Investments

Management, Leadership and
Dashboard excellence

DRSS Intelligence and CQI

DASHBOARDING ROAD SAFETY/SUPPORT VIA LSS/CONNECTED QP

For

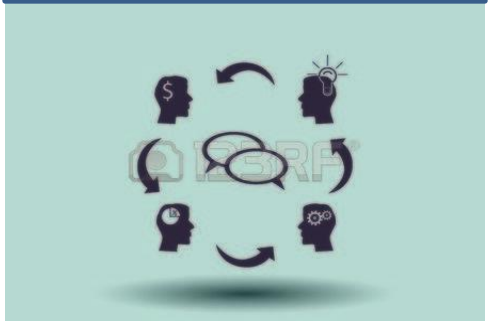
Institutions, organizations and

(the Interrelated Cluster)

AOEC, K.S.VENKATRAM, AAKKASH KV, AOEC 2025 -2026

Do-it-as-NSSR-Projects programmes

Innovation & Improvement

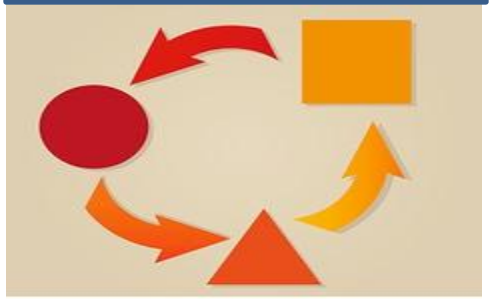


Learning, Knowledge

Right to Education

SA 8000

Dashboard Trends and Investment Cycle



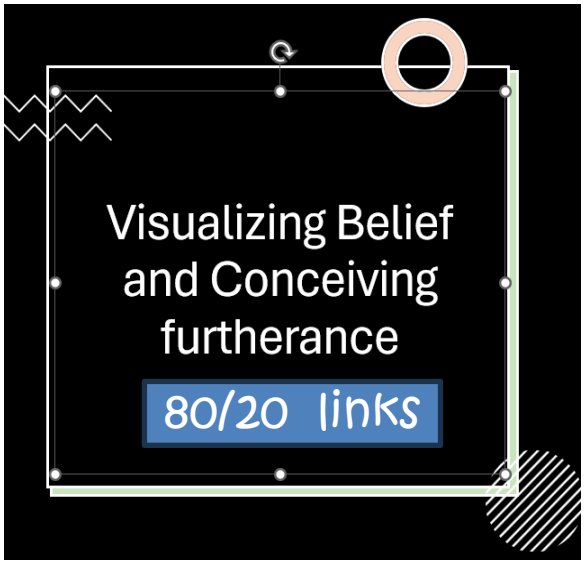
Green Asset Thinking

End of DRSS lifecycle

DRSS Intelligence

Road Safety / Support Project Intelligence and Continual Quality Improvement for Educational Institutions

