



IDEAS
FOR A
SAFER
STRONGER
BRIGHTER
INDIA

PEOPLE
IDEAS
TECHNOLOGY
SUSTAINABILITY
SAFER RAILWAYS
STRONGER INDIA

*Young Minds
Safer Tomorrow's*

PEOPLE
TECHNOLOGY
SAFETY
SUSTAINABILITY
A STRONGER
TOMORROW

INNOVATION
TODAY
SAFER
TOMORROW

IDEAS
PEOPLE
RAILWAYS
A BRIGHTER
TOMORROW

SMART RAILWAYS
SAFER TOMORROW

IoT SENSORS
AI ANALYTICS
PREDICTIVE
MAINTENANCE
SAFETY ALERTS
A GREENER
TOMORROW

IDEAS
INNOVATION
SAFETY
FOR GENERATIONS

RAIL SAFETY INNOVATION CHALLENGE FOR STUDENTS AND START-UPS

Inspiring Ideas • Developing Solutions • Preventing Accidents • Protecting Every Life

IMAGINE SAFER RAILWAYS • DESIGN PRACTICAL SOLUTIONS • CREATE NATIONAL IMPACT



IDEATE

BOLD IDEAS
REAL PROBLEMS



DESIGN

TURN IDEAS
INTO SOLUTIONS



PROTOTYPE

BUILD
AND REFINE



TEST

VALIDATE
FOR IMPACT



COLLABORATE

LEARN TOGETHER
GROW TOGETHER



IMPACT

SAFER RAILWAYS
A STRONGER INDIA

Your Idea Could Help Protect Tomorrow's Journey



VIKSI BHARAT 2047



MAKE IN INDIA



NET ZERO 2070



DIGITAL INDIA



VISION ZERO

ALL INDIA RAIL SAFETY COUNCIL

www.railsafety.co.in

SAFE PEOPLE
STRONGER CONNECTIONS
BRIGHTER INDIA

*Ideas
into Safer
Journeys*



IDEAS
FOR A SAFER
STRONGER
TOMORROW

PEOPLE | INNOVATION | SAFER RAILWAYS
A BRIGHTER INDIA

YOUNG
MINDS
SAFER
RAILWAYS
BRIGHTER
INDIA

*Ideas
Solutions
Safer
Journeys
for a
Better
Bharat*

IDEATE → PROTOTYPE → IMPACT

SAFER
PEOPLE

SMART
TECH

INCLUSIVE
RAILWAYS

SUSTAINABLE
FUTURE

*Empathy
Data
Ideation
Prototyping
Real Impact*

PASSENGER JOURNEY



MAP • IDENTIFY • SOLVE

RISK INSIGHTS

People
Process
Infrastructure
Technology
Behaviour

*Connected People
Stronger India*

DESIGN
SOLVE
BUILD
FOR PEOPLE

UNDERSTAND THE RISK • DEFINE THE PROBLEM • DESIGN FOR PEOPLE



Observe Responsibly



Research Evidence



Listen to Users



Think Creatively



THE BEST SAFETY SOLUTIONS BEGIN WITH A CLEARLY UNDERSTOOD PROBLEM



**PASSENGER
SAFETY**

Safer Journeys
for Everyone



**TRACK
MONITORING**

Smarter Insights
Safer Networks



**LEVEL
CROSSINGS**

Safer Crossings
Stronger Communities



**FIRE
SAFETY**

Prepared People
Safer Premises



ACCESSIBILITY

Inclusive Railways
for a Stronger India



**EMERGENCY
COMMUNICATION**

Faster Response
Greater Safety

Ask Better Questions • Discover Safer Possibilities



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STRONGER INDIA

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*Ideas
Move India Forward*



IDEAS
PEOPLE
TECHNOLOGY
SAFER RAILWAYS
BRIGHTER INDIA

INNOVATION
FOR A SAFER
TOMORROW

SAFE
IDEAS
SAFER
TOMORROW



YOUNG
INNOVATORS
SAFER JOURNEYS



SMART RAIL
SAFE INDIA

INCLUSIVE
RAILWAYS
FOR EVERYONE

PEOPLE
IDEAS
PROTOTYPES
PREVENTION

FROM IDEA TO PROTOTYPE • FROM PROTOTYPE TO PREVENTION

Build Carefully • Test Systematically • Improve Continuously • Document Clearly



INNOVATION MUST BE **SAFE**, **PRACTICAL**, **INCLUSIVE** AND **RELIABLE**



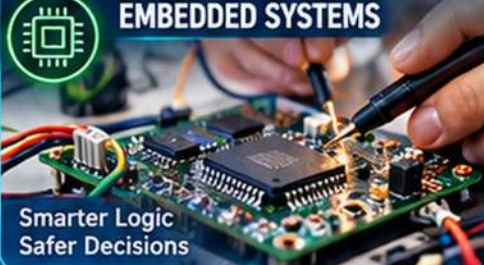
SENSORS



Sense Early
Enable Safer Railways



EMBEDDED SYSTEMS



Smarter Logic
Safer Decisions



RAPID PROTOTYPING



From Concept to Reality
Faster Solutions



USER TESTING



Real People
Real Insights



RELIABILITY



Test for Today
Trust for Tomorrow



DOCUMENTATION



Clear Records
Stronger Impact



Create • Test • Learn • Improve • Protect



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Safer Tomorrows
for a Stronger India*

