

ZRTI Occupancy Matrix

A	B	C	D1 -D119	E1-E119
		ZRTI Occupancy Matrix for ASMs Cadre **(Similar matrix will have to be prepared for other cadres who undergo training at ZRTI)**		
	(A.)	**ASMs' Course Schedules**		
		Name of Course	**Duration**	**Frequency**
	1.	Initial Course.	15 weeks	Once in entire service
	2.	Refresher Course.	2 weeks	Once every 5 years
	3.	Promotional Course.	15 weeks	4 times in entire service.
	(B.)	**Sometimes, Refresher Course and Promotional Course overlap. In that case, the counter for the Refresher Course is reset to 5 years after the staff has undergone his Promotional Course.**		
	1,	Refresher Course undergone.	August 2005	
	2.	Next Refresher Course will be due.	August 2010	
	3.	Meanwhile, his promotion becomes due and he undergoes Promotional Course.	January 2009	
	4.	Next Refresher Course will now be due.	January 2014	
	(C.)	**Initial Course**		

	1.	Total Number of ASMs in the Cadre on different Zonal Railways who are to undergo Initial Course in the ZRTI.	10000	
	2.	Average years of service.	33	
	3.	Number of staff retiring annually. [D19/D20]	303.03	
	4.	Rounding off to next higher integer.	304	
	5.	Number of new staff joining the cadre annually. [D22]	304	
	6.	Number of trainees per course.	40	
	7.	Number of courses required. [D23/D24]	7.60	
	8.	Rounding off to next higher integer.	8	
	9.	Number of courses required. [D26]	8	
	10.	Duration of each course in weeks. [D5]	15	
	11.	Number of weeks required annually. [D27*D28]	120	
	12.	Classroom accomodation, in weeks. [D29]	120	
	13.	Number of weeks per year.	52	
	14.	Average class rooms required throughout the year. [D30/D31]	2.31	
	15.	Rounding off to next higher integer.	3	
	16.	**Number of class rooms required for all initial courses throughout the year. [D33]**	**3**	
	17.	Number of trainees per room in hostel.	6	
	18.	Number of hostel rooms required per course. [D24/D35]	6.67	

	19.	Rounding off to next higher integer.	7	
	20.	Number of hostel rooms required per course. [D37]	7	
	21.	Number of hostel rooms required per course in weeks. [D28*D38]	105	
	22.	Number of hostel rooms required per course throughout the year. [D39/D31]	2.02	
	23.	Number of hostel rooms required for all course throughout the year. [D40*D27]	16.15	
	24.	Rounding off to next higher integer.	17	
	25.	**Number of hostel rooms required for all initial courses throughout the year. [D44]**	**17**	
	(D.)	**Refresher Course :**		
	1.	Total Number of ASMs in the Cadre on different Zonal Railways who are to undergo Refresher Course in the ZRTI.	10000	
	2.	Average years of service.	33	
	3.	Frequency of Refresher Course once in 5 years. [E7]	5	
	4.	Number of Refresher Courses staff will undergo during their career. [D50/D51]	6.60	
	5.	Rounding off to next higher integer.	7	
	6.	Number of Refresher Courses staff will undergo during their career. [D53]	7	
	7.	Initial Course undergone at the beginning of their career.	1	

	8.	Reducing the number of Refresher Courses by 1 for Initial Course undergone.	6	
	9.	Number of Promotional Courses staff will undergo during their career.	4	
	10.	Reducing the number of Refresher Courses by 50% of number of Promotional Course. [D57/2]	2	Refer to rows 12 to 15.
	11.	Actual Number of Refresher Courses staff will undergo during their career. [D56- D58]	4	
	12.	Total number of Staff who will undergo Refresher Course during their entire career. [D49*D59]	40000	
	13.	Number of staff who will undergo Refresher Course annually. [D60/D50]	1212	
	14.	Number of trainees per course.	40	
	15.	Number of courses required. [D61/D62]	30.30	
	16.	Rounding off to next higher integer.	31	
	17.	Number of courses required. [D64]	31	
	18.	Duration of each course in weeks. [D8]	2	
	19.	Number of weeks required annually. [D67*D66]	62	
	20.	Classroom accomodation, in weeks. [D67]	62	
	21.	Number of weeks per year.	52	
	22.	Average class rooms required throughout the year. [D68/D69]	1.19	
	23.	Rounding off to next higher integer.	2	
	24.	**Number of class rooms required for all Refresher Courses throughout the year. [D71]**	**2**	
	25.	Number of trainees per room in hostel.	6	
	26.	Number of hostel rooms required per course. [D54/D65]	6.67	
	27.	Rounding off to next higher integer.	7	

	28.	Number of hostel rooms required per course. [D29]	7	
	29.	Number of hostel rooms required per course in weeks. [D58*D68]	14	
	30.	Number of hostel rooms required per course throughout the year. [D69/D61]	0.27	
	31.	Number of hostel rooms required for all course throughout the year. [D70*D57]	8.35	
	32.	Rounding off to next higher integer.	9	
	33.	**Number of hostel rooms required for all Refresher Course throughout the year. [D72]**	**9**	
	(E.)	**Promotional Course**		
	1.	Total Number of ASMs in the Cadre on different Zonal Railways who are to undergo Refresher Course in the ZRTI.	10000	
	2.	Average years of service.	33	
	3.	Frequency of Promotional Course, 4 times in entire service. [E7]	4	
	4.	Actual Number of Promotional Courses staff will undergo during their career. [D90]	4	
	5.	Total number of Staff who will undergo Promotional Course during their entire career. [D88*D91]	40000	
	6.	Number of staff who will undergo Promotional Course annually. [D92/D89]	1212	
	7.	Number of trainees per course.	40	

	8.	Number of courses required. [D94/D96]	30.30	
	9.	Rounding off to next higher integer.	31	
	10.	Number of courses required. [D96]	31	
	11.	Duration of each course in weeks. [D7]	15	
	12.	Number of weeks required annually. [D97*D98]	465	
	13.	Classroom accomodation, in weeks. [D99]	465	
	14.	Number of weeks per year.	52	
	15.	Average class rooms required throughout the year. [D100/D101]	8.94	
	16.	Rounding off to next higher integer.	9	
	17.	**Number of class rooms required for all Promotional Courses throughout the year. [D103]**	**9**	
	18.	Number of trainees per room in hostel.	6	
	19.	Number of hostel rooms required per course. [D94/D105]	6.67	
	20.	Rounding off to next higher integer.	7	
	21.	Number of hostel rooms required per course. [D107]	7	
	22.	Number of hostel rooms required per course in weeks. [D98*D107]	105	
	23.	Number of hostel rooms required per course throughout the year. [D109/D101]	2.02	
	24.	Number of hostel rooms required for all course throughout the year. [D110*D97]	62.60	
	25.	Rounding off to next higher integer.	63	
	26.	**Number of hostel rooms required for all Promotional Courses throughout the year. [D112]**	**63**	

	(F.)	Total Accomodation Required		
	1.	Number of Class rooms required for all Initial, Refresher and Promotional Courses throughout the year. [D34 + D72 + D104]	14	
	2.	Number of Hostel rooms required for all Initial, Refresher and Promotional Courses throughout the year. [D43 + D81 + D113]	89	



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