NSSR RS PROGRAMME – ROAD SAFETY/SUPPORT ACCELERATOR
LEVEL 1 CERTIFICATE



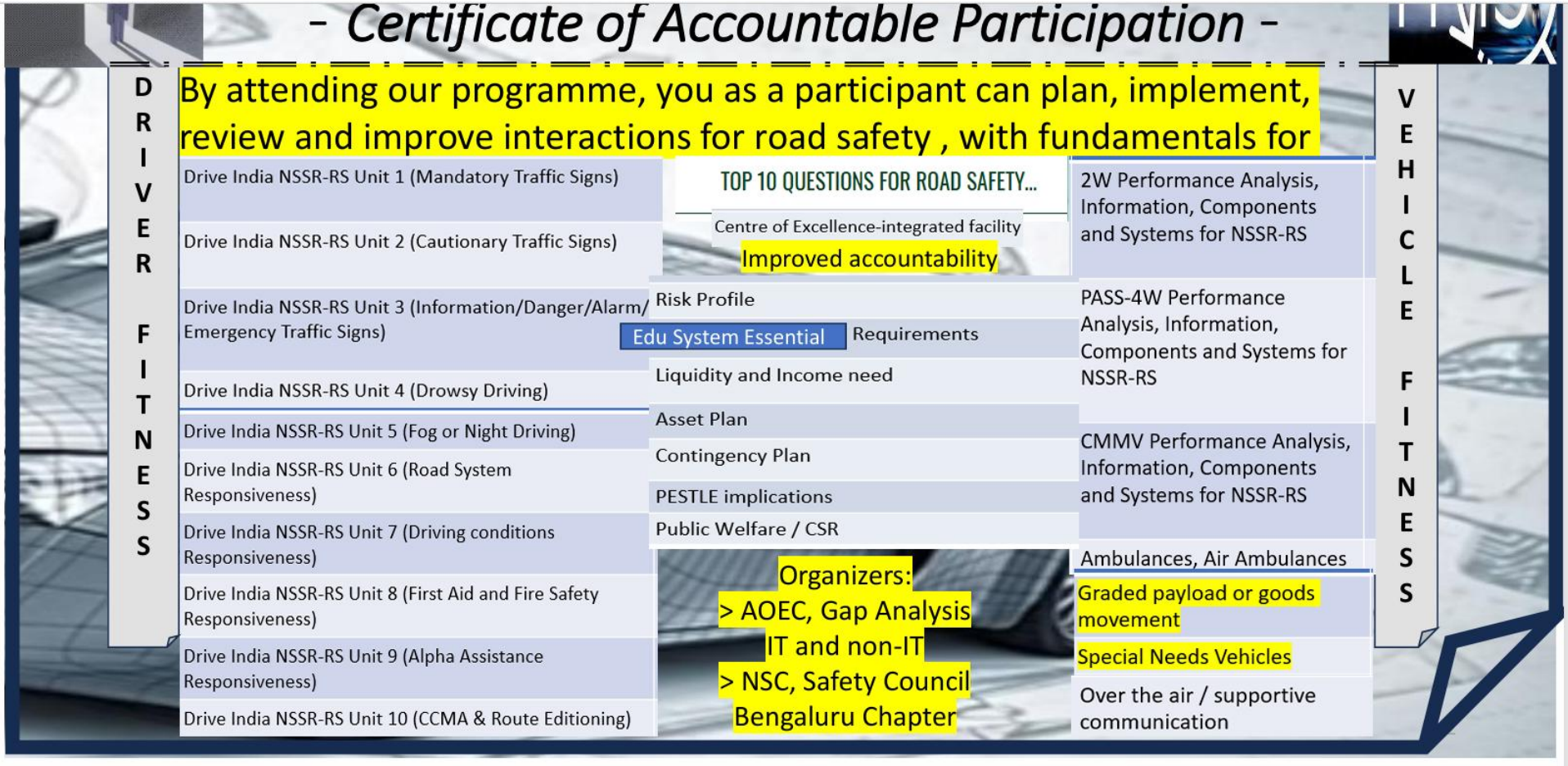
lifetime

EnABLErs

the focal point

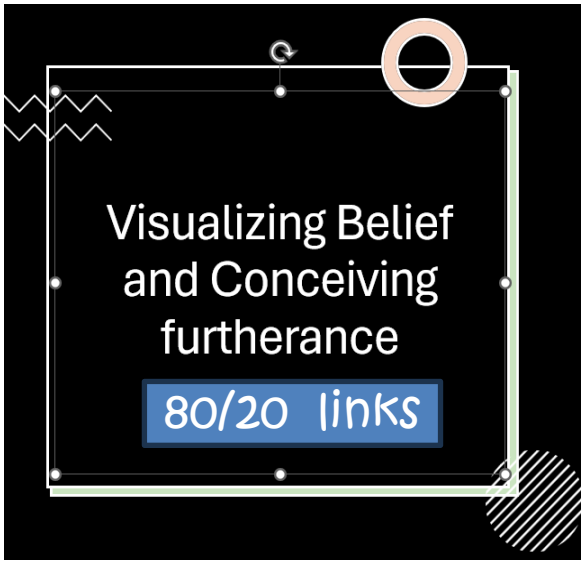
LEVEL 1

DASHBOARDING ROAD SAFETY/SUPPORT



Road Safety / Support Project Intelligence and Continual Quality Improvement for Educational Institutions

