

FRAMEWORK METHODOLOGY

Industry 5.0 Benchmark Framework

Framework Version 2.0 | Methodology Version 1.0 | 5th Sept. 2026

Developed by Sustainable Intelligence ASBL and SUSTIN C.I.C.

Core rule. i5Benchmark is a living and dynamically revised framework. Its revision system is designed to continuously interpret policy and standards change, scientific evidence, technology, public discourse and affected-person experience, and to translate material signals into controlled proposals for indicators, weightings, mappings and methods. No normative change becomes effective without provenance, review, versioning and an effective date; every relied-upon assessment remains fixed to an explicit scope, evidence period and versioned rule set.

This Methodology defines how i5Benchmark develops, dynamically revises and applies the Global Core, standards, implementation profiles, indicators, weightings, evidence rules, judgement methods and other normative instruments. It combines proportionate standards-development due process with the operational assessment baseline established by the Foundational Design Charter.

1. Purpose, status and authority

- 1.1 Purpose. This Methodology establishes the operating method for standards development, dynamic revision, evidence interpretation, indicator and weighting governance, assessment judgement and controlled publication. It is designed to protect scientific quality, stakeholder legitimacy, independence, interoperability, traceability and practical usability without freezing the Framework against legitimate change.
- 1.2 Authority. The Methodology derives its authority from the Foundational Design Charter Version 1.0. The Charter remains the stable foundational baseline; this Methodology governs how downstream normative content is created, tested, revised, applied and versioned.
- 1.3 Status. Version 1.0 is the initial controlled Methodology of Framework 2.0. It may be used immediately for Framework development, dynamic revision and formation of the Scientific & Standardization Committee (SSC). The first constituted SSC shall review the Methodology and may ratify or revise it; any substantive change thereafter follows the change controls in this Methodology.
- 1.4 Scope. This Methodology applies to the Global Core, standards, implementation profiles, Requirement & Mapping Registry rules, indicators, weighting models, evidence and judgement rules, and any other instrument or technical annex designated as normative. Assessment-instance records and operational evidence remain fixed to the Methodology, Registry and profile versions applicable to that assessment.

2. Principles of framework development and assessment

All development and revision activities shall apply the following principles:

Principle	Application
Public-interest purpose	Development should advance the Charter’s human-centred, sustainable and resilient purpose rather than the commercial interest of a single actor.
Evidence and traceability	Material requirements and decisions should have identifiable sources, rationale, scope and version history.
Meaningful participation	Affected people and relevant stakeholder groups should have realistic routes to shape interpretation, requirements and revision.
Scientific and normative integrity	Scientific evidence, standards, policy, law and legitimate stakeholder knowledge should be distinguished but brought into accountable relationship.



Principle	Application
Contextual legitimacy	Global comparability should coexist with cultural grounding, local intelligibility and implementation profiles.
Independence and conflicts	Contributors may have interests; those interests must be declared, managed and prevented from controlling outcomes.
Proportionality	The process should match the materiality of the proposed change. Editorial corrections should not require the same process as a new Global Core requirement.
Controlled evolution	The Framework should respond to new evidence and changing conditions while preserving reproducibility and historical comparability.

3. Controlled Framework hierarchy

The Framework is maintained as a controlled suite with different rates of change. A lower-level instrument may elaborate a higher-level instrument but may not contradict it.

Instrument	Role	Change model
Foundational Design Charter	Stable constitutional baseline	Major revision only through enhanced due process.
Methodology	Standards development, dynamic revision, evidence, validation, indicators, weighting, judgement, scoring and assessment rules	Versioned releases; continuous monitoring with controlled substantive change.
Requirement & Mapping Registry	Requirements, indicators, evidence rules, sources and crosswalks	Continuously maintained with controlled releases and provenance.
Implementation profiles	Jurisdictional or sector application of the Global Core	Updated when local law, standards, evidence or context changes.
Evidence & Rating Layer	Assessment-instance records and outputs	Fixed to the versions applicable to each assessment.

