COPQ Continuum and SMART Ward Management (S-W-M)

TC: technology considerations

SMART – resolution or quality?

Work in progress to enable conformity – 14/11/25, 15/11/25*

Design Elements Conformity?

COPQ-Project-CENTRE

T C

COPQ-Quality Promotion-CENTRE

SMART WARD PORT FOLIO

SMART Ward Management Elements?

SMART Ward Management Patterns Assessment, AOEC 2025


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UNDER
CONSTRUCTION

Name of NSSR Theme: Road Safety/Support
Name of SMART Connect Theme: COPQ/Drone Vision

DL number or AADHAAR CARD number or SMART Ward Portfolio number

SMART WARD PORTFOLIO

Name of service enabler/person:

Pincode(s) applicable:

Type of portfolio:

Personal/ Business / Community welfare / Government / Ease of SMART Ward Portfolio

Ward(s) / Ward Numbers:

SMART Ward Project Centre Pincode (if applicable):

SMART Ward Project Centre Contact No(s):

SMART Ward Accountability Level:

Personal interest/ RTO rules & regulations based/ Government rules & regulations based/Service enabling network based/ Service interaction network based/ COPQ/Drone Vision (COPQ-or-DV**) Continuum based/technology based/ Not known**

SMART Ward Portfolio Valid from:

SMART Ward Portfolio Valid till:

An open-ended COPQ issue

SMART Ward **Portfolio**

- Roads & Road Systems
- Road Arboriculture
- Road Infrastructure
- Traffic Engineering (TE)
- Traffic Control deployments
- Immersive TE deployments
- Commuter safety deployments
- Goods transportation networks/supply chains
- BSNL/TELECOM/similar deployments
- BESCOM /similar deployments
- BWSSB / similar deployments
- Healthcare services deployments
- Medical supply services
- Educational institutions/in-situ sites/campuses
- EV Infrastructure/Flexi-fuel pumps
- Automobile dealer networks
- Automobile service centres/businesses
- Mobile Vehicle Assistance Units (MVAU)
- MSME Manufacturers
- MSME Service deployments
- Corporate offices/campuses
- KSFES deployments
- FESA auditable buildings/sites/complexes
- Fast Track PRM deployments

Domains

- Border roads
- Flyovers
- Bridges
- Underpasses
- Link roads, road corridors
- Ring roads
- Connecting roads
- Road
- Stretch
- Route

Focus on SMART Ward Management

- Road Safety Editioning
- QOI/QOP/QOO/ QOS design
- QP/CQI turnover rate
- Deep Interaction Link PRM level
- Non-conventional vehicle usage PRM level

SMART Ward Portfolio Contact Numbers

Toll free number:

_____

Names of location centres and their contact numbers Names of

_____

regional centres and their contact numbers

_____

Name of nearest city centres and their contact numbers

_____

If found please return to:

PERFORMANCE @ SCALE

ROAD INFRASTRUCTURE TRANSFORMATION

- ❑ Service Production Connect Card
- ❑ Service Enabling Connect Card
- ❑ Service Interaction Connect Card
- ❑ PMS Domain Level Card
- ❑ PRM Domain Level Card
- ❑ Road Safety Level Card


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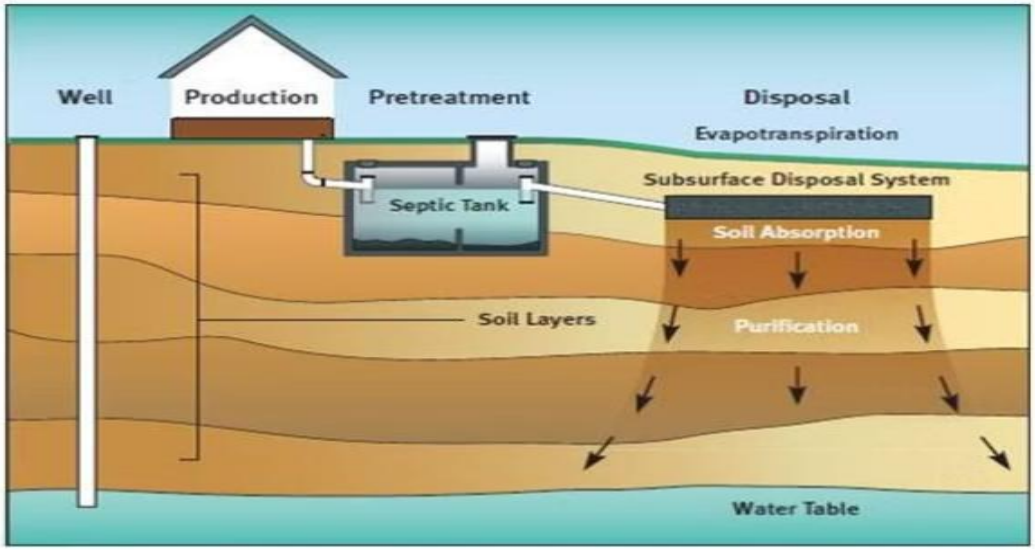

Well
Production
Pretreatment
Disposal
Evapotranspiration
Subsurface Disposal System
Septic Tank
Soil Absorption
Soil Layers
Purification
Water Table

smartconnect

Emergency Plan

Anticipated difficulty?