NSSR RS PROGRAMME – ROAD SAFETY/SUPPORT ACCELERATOR
LEVEL 2 CERTIFICATE



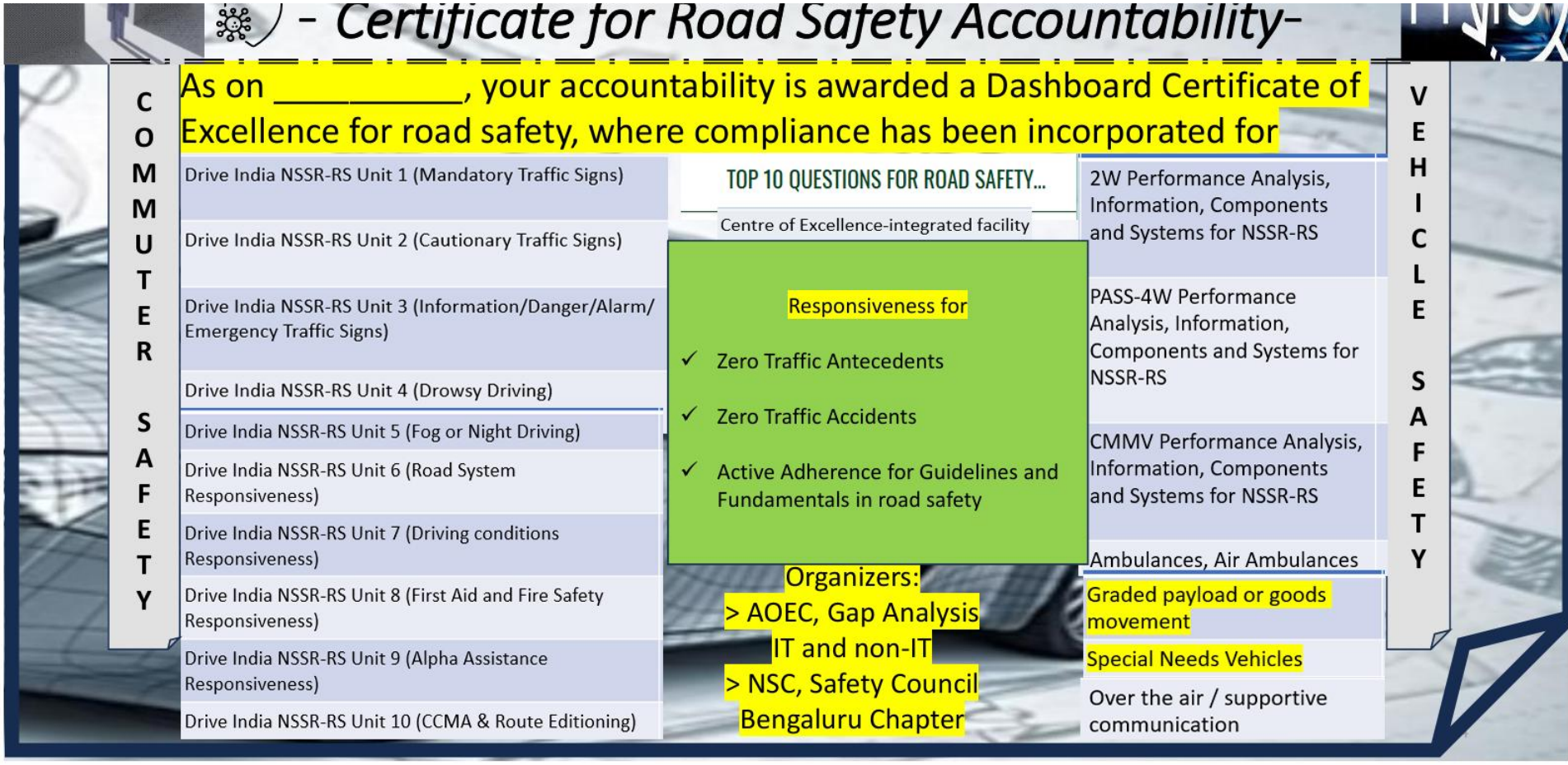
lifetime

EnABLErs

the focal point

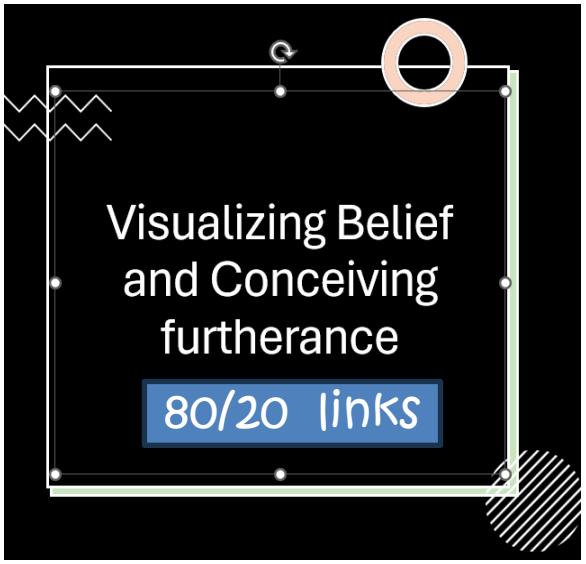
LEVEL 2

DASHBOARDING ROAD SAFETY/SUPPORT



Road Safety / Support Project Intelligence and Continual Quality Improvement for Educational Institutions

NSSR RS PROGRAMME – ROAD SAFETY/SUPPORT ACCELERATOR
LEVEL 3 CERTIFICATE/AWARD



lifetime

EnABLErs

the focal point

LEVEL 3

DASHBOARDING ROAD SAFETY/SUPPORT

Road safety and Accountability Dashboard for the Year 2026

- ❑ Certificate of Excellence — YES / NO / NOT SATISFACTORY
- ❑ Traffic issues or incidences — YES / NO / NOT SATISFACTORY
- ❑ Compliance with FMVSS standards — YES / NO / NOT SATISFACTORY
- ❑ Onboarding of NSSR Road Safety objectives — YES / NO / NOT SATISFACTORY
- ❑ Upgradability of NSSR Road Infrastructure objectives — YES / NO / NOT SATISFACTORY
- ❑ Traffic Engineering Assets planning — YES / NO / NOT SATISFACTORY
- ❑ Traffic Engineering Defects Liability — YES / NO / NOT SATISFACTORY
- ❑ Improved on-road assistance — YES / NO / NOT SATISFACTORY
- ❑ Cost of Quality /Cost of Poor-Quality Project Assistance — YES / NO / NOT SATISFACTORY
- ❑ Complexity for Road Safety and Accountability — YES / NO / NOT SATISFACTORY

Road safety and Accountability Dashboard for the Year/Season 1

- ❑ Certificate of Excellence — YES / NO / NOT SATISFACTORY
- ❑ Traffic issues or incidences — YES / NO / NOT SATISFACTORY
- ❑ Compliance with FMVSS standards — YES / NO / NOT SATISFACTORY
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- ❑ Complexity for Road Safety and Accountability — YES / NO / NOT SATISFACTORY

Road safety and Accountability Dashboard for the Year/Season 2

- ❑ Certificate of Excellence — YES / NO / NOT SATISFACTORY
- ❑ Traffic issues or incidences — YES / NO / NOT SATISFACTORY
- ❑ Compliance with FMVSS standards — YES / NO / NOT SATISFACTORY
- ❑ Onboarding of NSSR Road Safety objectives — YES / NO / NOT SATISFACTORY
- ❑ Upgradability of NSSR Road Infrastructure objectives — YES / NO / NOT SATISFACTORY
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- ❑ Traffic Engineering Defects Liability — YES / NO / NOT SATISFACTORY
- ❑ Improved on-road assistance — YES / NO / NOT SATISFACTORY
- ❑ Cost of Quality /Cost of Poor-Quality Project Assistance — YES / NO / NOT SATISFACTORY
- ❑ Complexity for Road Safety and Accountability — YES / NO / NOT SATISFACTORY

Road safety and Accountability Dashboard for the Year/Season 3

- ❑ Certificate of Excellence — YES / NO / NOT SATISFACTORY
- ❑ Traffic issues or incidences — YES / NO / NOT SATISFACTORY
- ❑ Compliance with FMVSS standards — YES / NO / NOT SATISFACTORY
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Road safety and Accountability Dashboard for the Year/Season 4