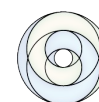
4. Dynamic revision model

Dynamic revision principle. The signal layer may operate continuously or near-real-time, but normative change is governed. i5Benchmark interprets material changes in policy, standards, evidence, technology and public experience to generate revision candidates; it does not silently rewrite an active assessment or allow automated signals to become rules without accountable review.

4.1 Continuous signal layer and Revision Register

The revision system is designed to support continuous or near-real-time interpretation of change using traceable human and automated methods. The Secretariat maintains a Revision Register in which signals are logged with source, date, scope, confidence and affected Framework objects. Signals may arise from:

- new or materially changed law, public policy, regulatory proposals, international standards or recognised guidance;
- scientific and technical evidence, including evidence that challenges an existing assumption or reveals an emerging risk;
- public discourse and social sentiment, including recurring concerns, shifts in perceived legitimacy, service experience or emerging social expectations;
- affected-person experience, stakeholder feedback, complaints, community or user evidence, and evidence of exclusion or harm;



- assessment, pilot and implementation learning, including indicator performance, ambiguity, unintended effects or poor discriminating power;
- new technologies, production arrangements, business models, risks or opportunities;
- changes in cultural, ecological, sectoral or jurisdictional context;
- interoperability gaps, source-version changes, mapping conflicts, data-quality or evidence-provenance issues.

Public discourse and social sentiment are treated as signals of emerging concern, experience and legitimacy—not as a popularity vote. They shall be interpreted with provenance, representativeness, manipulation and bias risks in view, and cannot override fundamental rights, safety, non-discrimination, ecological limits or stronger evidence.

4.2 Dynamic Revision Decision Path

The Dynamic Revision Decision Path is the common operating loop for Framework evolution. It converts raw signals into controlled, reviewable and versioned change.

Phase	Minimum output
1 · Detect & scope	Capture the signal, provenance, urgency and affected Framework objects; check duplication and classify the provisional change route.
2 · Interpret & propose	Compare the signal with the current baseline and source architecture; generate candidate changes to indicators, weightings, thresholds, evidence rules, mappings or guidance, with rationale and uncertainty.
3 · Validate & consult	Test evidence quality, bias, cross-domain effects and implementation consequences. Use targeted or public consultation where the change class requires it.
4 · Decide & version	Resolve material comments and dissent; the SSC or delegated authority approves, rejects or refers back. Assign the controlled version, effective date and migration rule.
5 · Monitor & learn	Observe implementation effects, indicator performance and stakeholder outcomes; feed new evidence and unintended effects back into the Revision Register.

4.3 Dynamic indicators and weighting

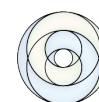
Indicators, thresholds and weightings are controlled methodological objects rather than permanently fixed constants. A revision candidate may propose adding, retiring, redefining or reweighting an indicator when accumulated evidence shows a material shift in policy relevance, impact or risk, affected-person experience, scientific understanding, contextual conditions, evidence quality or the indicator's observed performance.

Computational analysis may support signal detection, trend synthesis, scenario comparison and candidate reweighting. No indicator or weighting becomes normative solely because an algorithm, media volume or sentiment score recommends it. Material changes require an explicit rationale, review of bias and uncertainty, the applicable change class, and governed approval. The change record should preserve the relevant input period, source families, previous and new values or rules, and the reason for the adjustment.

Historical assessments remain bound to the indicator set and weighting rules in force for that assessment. Where a profile uses context-sensitive or time-sensitive weights, the applicable applicable profile or Registry release shall state when those weights are fixed, recalculated and published.