MISSION HEALTH

1

Why Safety Signage?

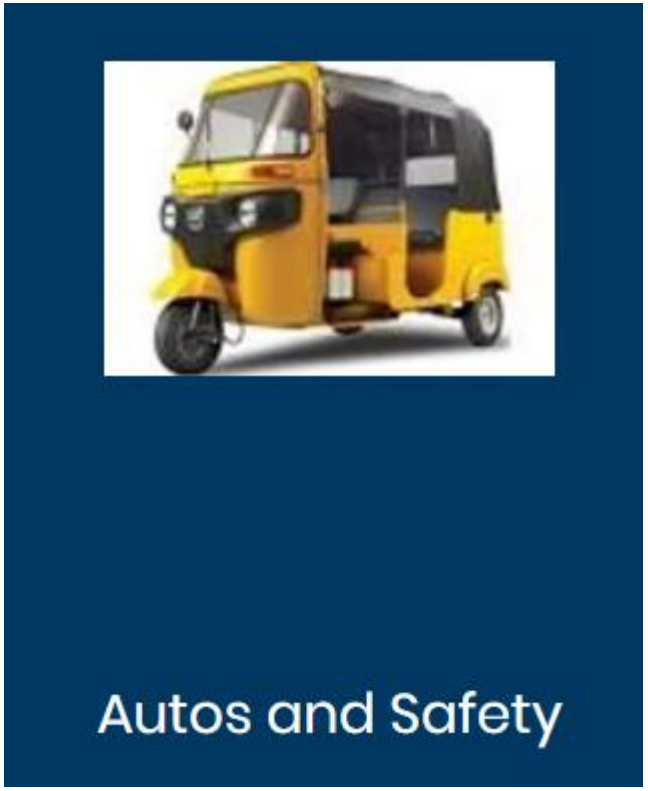
Some scenarios of risks filled SMART Ward Management with accentuation for 'Conformity Problem Solving'


ROADSIDE RAINWATER
HARVESTING

Some scenarios of installations where the lack of any Road Safety Level/PMS or PRM level at the ward management specific department/domain accentuates the need for road safety, safer logistics and safer commuting ’

TMS: TIME MOTION SCALE FOR QUALITY IMPROVEMENT/ASSURANCE

Some scenarios of installations where the lack of any Road Safety Level/PMS or PRM level at the ward management specific department/domain sets back TMS effectiveness for teams using vehicles for the services anywhere anyhow requirement’



PASSENGER AND COMMERCIAL 4W(S)

Buses, Vans and Safety

Two-wheelers and Safety

Veritable Metro and On Road Services

Fire Emergency and Safety Services

Emergency Response Services Network

the focal point

Lite Ally Vision

Know Mor...

An aerial or terrestrial viewpoint mapping for Fire and Emergency Services Actuation, Emergency Response Services, problem solving for dynamic Natural Systems interface environments, and PMS OR PRM responsiveness

Cost of Quality (COQ)