- ❑ Certificate of Excellence — YES / NO / NOT SATISFACTORY
- ❑ Traffic issues or incidences — YES / NO / NOT SATISFACTORY
- ❑ Compliance with FMVSS standards — YES / NO / NOT SATISFACTORY
- ❑ Onboarding of NSSR Road Safety objectives — YES / NO / NOT SATISFACTORY
- ❑ Upgradability of NSSR Road Infrastructure objectives — YES / NO / NOT SATISFACTORY
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- ❑ Traffic Engineering Defects Liability — YES / NO / NOT SATISFACTORY
- ❑ Improved on-road assistance — YES / NO / NOT SATISFACTORY
- ❑ Cost of Quality /Cost of Poor-Quality Project Assistance — YES / NO / NOT SATISFACTORY
- ❑ Complexity for Road Safety and Accountability — YES / NO / NOT SATISFACTORY

DRSS Assistants - Enablers for Road Safety and Accountability

- Driver Fitness
- Vehicle Fitness
- Road System Understanding
- Video Assistance

- Contingency Plan
- Call for Mitigation
- Safer driving Accentuator
- DRSS Workflow plus NSSR RS programme teamwork

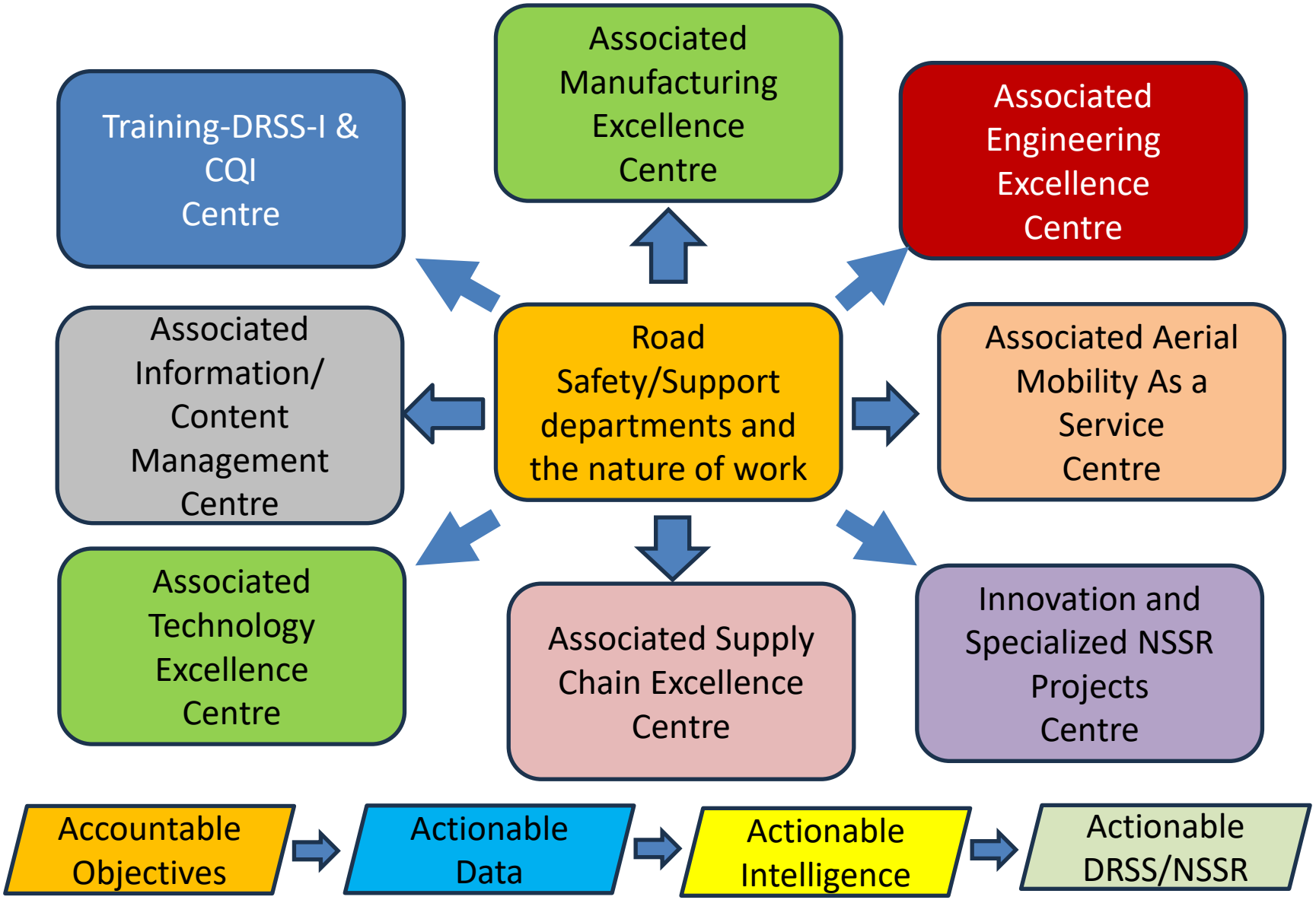
DRSS Intelligence and CQI

Highlights of the DRSS intelligence and Continual quality improvement possible through Lean Six Sigma projects, assessments, tools and techniques

(At the institutional/ organizational model level)

1. Code of NSSR Road Safety/Support Interest for dashboard excellence (with focus for Standard Operating Procedures/objectives, Accountable Validation & Analysis, Dashboard Development and Reporting for road safety/support, Assets / Hardware-in-the-Loop systems, NSSR-Objectives Workflow Management Systems, NSSR-Objectives Lifecycle Management Systems, QCDES Fitness Systems, Process Improvement Management Systems)
2. NSSR-Objectives Evaluation Review Technique
3. Critical Interaction Leverage Management
4. NSSR-Objectives Issue Management
5. Critical Interaction/Behaviour Modeling
6. Critical Interaction/Dimensions Modeling
7. Process Improvement/ Proportion Analytics
8. Future NSSR-Objectives Analytics
9. Future Process Improvement Analytics
10. Key Opinion Leadership and Empirical studies