4.4 Change classes

Class	Typical scope	Decision route	Release treatment
A · Editorial / corrective	Typography, broken links, formatting, non-substantive factual correction; meaning and obligations unchanged.	Secretariat; peer check where useful.	Patch or change-log entry; no public consultation required.
B · Controlled maintenance	Source metadata, edition references, mappings,	Secretariat with relevant technical review; SSC notified	Versioned maintenance release with rationale and



Class	Typical scope	Decision route	Release treatment
	explanatory guidance or implementation detail that does not materially change intended outcomes or judgement burden.	or delegated approval.	provenance.
C • Substantive revision	New, removed or materially changed requirements, evidence expectations, judgement rules, scoring, thresholds, domain interpretation or profile obligations.	SSC approval after research, testing and proportionate consultation.	New minor or major instrument version; transition and migration notes required.
D • Foundational revision	Change to Charter definition, principles, domain architecture, Global Core boundaries or non-negotiable commitments.	Enhanced due process and SSC approval; institutional steward completes formal adoption.	New Charter or Framework major version; broad consultation and explicit migration plan.
E • Urgent safeguard	Temporary change or notice needed to address credible legal, safety, rights, evidence-integrity or serious public-interest risk before ordinary consultation can conclude.	Secretariat + SSC Chair or delegated emergency panel, followed by SSC ratification.	Immediate provisional notice; retrospective review and consultation where material.

4.5 Controlled release, versioning and assessment snapshots

Framework components may evolve asynchronously. The Reference Library and source mappings may be maintained continuously; the Requirement & Mapping Registry may issue controlled maintenance releases; implementation profiles may update as jurisdictional conditions change; the Methodology may issue versioned releases; the Charter changes only through foundational revision.

Where multiple small maintenance changes accumulate, the Secretariat may bundle them into a scheduled release. A change affecting rights, safeguards, scoring, comparability or an organisation's substantive obligations shall not be treated as maintenance merely for convenience.

Every normative release shall have a unique version identifier and effective date. A change record shall identify what changed, why it changed, the decision authority, consultation status, affected dependencies and any migration action. Superseded versions and their histories should remain retrievable for audit, research and historical interpretation.

An assessment freezes the applicable requirement set, implementation profile, Methodology version, evidence period, indicators, weighting rules and decision rules at a defined assessment point. Later Framework changes do not silently alter historical findings, score snapshots or period ratings. Transition rules shall state whether an assessment may complete under the old version, must migrate or may elect to migrate.

4.6 Urgent safeguards and review cadence

Where delay could create material harm, legal inconsistency, rights or safety risk, serious evidence-integrity failure or misleading public output, an urgent safeguard may be issued before ordinary consultation is complete. It shall be clearly marked provisional, narrowly scoped and time-bounded. The SSC shall review the safeguard as soon as practicable and normally within 90 days determine whether to ratify, revise, replace or withdraw it.

Dynamic maintenance does not eliminate periodic review. At least once each year, the SSC should review the Revision Register, accumulated evidence, external source changes and implementation learning to determine whether any instrument requires a formal revision project. A major Framework or Charter review may be initiated at any time.



5. Methodological baseline for assessment

5.1 Canonical assessment chain

The operational chain is requirement → indicator or observation → evidence requirement → evidence record → finding → score snapshot or period rating → improvement action. Every material object shall retain its scope, source or provenance, time and applicable version so that a judgement can be reconstructed.

5.2 Evidence sufficiency and provenance

Evidence is evaluated for relevance, reliability, recency, representativeness, traceability and fitness for the specific requirement. Supporting, contrary and limiting evidence shall be distinguishable. Automated extraction, mapping or synthesis may assist analysis, but source provenance and material transformations must remain inspectable.

5.3 Judgement, uncertainty and human review

A material finding shall identify the requirement judged, evidence basis, confidence or uncertainty, material limitations and any unresolved contradiction or dissent. Externally relied-upon conclusions require accountable human review. Missing evidence and uncertainty shall not be converted automatically into a positive finding.

5.4 Scoring, aggregation and weighting

Scoring may combine minimum safeguards with progressive achievement. Material adverse findings, rights or safety failures and non-negotiable safeguards shall not be hidden by aggregation. Indicators, thresholds and weightings are versioned methodological objects governed by Section 4.3. Exact formulas, calibration parameters and profile-specific values may be maintained as controlled technical tables in the Requirement & Mapping Registry, provided that the applicable rules remain traceable and explainable.