Costs of Good Quality

Prevention Costs

- Planning
- Maintenance
- Training

Appraisal Costs

- Inspection
- Calibration
- Audits

Costs of Bad Quality

Internal Failure Costs

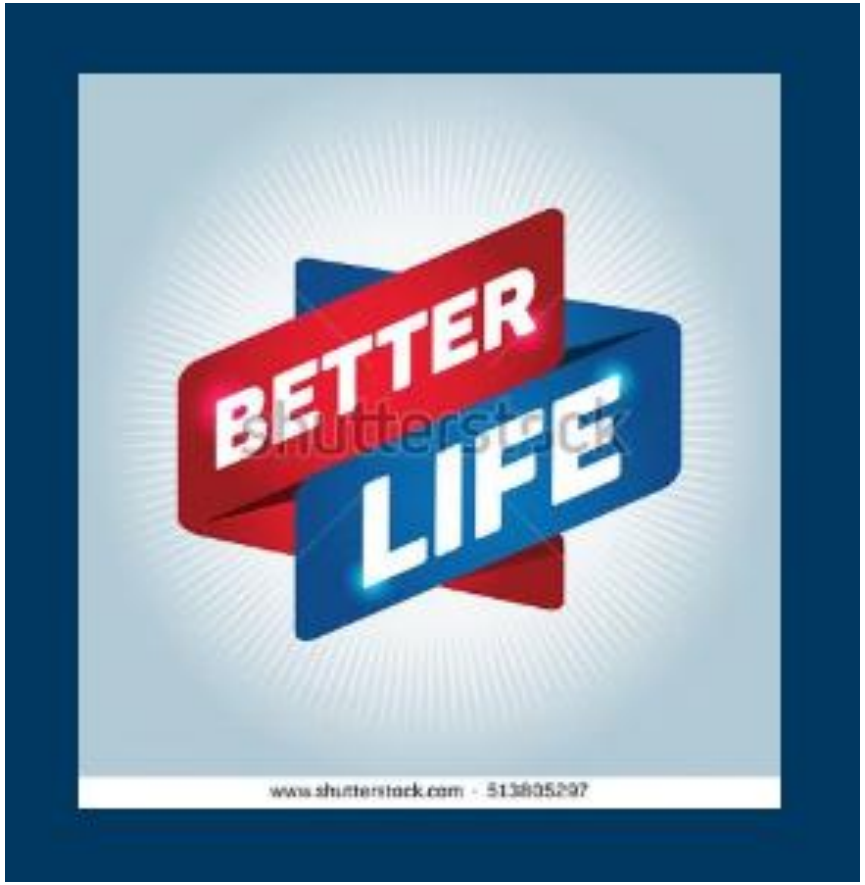
- Rework
- Scrap
- Delays

External Failure Costs

- Customer returns
- Warranty claims
- Low quality image

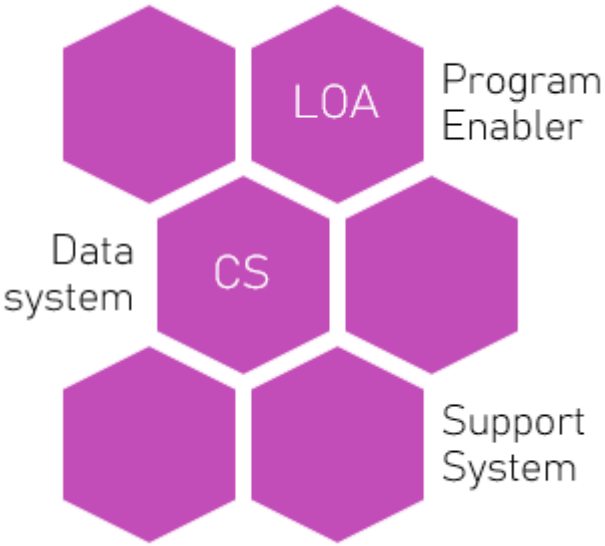
Visualizing Belief and Conceiving furtherance

Sustainable Project Management

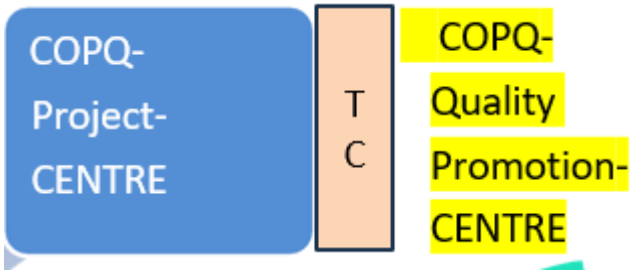


COPQ Profile for Quality, Cost, Delivery Safety, and Environment friendliness

FUTURE CONNECTED ANALYTICS



Transformations or Ripple effect



COPQ Continuum and S-W-M

The resolution though designed by the Ward management department, will need to consider certain Key Opinions called the profile of COPQ Continuum where the installation is being reviewed for any quality issues/failures/degradation etc.

The Key Opinions in the COPQ Continuum profile will need to include 6 concepts called the **COPQ Profile QCDSED**, where this stands for

Quality assessment and assurance for the installation and its due S-W-M agreement for the year or period identified

Cost estimation, baselining or distinctiveness for the ward/zone/road/street, the installation and its S-W-M agreement

Delivery of systems/parts/components/S-W-M service contract connected repairs or replacements as agreed upon as S-W-M for the installation's operation and maintenance

Safety in terms of S-W-M terms and conditions for safety at the ward/zone/ road/street, for the installation (or model or series), and for the customers or social network for the installation given their expectations and concerns for any unplanned downtime if the installation is not operational or not available

COPQ Continuum and S-W-M

Deep Interaction: Augmentation via the S-W-M Conformity enabled COPQ Research Methodology (COPQ-RM) to add future connected analytics for the customer/social network to help

Current-status or new requirements
Current assessment criteria or new requirements

COPQ Continuum and S-W-M

- **COPQ Conformity Form Serial No:** **Date:**

- **Name of the ward/zone/road/street/site or building/installation:**

- **Assessment carried out by:**

- **Form filled by:**

- **Current status (Tick as applicable):**

❑ Being planned/designed	[ ] Active and operational
❑ Being implemented	[ ] Under-rectification or Under-repair
❑ Being integrated/tested	[ ] Under-surveillance
❑ Being disassembled	[ ] Rejected due to costs, risks or problems

- **Assessment criteria (Tick as applicable):**

❑ Quality assurance for distinctive nature of conformity, product or service
❑ Quality assurance for Location
❑ Quality assurance for New/Existing/Aging Foundation
❑ Quality assurance for Layout
❑ Quality assurance for Natural systems interface utilization
❑ Quality assurance for Sustainability

COPQ Continuum and S-W-M

- **Quality assurance for distinctive nature of installation, its site, building, facility or need for service**
- **Nature of installation, its site, building or facility (Tick as applicable):**

❑ Small

❑ Medium

❑ Large

❑ Part of a larger cluster

Nature of S-W-M responsiveness needed (if any):

Are there issues related to the following (like) (Tick as applicable):

❑ S-W-M terms & conditions or due scope

❑ S-W-M pricing / COST OF POOR QUALITY COSTS

❑ S-W-M planning for & understanding of utilization

❑ S-W-M promotion of the old QCDESD expectation

❑ S-W-M effort in improving customer loyalty/ social welfare or assurance

❑ S-W-M inclusion of sustainable project management

Nature of S-W-M responsiveness needed (if any):

