

RR-Gov™ / RDIS Public S4-Lite

Stage-Gate, Lifecycle Monitoring and Governance Card Overview

Company Website Public Version / Non-Academic Supplementary Overview

Item	Public website version details
Document type	Public-facing explanatory overview of RR-Gov™ / RDIS stage-gate and lifecycle monitoring logic.
Related framework	RR-Gov™ / Regulated Deployment Infrastructure Score (“RDIS”).
Related technical paper	RR-Gov™: A Quantitative Governance Readiness Framework for Regulated Deployment of Embodied AI Eldercare Robotics – Toward an RDIS-Based Socio-Technical Systems Model for Assistive Robotics in the Health Domain.
Relationship to formal S4	This S4-Lite document is not the formal academic Supplementary File S4 and does not reproduce validation-level formulas, detailed thresholds, calculation worksheets or formal templates.
Status	Public website version; not independently peer-reviewed; not regulatory approval, clinical validation, product certification, legal advice, commercial valuation or deployment authorisation.
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Important Notice

This public S4-Lite document is prepared for company website reference to explain, in a reader-friendly and boundary-controlled manner, the stage-gate, lifecycle monitoring and governance-card logic associated with RR-Gov™ / RDIS.

It is not the formal academic Supplementary File S4. It does not reproduce validation-level formulas, detailed scoring tables, full threshold worksheets, institutional records, source-record confirmation, site-level evidence, confidential templates or calculation workpapers.

The formal supplementary materials, including the detailed stage-gate logic, monitoring indicators and governance-card template, are retained as supporting technical materials for academic review, qualified institutional review, governance reference and evidence-control purposes.

This document should not be interpreted as legal advice, regulatory approval, clinical validation, medical-device certification, product clearance, government endorsement, institutional endorsement, investment recommendation, commercial valuation or universal deployment readiness.

1. Purpose of this Public S4-Lite

The purpose of this public version is to help readers understand how RR-Gov™ / RDIS uses stage-gate thinking and lifecycle monitoring to support responsible governance-readiness assessment of embodied AI humanoid eldercare robots.

The public version is intentionally written as an explanatory overview. It preserves the conceptual meaning of the formal S4 material while avoiding unnecessary reproduction of detailed academic supplementary content that may later be submitted, revised, peer-reviewed or assessed through formal scholarly channels.

2. Public Disclosure Boundary

Public website version explains	Formal / retained supplementary materials may contain
The purpose of stage-gate review.	Detailed stage-gate thresholds, formal review worksheets and validation-level tables.
The reason why aggregate scores should not override critical governance failures.	Full formula dictionary, scoring rubrics and component-level calculation support.
The categories of lifecycle monitoring indicators.	Detailed monitoring formulas, calibration rules and site-level reporting templates.
The public meaning of an RDIS Governance Card.	Formal governance-card template fields, evidence-owner fields and remediation tracking details.
The confidentiality and evidence boundary for public disclosure.	Institutional source records, internal audit trails, logs and evidence-control materials.

3. Stage-Gate Logic: Public Overview

In RR-Gov™ / RDIS, the composite governance-readiness score is necessary but not sufficient. A high overall score should not conceal a critical weakness in safety, compliance, auditability, data governance, human oversight or lifecycle monitoring.

The stage-gate logic is therefore designed to ensure that critical governance conditions must be considered separately from the aggregate score. This helps prevent commercial, operational or adoption strengths from offsetting unresolved governance weaknesses.

Stage-gate theme	Public interpretation
Governance risk control	Residual governance risks should remain controlled within the defined deployment boundary.
Compliance confidence	The compliance pathway should be credible, traceable and reviewable.
AI auditability	System actions, logs, alerts and human interventions should be sufficiently traceable for review.
Institutional deployability	The deployment site, staff workflow and operational pathway should be prepared for controlled assessment.
Data governance	Data flow, access, retention, deletion and privacy-control considerations should be addressed.
Human oversight	Human responsibility, override, escalation and periodic review should remain defined and active.

4. Deployment Classification: Public Overview

The formal RR-Gov™ / RDIS materials may distinguish different levels of deployment-readiness interpretation. This public version does not reproduce formal threshold tables. Instead, it explains the logic at a high level.