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PEOPLE
SAFER RAILWAYS
STRONGER INDIA



Safer Railways
Brighter Bharat

PEOPLE
IDEAS
TECHNOLOGY
SAFER TOMORROW

INDIAN RAILWAYS
CONNECTING PEOPLE
A SAFER, GREENER
STRONGER INDIA

INNOVATION
COLLABORATION
IMPACT
FOR A SAFER
INDIA

DATA
PEOPLE
SAFETY
PROGRESS

RAIL DIGITAL TWIN



LIVE ANALYTICS



SAFER OPERATIONS
HIGHER RELIABILITY
GREATER EFFICIENCY
CLEANER TOMORROW

CROWD FLOW (AI)



WEATHER RISK ANALYTICS



ETHICAL DATA
SECURE SYSTEMS
TRUSTED AI

IDEAS
INNOVATION
YOUTH
A SAFER INDIA

AI AND DATA FOR SAFER, SMARTER RAILWAYS

Predictive Insight • Early Warning • Responsible AI • Secure Digital Systems

USE DATA RESPONSIBLY • VERIFY RESULTS • PROTECT PRIVACY • SUPPORT HUMAN DECISIONS

PREDICTIVE
MAINTENANCE



AI detects issues early
for higher reliability

COMPUTER
VISION



Smarter surveillance
for safer stations

DIGITAL TWINS



Simulate. Analyse.
Plan a safer tomorrow.

CYBERSECURITY



Protect data.
Ensure trust.
Keep railways resilient.

CLIMATE
ANALYTICS



Anticipate weather risks
Build climate resilience

HUMAN
OVERSIGHT



People make
safer decisions
with AI

Smarter Information • Earlier Prevention • Safer Journeys

Innovation
Moves India

SAFE PEOPLE
STRONG RAILWAYS
PROSPEROUS INDIA

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DIGITAL INDIA

VISION ZERO

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PEOPLE
SAFETY
SUSTAINABILITY
A BRIGHTER INDIA

Ideas for
Safer Journeys



INNOVATION FOR A SAFER TOMORROW

PEOPLE | TECHNOLOGY | SUSTAINABILITY
STRONGER RAILWAYS
BRIGHTER BHARAT

*Ideas
in Motion
for a Safer
India*

LEARN
TEST
VALIDATE
IMPROVE

SIMULATION
FOR A SAFER TOMORROW

RAILWAY TECHNOLOGY
TEST & INNOVATION CENTRE
TEST • VALIDATE • SCALE • FOR A SAFER INDIA

SAFE
SMART
SUSTAINABLE
INCLUSIVE

TEST TRACK
AUTHORIZED ACCESS ONLY

PEOPLE-CENTRIC
RAILWAYS



FOR EVERY JOURNEY
FOR A BETTER TOMORROW

IDEAS
PROTOTYPES
SAFER
RAILWAYS

DEMONSTRATE SAFELY • VALIDATE EVIDENCE • PREPARE FOR IMPACT

Safety First | Expert Review | Measurable Results | Responsible Scaling

! NEVER TEST IN LIVE RAILWAY OPERATIONS WITHOUT FORMAL AUTHORISATION

01 LAB TESTING



Validate design, functionality
and safety in controlled conditions

02 SIMULATION



Test scenarios, human factors
and system performance

03 FIELD VALIDATION



Demonstrate in authorised
test environments with real-world data

04 EXPERT REVIEW



SAFER IDEAS
STRONGER RAILWAYS

Get feedback from domain experts,
rail professionals and industry mentors

05 USER FEEDBACK



Understand real user needs
for inclusive and accessible solutions

06 RISK ASSESSMENT



- ☒ HAZARD IDENTIFICATION
- ☒ RISK ANALYSIS
- ☒ MITIGATION PLAN
- ☒ COMPLIANCE CHECK
- ☐ GO / NO-GO

Identify risks, mitigate effectively
and ensure regulatory compliance



Prove the Concept • Respect Procedures • Strengthen Trust



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Stronger Bharat*



INNOVATION
BUILDS SAFER JOURNEYS
A STRONGER INDIA

SUSTAINABLE RAIL
SMARTER TOMORROW

CLEANER
GREENER
SAFER
SMARTER
TOGETHER

YOUNG
MINDS
SAFER
TOMORROW

Safer Railways
Stronger India

INDIA
INNOVATES
RAILWAYS
PROTECTS
LIVES

Ideas
in Motion
for a Safer
Tomorrow

INNOVATION FOR SAFER RAILWAYS • OPPORTUNITY FOR A STRONGER INDIA

Student Talent • Start-up Energy • Industry Guidance • Public Benefit

BRIGHT IDEAS • RESPONSIBLE INNOVATION • SCALABLE SOLUTIONS • PROTECTED LIVES

 MENTORSHIP Guiding ideas to greater impact	 INCUBATION From concept to real-world solutions	 COLLABORATION Academia • Start-ups Industry • Community	 PILOT PROJECTS Testing innovations for a safer tomorrow	 SOCIAL IMPACT Safer journeys Stronger communities	 VISION ZERO Zero accidents A brighter, sustainable India
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Inspiring Ideas • Developing Solutions • Preventing Accidents • Protecting Every Life

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CONNECT PEOPLE
BUILD OPPORTUNITIES
DRIVE A BRIGHTER INDIA

Safe People
Stronger India