COPQ Continuum and S-W-M

- **Quality assurance for the installation's Location**
- **Nature of installation, site or building (Tick as applicable):**

❑ Small
❑ Medium
❑ Large
❑ Part of a larger cluster

Nature of S-W-M responsiveness needed (if any):

Are there issues related to location of installation, site or building (like) (Tick as applicable):

❑ In a crowded neighborhood
❑ In an industrial region
❑ In a polluted region
❑ In an isolated place
❑ In a generally unsafe area
❑ With other inherited vulnerabilities due to geographical conditions

Nature of S-W-M responsiveness needed (if any):

COPQ Continuum and S-W-M

- **Quality assurance for the S-W-M via a** SMART S-W-M Conformity / COPQ Profilometer

- **The SMART Focus to include (Tick as applicable):**

- ❑ Quality Assessment and Assurance
- ❑ Proof of stability or sustainable performance amidst climate change and road system / road infrastructure dynamics
- ❑ Connected cost-effectiveness and performance
  - ❑ For the S-W-M scope
  - ❑ For the S-W-M period
  - ❑ For the S-W-M relevance for quality
  - ❑ For the S-W-M relevance for energy / utilization based sustainability
- ❑ Safety based on
  - ❑ Connected cost-effectiveness and performance
  - ❑ Nature of the installation site and accountability
  - ❑ Nature of ownership or open-ness

- ❑ Adjoining Unregulated/Basement Parking areas and possibility of accidental damage
- ❑ Adjoining Sheds or temporary structures and possibility of accidental damage
- ❑ Future connected analytics
  - ❑ CCMA related Problem solving for connected effectiveness and performance
  - ❑ Scaled-up-adoption in terms of Green QA products/systems/continuum-profiles, energy systems/backup systems/panel incorporations

COPQ Continuum and Sustainable S-W-M

- **Quality assurance for S-W-M via a** SMART S-W-M Conformity / COPQ Profilometer

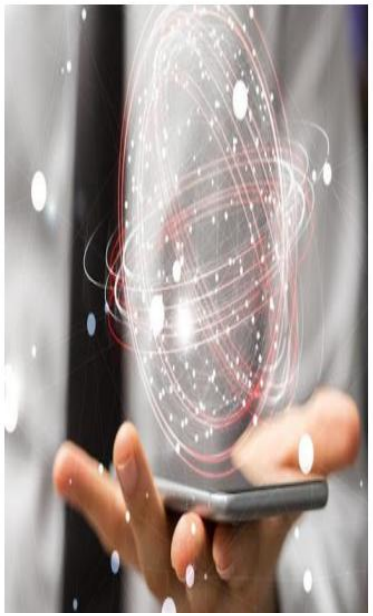
❑ **Nature of S-W-M responsiveness needed (if any):**

❑ **Use of a tool like Dimensional benefits (related details)**

Quantitative dimensional benefits of the solution for the ecosystem
(current + potential)

SMART Focus

- Quality
- Cost
- Delivery
- Safety
- Environment
- Deep Interaction



Sustainability Proposal

- Green MIR Identity
- Analytics
- Management Index
- Augmented Protection
- Compliance Assessment Model
- Aging Assessment Model

Green QA Product

COPQ Continuum and Sustainable S-W-M

- **Quality Assurance for the S-W-M via a** SMART S-W-M Conformity / COPQ Profilometer
- **Augmented Focus includes (Tick as applicable):**

- ❑ **Compliance Re-Assessment Model**
- ❑ **Site/closed-for-dynamics installation or open-dynamics installation Aging Assessment Model**
- ❑ **Key Opinion Profile Analytics**
  - ❑ Via Call to attention Self-assessments
  - ❑ Via Call to attention QA Audits
  - ❑ Via Call to attention CUSTOMER SATISFACTION Surveys/ Common complaints
  - ❑ Via S-W-M connected Incidence Management, Complaints Redressal, Feedback

- ❑ **Augmented Protection**
  - ❑ Commitment to make the installation/service lifecycle a Green-QA-Product
  - ❑ Commitment to improve the Ease of Management Index
  - ❑ Commitment to help Risk Assessment and Control
- ❑ **Statistical Analysis**
  - ❑ For site and installation installation
  - ❑ For Call to attention highlights
- ❑ **Future connected analytics**
  - ❑ Ranked (for Issue resolution) planning for quality assurance and customer satisfaction
  - ❑ Forward Lifetime analysis for the site/installation/operation and maintenance

S-W-M Conformity Assessment form

- **Quality assurance for closed for dynamics installation or open dynamics installation and its reviewed for Dimensional Benefits Layout**
- **Installation Layout could include (Tick as applicable):**

[ ] Road system / Road side

- ❑ Single building
- ❑ Commercial establishments
- ❑ Security infrastructure
- ❑ Club-house & other amenities
- ❑ Compound area
- ❑ Unregulated Parking areas
- ❑ Basement Parking areas
- ❑ Sheds or temporary structures

[ ] Open environment

- [ ] Multiple buildings
- [ ] Government offices
- [ ] Basement areas
- [ ] Multi-level Parking areas
- [ ] Storerooms

Nature of S-W-M responsiveness needed (if any):