5.5 Comparability and assessment snapshots

Benchmark comparison requires compatible scope, cohort logic, evidence period and method version. Where different Methodology, Registry or profile versions materially affect a result, that difference shall be disclosed and false comparability avoided. Historical results remain attached to the rules under which they were produced.

6. Governance bodies and responsibilities

6.1 Institutional steward and Secretariat

Sustainable Intelligence ASBL is the institutional steward and Secretariat. It administers the development process, maintains controlled records, convenes consultation, supports the SSC and working groups, manages publication and version control, and retains legal, fiduciary and administrative responsibility for the Framework.

The Secretariat may prepare drafts, research and technical proposals but does not have unilateral authority to alter SSC-approved normative content. It may make editorial or administrative corrections only within the change controls in Section 4.

6.2 Scientific & Standardization Committee (SSC)

The SSC is the Framework's scientific and standardization authority. It reviews and approves normative and methodological content, confirms change classifications where material, oversees due process, records material dissent and protects the integrity of the Global Core.

Composition should be multi-stakeholder and competency-based. The SSC should normally include 5–11 voting members and collectively cover scientific/research expertise, standards or assurance, industry or implementation practice, public policy or governance, and affected-stakeholder or civil-society perspectives. Geographic and cultural diversity should be considered. No single employer or stakeholder constituency should control the Committee.

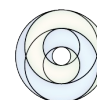
Members are appointed for defined terms, normally three years and renewable once. Initial appointments may be staggered. Material exceptions may be made during the Framework's formation phase but shall be disclosed in the SSC record.

6.3 Working Groups, Expert Panels and contributors

The SSC or Secretariat may establish temporary Working Groups or Expert Panels for a domain, sector, jurisdiction, technical issue or revision project. These groups develop recommendations; they do not replace SSC approval. Membership, remit, conflicts and outputs shall be recorded.

6.4 Stakeholders and affected people

Participation is not limited to institutional experts. Workers, users, communities and other affected people may contribute through public consultation, targeted interviews, workshops, pilot validation, local review or other accessible formats. The process should



distinguish stakeholder experience from scientific evidence while treating both as legitimate inputs within the Charter's four-source architecture.

7. Work programme and project initiation

A development or revision project may be initiated by the SSC, the Secretariat, a Working Group, or a documented stakeholder proposal. A proposal should identify:

- the problem, gap or change trigger;
- the instrument and scope affected;
- the intended users and affected stakeholders;
- relevant scientific, policy, legal, standards or implementation sources;
- anticipated materiality and provisional change class;
- expected consultation and validation needs;
- dependencies, conflicts, indicator/weighting implications or interoperability effects.

The Secretariat maintains a public or publishable work programme showing active projects, status, responsible group and expected next phase. Sensitive research or pre-decisional material may remain controlled where justified, but the existence and eventual disposition of a substantive normative project should not be hidden.

8. Proportionate development, consultation and approval

Once a proposal enters development through the Dynamic Revision Decision Path in Section 4, the depth of research, validation, consultation and approval shall match the change class and materiality. Class C substantive revisions and Class D foundational revisions normally require the full set of controls in this section. Class A editorial changes and Class B controlled maintenance use abbreviated routes; Class E urgent safeguards may take effect provisionally before ordinary consultation, subject to subsequent review. No project is required to perform an immaterial procedural step merely to complete a checklist.

8.1 Consultation

Substantive changes require consultation proportionate to their reach. Consultation should normally remain open for at least 45 calendar days. A foundational Charter revision or a major Global Core revision should normally remain open for at least 60 calendar days. The SSC may approve a shorter period where urgency is documented, provided that affected groups have a meaningful opportunity to respond and the reason is published.

Consultation material should state the problem being addressed, proposed changes, affected instruments, expected consequences, key evidence and unresolved questions. Responses may be published in aggregate or with attribution where contributors consent and confidentiality permits.

8.2 Comment resolution

The project team shall maintain a comment disposition record for material comments. Similar comments may be grouped. The record should show whether an issue was accepted, partly accepted, deferred or not accepted, together with a concise rationale. Dissent must not be erased merely because consensus is reached.