Public classification concept	Public meaning
Controlled pilot candidate	A limited, supervised and documented assessment may be considered, subject to local approval and evidence review.
Broader institutional assessment candidate	Broader assessment may be considered only where governance evidence, local requirements and monitoring controls support further review.
Remediation required	Corrective action is needed where a critical governance gate remains unresolved, even if the aggregate score appears acceptable.
Not deployment-ready	Major redesign, governance remediation or further preparation is required before controlled assessment should proceed.

5. Lifecycle Monitoring: Public Overview

Post-deployment monitoring is the feedback mechanism that makes RR-Gov™ a systems-oriented governance model rather than a one-time checklist. Monitoring is intended to identify whether the deployment environment remains consistent with the assumptions under which governance-readiness was assessed.

This public version describes monitoring categories only. Formal formulas, measurement definitions, calibration details and site-level templates are retained in the supporting technical materials.

Monitoring category	Public interpretation
Workflow fit	Whether robot-supported activities remain compatible with actual institutional workflow.
Compliance traceability	Whether required compliance items remain documented and reviewable.
Corrective-action closure	Whether remediation actions are assigned, tracked and closed.
Human override and escalation	Whether human intervention and escalation events are recorded and resolved.
Incident review	Whether incidents are documented, escalated and reviewed at the appropriate level.
Audit closure	Whether audit findings and governance review items are closed or escalated.
Recalibration trigger	Whether material changes in site conditions, robot functions, workflow or regulatory requirements require reassessment.

6. Public Governance Card: Summary View

The RDIS Governance Card is intended to summarise the governance-readiness assessment boundary, not to certify a deployment. The public version below is a simplified explanation of the governance-card concept and does not reproduce the formal template.

Governance Card area	Public summary
Assessment boundary	Defines the institution, site, task scope, robot functions, resident profile and relevant data flows.
Intended use	Clarifies that the robot is assessed for care-support or workflow-support functions, not autonomous clinical decision-making unless separately validated.
Evidence package	Identifies categories of policies, logs, training records, incident records, data-protection materials and remediation records.
RDIS interpretation	Summarises component-level governance-readiness assessment and overall candidate interpretation.
Stage-gate status	Records whether critical governance gates are satisfied, unresolved or require remediation.
Limitations	States assumptions, missing evidence, local constraints and evidence-boundary limits.
Remediation and monitoring	Identifies action owners, target dates, monitoring frequency, escalation pathway and recalibration triggers.

7. Evidence Disclosure and Confidentiality Boundary

RR-Gov™ / RDIS separates public methodological explanation from source-record disclosure. Public materials may describe evidence categories and governance interpretation, while sensitive institutional records, logs, data maps, incident files, source confirmations and operational assumptions may be retained internally or disclosed only through appropriate academic, legal, institutional or qualified review channels.

Evidence area	Public treatment
Safety and governance risk records	Disclosed only in summary risk categories and non-identifiable interpretation.
Compliance and data-protection records	Described by category; detailed documents are retained under appropriate access control.
Audit logs and technical records	Summarised as auditability evidence categories; raw logs are not intended for public disclosure.
Institutional workflow and training records	Explained at the process level; site-specific records are retained for authorised review where applicable.
Operational viability and monitoring records	Presented in aggregated governance-adjusted terms, not as revenue, pricing, valuation or investment-return evidence.

8. Relationship to Future Academic Publication

This S4-Lite document is deliberately not a substitute for the formal academic supplementary file. It does not reproduce the complete academic template, formal worksheet structure, detailed formulas or validation-level tables.

Any future peer-reviewed manuscript may include, revise or supplement the formal S4 materials in accordance with the target journal's policies, editorial requirements, supplementary-material guidelines and prior-publication rules. This public version should be disclosed where relevant as a company website explanatory version, not as a final peer-reviewed supplementary file.

9. Final Public Interpretation Statement

RR-Gov™ / RDIS stage-gate and lifecycle monitoring logic should be understood as a governance-readiness and responsible deployment-assessment tool. It is not regulatory approval, clinical validation, product certification, deployment authorisation, commercial valuation, sales forecast or evidence of universal deployment readiness.

The formal stage-gate, monitoring and governance-card materials are retained as supporting technical materials for academic review, qualified institutional review, governance reference and evidence-control purposes. This public S4-Lite version is intended to make the governance logic understandable while preserving the academic and evidentiary boundary of the formal supplementary materials.