S-W-M Conformity Assessment form

Electricity supply arrangements (Tick as applicable):

- ❑ Overhead lines — Number:
- ❑ Transformers — Number:
- ❑ Substations — Number:
- ❑ Alternate energy systems

Nature of S-W-M responsiveness needed(if any):

S-W-M Conformity Assessment form

New / Existing Load estimation for site (Tick as applicable):

- ❑ General purpose lighting (in-doors)
- ❑ General purpose lighting (out-doors)
- ❑ installations Number:
- ❑ Pumps Number:
- ❑ Motors Number:
- ❑ Generators / Diesel sets Number:
- ❑ UPS Number:
- ❑ Computers Number:
- ❑ Appliances Number:
- ❑ Advanced equipment Number:
- ❑ Critical for life saving, healthcare or nursing equipment
- ❑ Solar heaters Number:
- ❑ Cooling plants Number:
- ❑ HVAC systems Number:
- ❑ Air-conditioning systems Number:
- ❑ Chimneys Number:
- ❑ Incinerators Number:
- ❑ Alternate Energy (electricity supply) systems Number:

S-W-M Conformity Assessment form

Nature of issues / condition of the electrical systems (if any):

S-W-M Conformity Assessment form

S-W-M connected circuit arrangements (Tick as applicable):

[ ] According to regulations

[ ] Concealed (where ever possible)

[ ] Temporary

[ ] Open

[ ] Emergency

Nature of problems (if any):

S-W-M related Norms considered at the site (Tick as applicable):

- ❑ Protection against lightning
- ❑ Protection against faulty earthing leakages
- ❑ Protection against short circuit current surges, low voltage, fluctuating voltage, spikes
- ❑ Increasing wiring sizes according to regulation codes or opting for better insulation to prevent energy loss
- ❑ Policy driving replacement of obsolete or power intensive equipments and systems with ones that are capable of more energy savings
- ❑ Regular inspection and remedial action

S-W-M Conformity Assessment form

Fire mitigation need based Water supply arrangements for the site:(Tick as applicable)

- ❑ Public distribution system — Capacity: — Timings:
- ❑ Wells — Number:
- ❑ Bore-wells — Number:
- ❑ Tanks — Number:

Nature of problems (if any):

S-W-M Conformity Assessment form

Type of distributionnetwork for fire mitigation related water supply (Tick as applicable):

- ❑ Pipes (metallic)
- ❑ Pipes (non-metallic)
- ❑ Hoses
- ❑ Temporary arrangements
- ❑ Emergency arrangements

Nature of problems (if any):

S-W-M Conformity Assessment form

NOTE: Sustainable product usage and S-W-M effectiveness is a subject where assessments are done and possible actionsplans drawn to preserve the environment, mitigate disasters, damage, risks or threats. The subject deals with equipping the manufacturer, S-W-M department, third party site management company or occupants with information so one can develop a "S-W-M Conformity profile of the Natural systems interface" to take advantage of the naturalassets at the location like the following:

a. Use of natural slope or designing man-made sloping to mitigate issues like water shortage, low pressure in water supply, water logging, landslides and mudslides etc

b. Optimum use of sunlight, shade to provide natural lighting, and/or generate energy via solar photo voltaic panels

c. Best use of the prevailing winds to provide ventilation, and/or generate energy via micro-windmills

d. Effective use of the prevailing rainfall patterns and the microclimate at the location to plan hazard control construction, water management systems and landscaping

Assessment form

e. Implementing (i) rain water harvesting, or (ii) storm water harvesting

f. Opting for eco-scaping which includes xeriscaping and gardening, where the plants that are grown in-house, or on terraces or in gardens are medicinal plants, aromatic plants and other varieties that need less water and minimal maintenance

g. Facilitating sustainable building techniques by promoting more awareness, adherence and mitigation where occupants show collective responsibility or come up with complementary go-green measures

h. Developing of a disaster mitigation plan to help sensitize the third party management company and occupants to disasters, risks or threats or to at least opt for measures that increase chances of loss reduction or survival.

Part 2 of this Reckoner provides more details on how one can develop a disaster mitigation plan.

Assessment form

Are there any issues related to the (Tick as applicable)

- ❑ Natural systems interface (to take advantage of the natural resources at the location, use of light, shade, the prevailing winds, the prevailing rainfall patterns, the microclimate at the site)? Yes/No

  Related details about design, layout andnatural systems utilization:

- ❑ Proximity to disaster prone areas? Yes/No — Vulnerable: Yes/No

  Related details about risks or threats:

- ❑ Seasonal climate patterns in region/state? Yes/No — Vulnerable: Yes/No
- ❑ Recent climate patterns in region/state? Yes/No — Vulnerable: Yes/No
- ❑ Electricity (Energy) supply systems? Yes/No — Insufficient: Yes/No
- ❑ Alternate Energy supply systems? Yes/No — Not planned: Yes/No
- ❑ Water supply systems? Yes/No — Insufficient: Yes/No
- ❑ Alternate Water supply systems? Yes/No — Not planned: Yes/No
- ❑ Irrigation system for garden/lawn etc? Yes/No — Not conservative: Yes/No
- ❑ Waste management systems? Yes/No — Insufficient: Yes/No