DRSS Intelligence and CQI



DRSS Intelligence and CQI

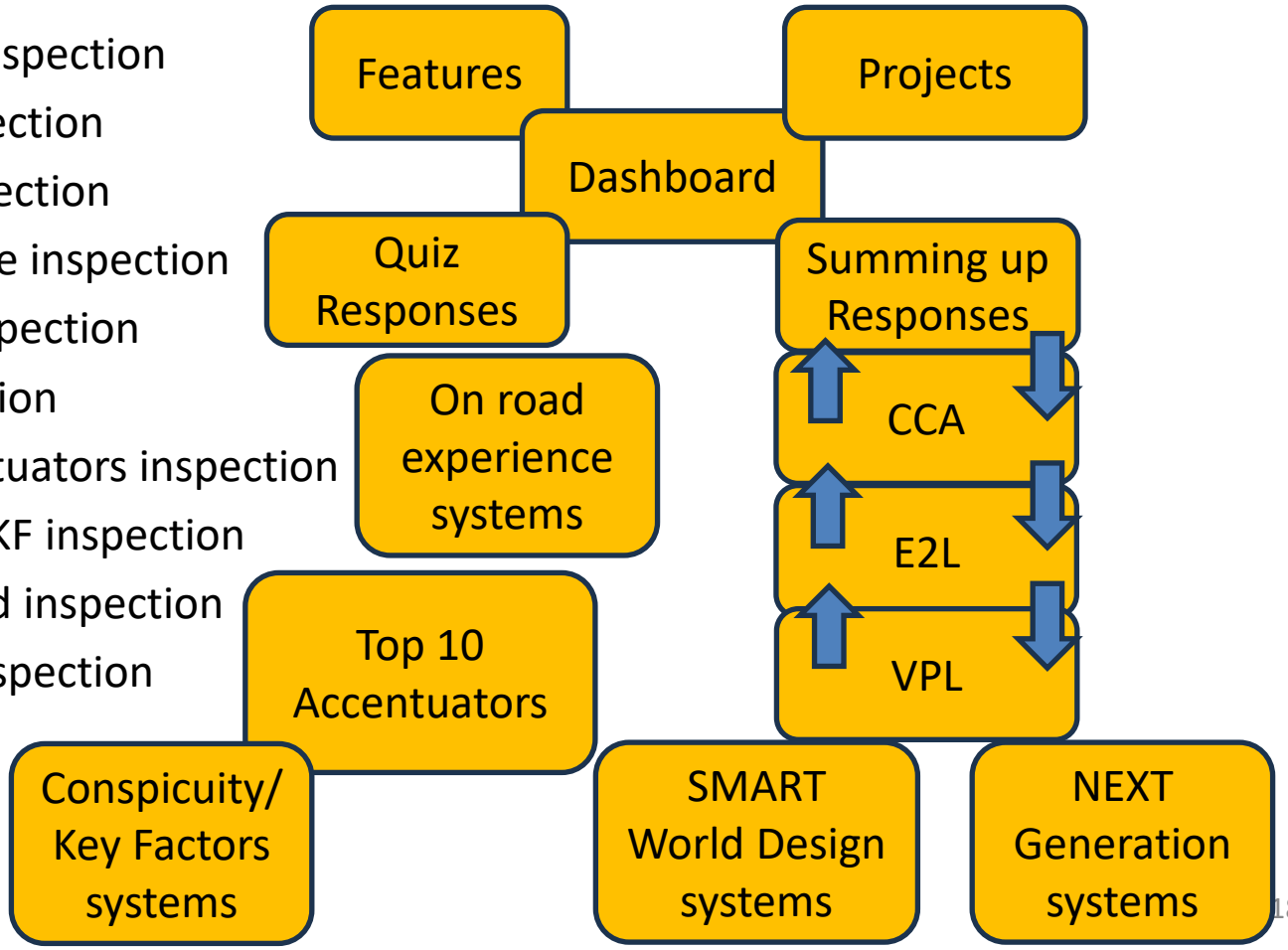
- For the institution/organization, DRSS **intelligence and Continual quality improvement (LSS) projects** will involve basic concepts for NSSR objectives excellence like

- ❑ Management attitude and Leadership for Road Safety Intelligence (RSI) and Continual Quality Improvement (CQI)
- ❑ NSSR-objectives satisfaction indicators or Projects development
- ❑ NSSR-objectives Quality circles and champions involvement for RSI/CQI standards for safer commuting
- ❑ DRSS Tools, Datasets & Techniques for quality control, process management and process improvement
- ❑ NSSR-objectives/Projects Supplier Partnership and Quality Processes
- ❑ DRSS Performance measures and problem solving or continuous improvement

DRSS Intelligence and CQI

- For the institution/organization, Road Safety **Intelligence and Continual quality improvement (LSS) projects** will incorporate alignment for methods of dashboard/data inspection with Process improvement (PI) reviews such as

- 1. Dashboard inspection
- 2. Feature inspection
- 3. Projects inspection
- 4. Quiz response inspection
- 5. Summary inspection
- 6. ORES inspection
- 7. Top10 Accentuators inspection
- 8. Conspicuity/KF inspection
- 9. SMART World inspection
- 10. NXT GEN inspection



Solution finding for DRSS excellence

No	Details	NSSR-objectives Classification	Types of NSSR objectuves workflows/ lifecycles/ processes
1	Process Variation (Review)		
2	Sources of Variation (Review_		
3	Process capability (analysis_		
4	PI Natural limits (Review_		
5	PI Specification limits (Review)		
6	Lean Six Sigma DIAGNOSTICS (Review)		

Process Variation

1. Variations in processes, systems, materials, products etc necessitate Quality analysis and control. There is commonly a conflict between the following 2 influencing facts

a. Variation and non-uniformity is inevitable

b. Process improvement and the use of inspections & processes is most potentially economical when there is no variation in their quality

2. Very commonly we know that variations can never be eliminated but the study of the sources of variation and thereon reducing & controlling variations is important for uniformity in quality and reliability.