8.3 Approval and publication

Approval requires the SSC to be satisfied that the proposal is within Charter boundaries, has an adequate evidence basis, received proportionate consultation and testing, and has a documented treatment of material comments and conflicts. The published release shall include an effective date, version identifier, change summary and any transition or migration rules.

9. Consensus, quorum and decisions

Consensus is the preferred decision method and does not require unanimity. The Chair should seek a solution that addresses material objections while preserving rights, safety, non-discrimination, ecological limits and scientific integrity.

A quorum is a majority of appointed voting SSC members and not fewer than three. Where reasonable efforts to reach consensus fail, a normative decision may proceed with at least two-thirds of voting members present supporting the proposal. Abstentions are recorded but do not count as supporting votes. Material dissent and its rationale shall be preserved in the decision record.

A member with a conflict that could reasonably impair independent judgement shall disclose it and may be required to recuse from discussion, drafting, recommendation or vote depending on materiality.



10. Independence, conflicts and transparency

All SSC members, Working Group members, experts and material contributors shall disclose relevant financial, professional, organisational or other interests. The Secretariat maintains a conflict register and determines management measures with the Chair or an unconflicted SSC member where necessary.

Funding, sponsorship, partnership or participation in a pilot does not create a right to control requirements, scoring, recognition or public conclusions. Where a funder, commercial partner or assessed organisation materially contributes to a proposal, that role should be visible in the project record and balanced by independent review.

Meeting minutes need not reproduce every discussion but shall record attendance, conflicts, key decisions, material dissent, approvals and assigned actions. Normative decisions should be traceable to a decision record.

11. Procedural challenge, reconsideration and appeals boundary

Any stakeholder may raise a procedural concern alleging that a development or revision decision did not follow this Methodology, omitted a material stakeholder group, mishandled a conflict, or materially misrepresented consultation. The Secretariat shall log and respond to the concern; a matter involving the Secretariat shall be referred to the SSC Chair or another unconflicted SSC member.

The SSC may reopen or reconsider a decision where new evidence, a due-process defect or a material implementation consequence justifies review. Reconsideration does not imply that every disagreement requires reopening.

This section concerns Framework-development governance. Appeals against individual assessment findings, ratings, assessor conduct or recognition decisions shall be governed by the applicable assessment and recognition protocols.

12. Records, publication and accessibility

For each substantive project, the controlled record should include the project scope, responsible body, source base, consultation draft, consultation period, material comment disposition, conflict declarations, decision record, final text, effective date and change log. Where information cannot be published because of privacy, confidentiality, security or licensed-source restrictions, the existence and category of the withheld information should be described where possible.

Published normative documents should identify their status, version, effective date and superseded version. Accessible formats and plain-language summaries should be provided where proportionate, particularly where a change materially affects assessed users or affected stakeholders.

13. Adoption, transition and review of this Methodology

Version 1.0 is the initial controlled Methodology for Framework 2.0. It governs Framework development and maintenance from its effective date. The first constituted SSC shall review the formation-stage Methodology, record any exceptions and ratify or revise it using the applicable change class.

This Procedure is itself a controlled Framework instrument. Editorial changes may follow Class A; substantive governance changes follow Class C; any change that alters the authority established by the Charter requires consistency review against the Charter and may require a Class D foundational revision.

The Methodology should be reviewed after the first complete major revision and assessment cycle so that practical learning can be incorporated without waiting for an arbitrary multi-year interval.

Informative references

ISO/IEC Directives, Part 1 — procedures for technical work and maintenance of documents. · ISEAL Code of Good Practice for Sustainability Systems — standard-setting, stakeholder participation and improvement. · Global Reporting Initiative, GSSB Due Process Protocol — standards-board oversight and due process.

Next controlled development gate. Constitute the initial Scientific & Standardization Committee; review and ratify Methodology Version 1.0; then develop the first controlled Requirement & Mapping Registry releases and implementation profiles with the Dynamic Revision Decision Path and Revision Register active from the outset.