Assessment form

- **Are there any issues related to the (Tick as applicable)**

❑ 24/7 Availability model for occupancy or business practices (via standby diesel sets/alternate systems/alternate resources)? Yes/No

(If yes) Nature of problems:

❑ Human health influencers (air quality/water quality/land degradation/waste generated/ house-keeping chemicals utilization etc)? Yes/No

(If yes) Nature of problems:

❑ Neighboring site/facility/building influencers? Yes/No

(If yes) Nature of problems:

❑ Other costs related influencers and risks affecting occupants or business practices? Yes/No

(If yes) Nature of problems:

Assessment form

- **Identification of trends seen for costs related influencers (Tick as applicable)**

❑ Increasing operating costs and maintenance costs? Yes/No

❑ High electric power or electric systems costs? Yes/No

❑ Worsening power grid problems such as power quality and unavailability? Yes/No

❑ Possible water shortages, and waste water disposal issues? Yes/No

❑ Escalating need to control waste generated via proper eco-friendly and conservative approaches? Yes/No

❑ Pressure and responsibility to control utilization and reduce causative effect of harmful chemicals, and criteriapollutants(VOCs)? Yes/No

❑ Growing concern about the aspect of Global warming and unprecedented climate change affecting similar sites/facilities/buildings? Yes/No

Note: This issue may need investment in additional solutions that help mitigate risks and threats.

Assessment form

- **Identification of influencers causing risks (Tick as applicable)**

- ❑ Issues due to unplanned tall/weak structures at location? Yes/No
- ❑ Issues due to old and defunct infrastructure at location? Yes/No
- ❑ Issues with design and/or locationof electrical systems? Yes/No
- ❑ Issues with design and/or locationof waste water treatment plants? Yes/No
- ❑ Issues with design and/or locationof waste treatmentplants? Yes/No
- ❑ Issues with how house-keeping chemicals, fertilizers, manure, or other hazardous material is being utilized and/or stocked? Yes/No
- ❑ Issues with availability of transport for occupants, visitors or materials? Yes/No
- ❑ Does the site/building have plans and provisions for early detection, abatementand containment of fire? Yes/No

Assessment form

- **Identification of influencers causing risks (Tick as applicable)**

❑ Issues with fire extinguisher systems? Yes/No

❑ Issues with planning for inflow, exit or evacuation areas? Yes/No

❑ Issues due to non-fire or sudden climate change emergencies? Yes/No

Does the site/building have plans and provisions for preparedness, abatement and containment of damages due to earthquakes? Yes/No

Does the site/building have plans and provisions for preparedness, abatementand containment of damages due to landslides and mudslides? Yes/No

Does the site/building have plans and provisions for preparedness, abatement and containment of damages due to cyclones? Yes/No

Does the site/building have plans and provisions for preparedness, abatement and containment of damages due to water logging or flooding? Yes/No

Does the site/building have plans and provisions for preparedness, abatement and containment of damages due to sudden hailstorms/windstorms/frost? Yes/No

Assessment form

- **Identification of influencers causing risks (Tick as applicable)**

  Does the site/building have plans and provisions for early remedial action, abatement and containment of damages & health hazardsdue to garbage dumps, sewer problems or open drain problems? Yes/No

  Does the site/building have plans and provisions for early remedial action, abatement and containment of damages & health hazards due to nearby contaminated water bodies? Yes/No

  Does the site/building have plans and provisions for early detection, abatement and containment of damages & health hazards due to pests/termites/virulent insects? Yes/No

Assessment form

- **Risks to life and property due to Earthquakes (Tick as applicable)**

- ❑ Does the building or facility adhere to Building codes for structural and non-structural design measures? Yes/No
- ❑ Do the structures have high energy absorption capability? Yes/No
- ❑ Is seismic resistant steel used? Yes/No
- ❑ Has sway resistance been designed in steel used in the building or facility? Yes/No
- ❑ Has the ductility of steel frames of the building or facility been improved? Yes/No
- ❑ Have norms or guidelines been followed for Building configuration (…)? Yes/No
- ❑ Have norms or guidelines been followed for the Building Foundation (…)? Yes/No
- ❑ Have norms or guidelines been followed for the control on openings in walls (…)? Yes/No

Assessment form

- **Risks to life and property due to Earthquakes (Tick as applicable)**

- ❑ Have norms or guidelines been followed for the control on wall length and building height (…)? Yes/No

- ❑ Have norms or guidelines been followed for providing vertical reinforcement (…)? Yes/No

- ❑ Have norms or guidelines been followed for water-proofing of building (…)? Yes/No

Assessment form

- **Risks to life and property due to Cyclones (Tick as applicable)**

- ❑ Is the building protected from high-velocity winds? Yes/No
- ❑ Has the whole structure been designed in such a way that it can withstand lateral movement and upinstallation forces? Yes/No
- ❑ Are the frames and gables braced? Yes/No
- ❑ Have the connections between the roofs and the walls been strengthened? Yes/No
- ❑ Have norms or guidelines been followed in planning orientation of the building (…)? Yes/No
- ❑ Have norms or guidelines been followed for certain parameters of the Building Foundation (…)? Yes/No
- ❑ Have norms or guidelines been followed for the control on openings in walls (…)? Yes/No