Sources of Variation

1. Sources of variation in a Process Improvement / DRSS organizational system are mainly due to people, work methods, vehicles, equipment and materials.

2. There can also be variations in the road system / infrastructure/environment that affect people, work methods, vehicles, equipment and materials.

3. Suppose these variations need to be controlled, the key questions that need answering are what variations are present in the RSI/NSSR-objectives specific procedures and processes used.

4. As we cannot enforce fixed environmentally related factors of variability, what can be done as a key policy is - ensure there is minimum variation in PI inspection processes and their stability.

Process capability analysis

1. To enable minimum variation in processes and their stability, Process improvement institutions/organizations conduct process capability analysis.

2. Process capability analysis is an effort to document a PI inpection process' capability.

3. The mechanism includes

3.1 Defining the conditions in which the analysis must be done

3.2 Defining the key process/workflow/lifecycle characteristic expected

3.3 Defining the Sample set and Sample units for the NSSR RS Assistants

3.4 Defining the Sampling size and frequency for the NSSR RS Assistants

3.5 Calculating the statistic results like mean, standard deviation, concepts like control limits for the NSSR RS Assistants

3.6 Deciding on the Control charts that will be plotted for the NSSR RS Assistants

3.7 Interpreting the Control charts for process capability, variation etc for the NSSR RS Assistants

PI Natural limits

1. When sporadic problems are absent, the DRSS feature to feature (or NSSR OBJECTIVES SPECIFIC unit to unit) variations will be random (external factors affect the process in the most minimal manner)

2. In a stable operating environment, most processes will have a natural variation pattern that is normally distributed

3. To get a true interpretation of this normal distribution, it is important to decide on the relevance of sporadic variations or random variations.

4. For normal distribution, the sporadic variation cannot be predicted by statistics

5. When variation data is evident of capability / characteristics expected, then control charts are plotted for what is called as PI Natural limits or DRSS feature/NSSR objectives unit fitness limits.

PI Specification limits

1. Specification limits are the boundaries between the good and bad for a particular characteristic in terms of the NSSR Assistant Results/ fitness of the LSS? PI processes to be used

2. For specification limits, the sporadic variation are important for they decide whether the characteristics conform to tolerance levels expected.

3. Different classifications of control charts are plotted for what is called as conforming characteristics, nominal variation and high variation.

LSS diagnostics / review

LSS REVIEWS will be done to understand the need for RSI and CQI with the use **of focal point** statistical process control in DRSS workflows or lifecycles, quality analysis and control etc

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DRSS Intelligence and CQI

CQI Study for factors of importance such as

Familiar with Road Safety/Support needs/NSSR objectives
Controlled quality incorporation/improvement
Accurate CQI
Fast CQI
Efficient DRSS coverage
Large fleet/special need vehicle/vehicle size
Reliable RSS planning/incorporation
Fleet/Special Need Vehicle/ Vehicle / VPL maximization
Adaptability to environmental conditions