Assessment form

- **Risks to life and property due to Cyclones (Tick as applicable)**

- ❑ Have norms or guidelines been followed for the control of paneling (…)? Yes/No

- ❑ Have norms or guidelines been followed while deciding upon roof and rooftop structures for the building (…)? Yes/No

- ❑ Have norms or guidelines been followed by the installing of wind-break fences and planting of shelter belts in the direction of the wind, if building is in the country-side, or out in the open (…)? Yes/No

Assessment form

- **Risks to life and property due to Floods (Tick as applicable)**

- ❑ Have norms or guidelines been followed in selecting site of the building (away from flood plains or away from large water bodies that can flood)? Yes/No

- ❑ If not, have norms or guidelines been followed for mitigationof certain risks (like being swept away by strong currents, sudden collapse, water logging)? Yes/No

- ❑ Have norms or guidelines been followed to elevate the building so as to keep the lowest floor above flood level? Yes/No

- ❑ Have norms or guidelines been followed in making the building water tight to restrict entry of water (blocking of doors, windows and air vents with boards, use of coal fly-ash in construction of embankments or dykes)? Yes/No

- ❑ Have norms or guidelines been followed in making the exposed parts of the building resistant to water damage (use of coal fly-ash as it has self-cementing properties)? Yes/No

- ❑ Have norms or guidelines been followed in designing sloping rooftops, basements, driveways and suitable storm water drains to help prevent water logging in manageable circumstances? Yes/No

Assessment form

- **Risks to life and property due to Landslides and Mudslides (Tick as applicable)**

- ❑ Have norms or guidelines been followed in selecting site of the building (away from the foot of hills, not on open or unconsolidated slopes of hilly areas)? Yes/No
- ❑ Have norms or guidelines been followed for mitigation of certain risks (like being swept away by land slides or mud slides, sudden collapse, water stagnation)? Yes/No
- ❑ Have norms or guidelines been followed by constructing wide ditches around building? Yes/No
- ❑ Have norms or guidelines been followed by constructing retention structures? Yes/No
- ❑ Have norms or guidelines been followed by constructing deflection structures or protection walls for building? Yes/No
- ❑ Have norms or guidelines been followed in constructing channels or drainage systems on slopes? Yes/No
- ❑ Have norms or guidelines been followed by planting trees on open or unconsolidated slopes of nearby hilly areas? Yes/No

Readiness, repair and restoration strategy

- **Inspection category:** Assessment of solution, product or service

- **S-W-M Conformity Form Serial No:** **Date:**

- **Name of the project:**

- **Scenarios of issues**
- 1. If there are issues with the scope, pricing, consumerism, promotions or customer loyalty, the company will need to conduct gap analysis using the "Making your products and projects sustainable" handbook/guide. Incorporation of satisfactionsurveys at different levels like the Customer Satisfaction Survey, the Manufacturer Satisfaction Survey, and the Supplier Satisfaction Survey can help.

- 2. If there are issues with the project management methodologies, then the company will need to refer to the ZED Proverbial on Project Management, and compliment this understanding by reading more about sustainable project management in the "Making your products and projects sustainable" handbook/guide.

Readiness, repair and restoration strategy

- **Inspection category:** Assessment of the ward/zone/road/street/installation/S-W-M assurance

- **S-W-M Conformity Form Serial No:** **Date:**

- **Name of the site or building:**

- **Scenarios of issues**
- 1. If there are issues with the Natural systems interface, these need to be analyzed to understand what the construction company, third party BMS/FMS company or occupants can do to better the design for sustainability. It is found that in most cases a third party management company or occupant cannot change the inherent design of the site/building/design for installations, or occupants cannot invest in all possible renewable energy solutions due to cost factors, then a revert on any conformance to certain basic expectations like DEC and HPE can mitigate risks and threats.

- 2. If the site is near disaster prone areas, then it is necessary for the third party management company or occupants to have a disaster mitigation plan.

- 3. If there are issues with the geographical location or seasonal climate patternsin the region/state, then the third party management company or occupants must analyze the risk probability and mitigate risks via a suitable plan or even procure insurance.

Readiness, repair and restoration strategy

- 4. If there are issues with sudden seasonal climate patterns in region/state, then the occupants must assess the **risk probability,** pursue **or** devise a contingency plan to control or repair damage to the extent possible. It may be necessary to plan for contingency repair/replacement/service effectiveness.

- 5. If there are issues with the irrigation systems flooding or draining water supply**,** then the third party BMS/FMS company or occupants must get this addressed immediately.

- 6. If there are issues with the Electricity (Energy) or Water supply systems, then the third party BMS/FMS company or occupants must evaluate DEC & HPE adherence, and get this addressed immediately.

- 7. If there are issues with the Alternate Energy (Electricity supply) systems, then one must evaluate the impact on sustainability and address the same keeping in mind the priority to use the installation and triple bottom line profitability.

- 8. If there are issues with the Alternate Water supply systems, then one must evaluate the impact on sustainability and address the same keeping in mind the need to protect the installation installation/ resolve fire incidences and revert for any triple bottom line profitability.

Readiness, repair and restoration strategy

- 9. If there are issues with the Drainage arrangements (regular/excess/incidental), then one must evaluate the potential of a better Natural systems interface, and according to what is possible control the damage keeping in mind the installation utilization and sustainability.