DRSS Intelligence and CQI

Diagnostics to control process variation or improve quality

Innovation & Improvement

Learning, Knowledge

Right to Education

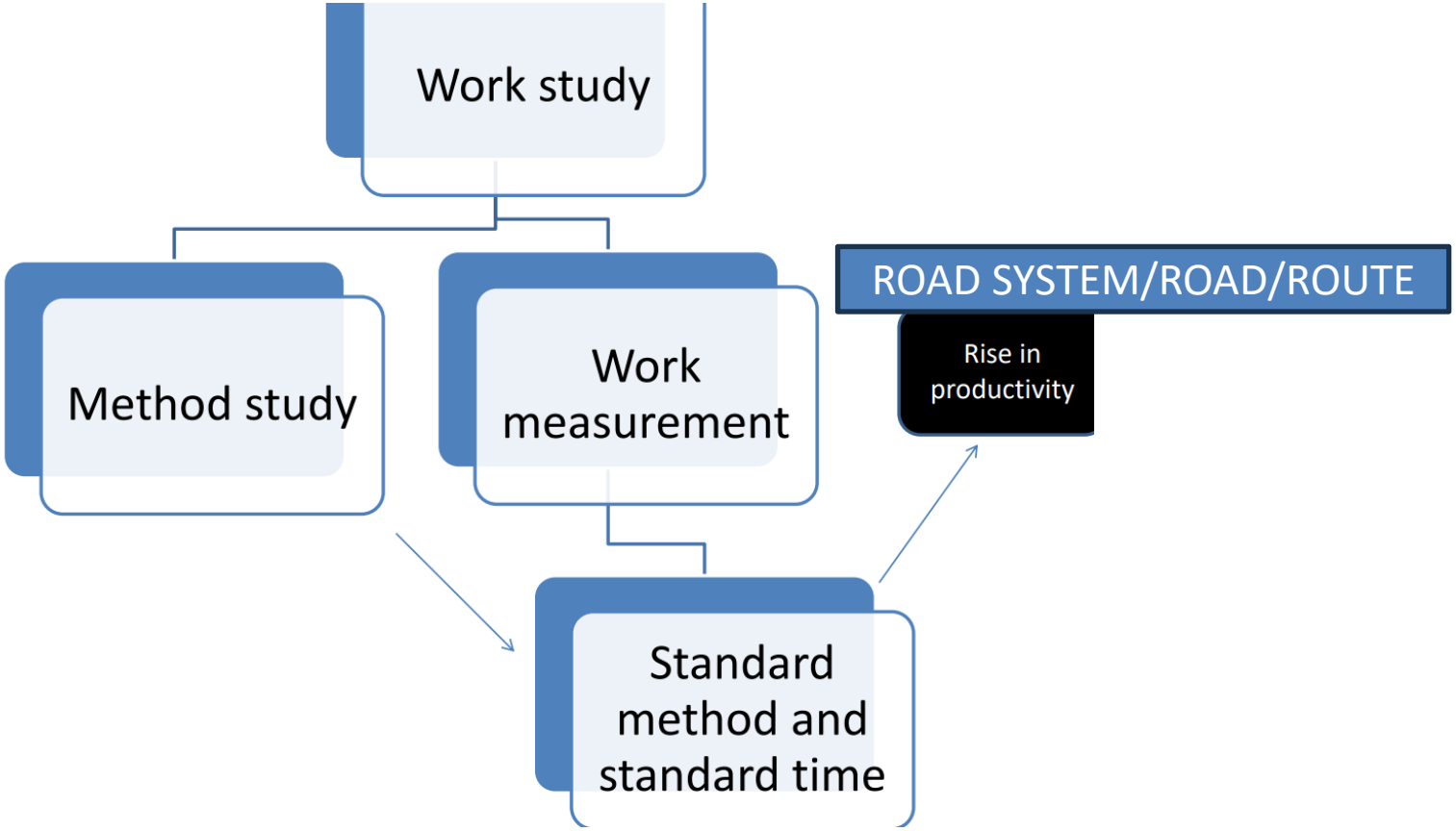
Dashboard Trends and Investment Cycle

Responsiveness for

- ✓ Zero Traffic Antecedents
- ✓ Zero Traffic Accidents
- ✓ Active Adherence for Guidelines and Fundamentals in road safety

DRSS Intelligence and CQI

Diagnostics to control process variation or improve quality



DRSS Intelligence and CQI

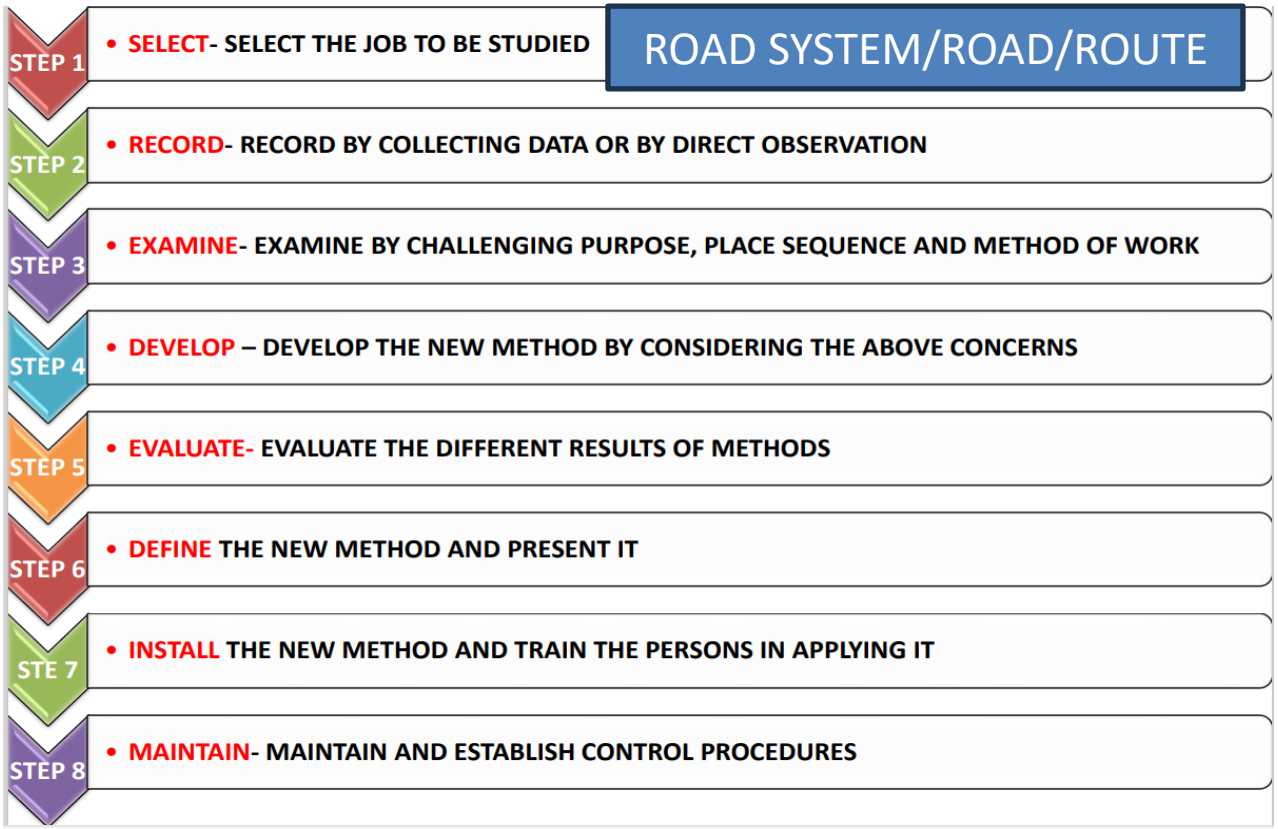
- **OBJECTIVES OF WORK STUDY**
- • Improve the basic process by research and development.
- • Improve the methods of drive to perform workflows/lifecycles/processes
- • Improve manpower efficiency
- • Standardize the PI programme.
- • To motivate the students/participants/champions/project teams/DRSS analyst teams