- 10. If there are issues with the Non- biodegradable (inorganic) Waste management, then one must carefully look at the nature of the problem and address the same with the help of better segregation, packing and disposal techniques. Any neglect could lead to contamination or degradation of the installation / installation / environment.

- 11. If there are issues with the Biodegradable (organic) Waste management, then one must address the same with the help of better labelling of product / service lifecycle expectations for segregation, packing and disposal techniques. Any neglect could lead to the germicidal issues affecting the installation/installation/environment.

- 12. If there are issues with the Waste-to-Energy systems, then one must evaluate the impact on the usage of the installation keeping in mindthe priority and triple bottom line profitability.

Readiness, repair and restoration strategy

- 13. In scenarios where there is a large garden or lawn, if there are issues with energy consuming/draining garden or lawn implements, this must be addressed immediately.

- 14. If there are issues with the energy consuming/draining garden or lawn implements, then one must evaluate the impact on sustainability and address the same keeping in mind the priority for the installation installation and triple bottom line profitability.

- 15. If there are issues with the house-keeping chemicals, fertilizers, manure etc, then one must identify the nature of the problem this can cause to the life/service lifecycle i.e. whether the issues are related to the hazards or benefits of the product, the EPD or EBD declarations of the product, its sourcing, its inventorying, its stocking, its 24/7 or as needed availability, its reordering etc.

  NOTE: EPD stands for Environment Product Declarations, EBD standsfor Environment Building Declarations that identify whether a product is safe for the environment and green in its complete lifecycle i.e. sourcing, manufacturing, utilization, disposal and/or reuse practices.

Readiness, repair and restoration strategy

16. If there are issues with the 24/7 Availability model for occupancy or business practices (via standby diesel sets/alternate systems/alternate resources), then these problems need to be cross-examined and addressed to prevent any lack of planning or unavailability (like lack of minimal lighting, water supply, non-functional installations etc) from adding to the risks faced by the occupants. Preparedness and agility to act are factors that are important to control damage today.

17. If there are issues with Human health influencers (air quality/water quality/chemicals utilization etc), then these need to be taken up seriously and remedial steps taken to address the same.

18. If there are issues with Neighboring plot/site/building/facility influencers, then it needs to be understood that this may affect environment conservation practices and also could in the long term lead to climate change issues and environment deterioration.

19. If there are other costs related influencers affecting occupancy or business practices, then it is important for one to get some assistance in understandingthe influencers and alternatives available today. If there is a growing concern about costs, shortage, climate change, then one must assess the **risk probability** for the site.

Readiness, repair and restoration strategy

A note on the risk probability for the site

(a) One must assess and examine what best can be done in case of fire-emergencies. An associated body providing consultation advice can help understand the options available to control damages.

For preparedness, abatement and containment of damages due to earthquakes, cyclones, flooding, landslides and mudslides, one needs to practice hazards control construction and also devise a disaster mitigation plan to act in the event of a disaster, risk or threat.

Certain details have been shared via our Case studies for this Reckoner, it is advised that one consult with an associated case study to understand the solutions available to control damages.

(b) One must assess and examine what best can be done in case of climate change emergencies like hailstorms/snow fall/frost. An associated case study providing consultation advice can help understandthe options available to control damages.

(c) One must assess and examine what best can be done in case of other emergencies like attack due to pests/termites/virulent insects. An associated case study providing consultation advice can help understand the options available to control damages.

Readiness, repair and restoration strategy

(Continued) **A note on the risk probability for the site**

(d) One must assess and examine what best can be done in case of another emergency like issues caused due to hazardous practices of a neighboring plot/site/building/facility. An associated body providing consultation advice can help understand the options available to control damages.

(e) If there are issues like health hazards due to garbage dumps, sewer problems or open drain problems, or nearby contaminated water bodies, then must mobilize support from the neighborhood and raise the issue with the area-wise municipal body to initiate necessary remedial action.

From required repair/replacement to assessing for risk probability

Some of these areas need all concerned to have the interests of the community in mind and for people to show collective responsibility for environment conservation and sustainability.

Sensitization and preparedness are the first steps. The Q&A reports/surveys from this assessment will be shared with a COPQ-PROJECT-CENTRE / COPQ-QUALITY_PROMOTION-CENTRE to determine the call to attention cost of poor quality (COPQ) issues or COPQ continuum problem solving, where the focus for SMART Ward Management is developed using a SMART Ward Portfolio concept.

Readiness, repair and restoration strategy

(Continued) **A note on the risk probability for the site**
As the roads alongside which the specific SMART Ward Management repair/replacement/Quality assurance are of different types, the proposal for a strategy accentuates the need for a SMART Connect Portfolio for people/commuters/service anywhere anyhow teams to address a distinctive nature and cost of poor-quality nature of road system and road infrastructure issues affecting a Ward/Zone/Road/Street/Site's installation of department specific elements.

For SMART Ward Management departments, the costs of road system and road infrastructure issues, or deteriorating climatic conditions will sometimes cause a concern as to whether related terms and conditions, and due scope considerations are being given for QCSED expectations where this can be helped by ward management department or domain specific sustainable project management.