DRSS Intelligence and CQI

- **BENEFITS OF WORK STUDY**
- • Increased productivity.
- • Reduced PI costs.
- • Improved workflow/lifecycle/DRSS reports.
- • Improved NSSR-objectives flow
- • Basis for NSSR objectives / PI incentives scheme.
- • Provide better DRSS satisfaction to teams
- • Reduce NSSR-objective incorporation trial and error costs

DRSS Intelligence and CQI

PROCEDURE (CONVENTIONAL) – WORK STUDY



DRSS Intelligence and CQI

- **METHOD STUDY**
- • According to BRITISH STANDARD INSTITUTE
- " Method study is the systematic recording and critical examination of existing and proposed ways of doing work as a means of developing and applying easier and more effective method and reducing costs"
- **OBJECTIVE OF METHOD STUDY**
- • To study the existing /proposed method of doing any job, operation or activity. We propose to use to improve the DRSS workflow/lifecycle
- • To improve utilization of DRSS workflow/lifecycle resources.
- • To eliminate wasteful and inefficient motions.
- • To standardize drive to perform methods of processes, driving pertinence, workflow - systems integration, workflow-panel integration and analytics.
- • To develop an improved workflow/lifecycle/method

DRSS Intelligence and CQI

- **BENEFITS OF METHOD STUDY**
- • Improve CCA/E2L/VPL .
- • Improved NSSR objectives flow
- • Improved safety standards.
- • Better DRSS working conditions.
- • Economy of PI expenditure.
- • Improved RSI and CQI for DRSS
- • Most effective handling of vehicle/systems/RSI reports
- • Effective utilization of human effort.

DRSS Intelligence and CQI

- **METHOD STUDY - PROCEDURE**
- The procedure is same as work study.
- • Select
  - – Economic consideration.
  - – Technology consideration.
  - – Human consideration.
- • Record (record of all facts relating to existing methods)
  - – Select a Recording techniques
- • Process charts
- • Workflow/Lifecycle Diagrams (flow diagram/string diagram)

DRSS Intelligence and CQI

- **METHOD STUDY - PROCEDURE**
- Examine
  - – Questioning the purpose / Statement of purpose
- What is achieved
- How is it achieved
- Sequence
- Place
- Person
- • Improve work /develop
  - – Develop the improved method by generating several alternatives and selecting best method
  - – Factors to be considered in evaluating alternative • Cost of NSSR objectives implementation

DRSS Intelligence and CQI

- **METHOD STUDY - PROCEDURE**
- • Feasibility
- • Produce ability
- • Reaction of students/participants/champions/project teams/DRSS analyst teams
- • Acceptance to design, planning, control sales department
- • Evaluate
  - – Compare the cost effectiveness of the selected method with current method of performance.
- • Define
  - – Present the new method to management, champions and participants.
  - – Provide “NSSR Assistant usage/inspection sheet”

DRSS Intelligence and CQI

- **METHOD STUDY - PROCEDURE**
- • Install
  - – Test the method for short period and then deploy via the DRSS
  - – Provide training to students/participants/champions in the new RSI/CQI methods.
  - – Get active support of all members before deploying in the DRSS.
- • Maintain
  - – Periodically check and verify the new methods at regular intervals.
- – It is important to see that improved method is not gradually changed back to the original method through force of habit

DRSS Intelligence and CQI

- **TECHNIQUES FOR METHOD STUDY**
- • Process chart
  - – Outline process chart
  - – Process flow chart
  - – Two stepped chart (Dashboarding and COQ or COPQ Evaluation)
  - – Multiple NSSR Assistants/process activity chart.
  - – NSSR objectives SIMO chart.
- • Diagrams
  - – Flow diagrams
  - – String diagrams
  - – Cycle graph
  - – Chrono cycle graph

DRSS Intelligence and CQI

- For the institution/organization, the **DRSS Intelligence and Continual quality improvement (LSS) projects** will design PDCA cycles that involve
- 1. Decisions for the NSSR objectives LSS projects teaming
- 2. Selection of NSSR objectives LSS projects
- 3. Validation and explanation of reason or empirical findings
- 4. Setting of goals
- 5. Preparing of an Action plan
- 6. Gathering of data, and assessment of capability of quality procedures & work instructions
- 7. Analysis of facts, root causes and/or results of empirical studies
- 8. Developing of the LSS/RSI/CQI solution
- 9. Testing/Accentuation of the LSS/RSI/CQI solution
- 10. Ensuring the goals are met and the change is stable & has improved the process capability
- 11. Implementing of the LSS/RSI/CQI solution in context to the macroscopic and microscopic priority & inter-dependency
- 13. Monitoring of the LSS/RSI/CQI solution & its impact on subsystems and underlying organizational systems, processes, operations and performance excellence
- 14. Review any incidental cause & effect issues and/or barriers for the LSS/RS/CQI solution
- 15. Review any issues to safety and working conditions

An Initiative for DRSS Intelligence & CQI

DETAILS

Programme Proposal	Details / Associated NSSR objectives Project showcase assistance	Remarks
Training / RSI and CQI Incorporation Review		
Empirical studies		
Case studies		
ISO 9004 Continual Excellence Report		
SMART World Design Report		
GAP ANALYSIS FORESIGHT		