



IAF PSR | SUPPLIER RECOGNITION | FIRST EDITION

IMPLEMENTATION & EVIDENCE MANUAL

Practical quality implementation, technical evidence and worked examples for automotive industry recognition.

PREPARED FOR IAF ADOPTION

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Product & System Suppliers
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Document control

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Public recognition wording	IAF Corporate Recognised - bounded to the approved legal entity, sites and activities.
Hierarchy	Standard including internal directives and normative annexes; adopted implementation notice within those rules; Status and Mark Rules; Audit and Implementation Manuals; Applicant Guide; controlled forms.
Authority boundary	Corporate implementation assurance. Separate product approvals, market permissions and other IAF programme decisions remain distinct.
Control	Retain exact scope and criterion versions. Protect completed records, personal information and industrial evidence.

Purpose and use

Practical quality implementation, technical evidence and worked examples for automotive industry recognition.

Shall denotes a requirement; should guidance; may permission. Examples are illustrative unless a normative provision expressly establishes a rule. No checklist score can compensate for failed safety, integrity, competence or an unsupported scope.

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TM01 Build the corporate assurance case

Start with the decision

An assurance case connects a precise claim to the evidence and reasoning that support it. Define the legal entity, site, activity, product/service family, technology and period first. Then state the control outcome to be demonstrated, such as reliable release of a particular component family from a named plant.

For each claim identify the requirement, process owner, original evidence, independent check and known limitations. A policy establishes intent; a production record shows execution; a traced failure and effective remedy show whether the system can detect and correct loss of control. The case should connect these different kinds of evidence.

Separate facts from conclusions

Label measured results, observations, customer reports, estimates and management assertions distinctly. Explain why a sample supports a conclusion and what it cannot establish. A persuasive presentation, a signature or a large document volume does not increase the underlying technical validity.

Use an evidence manifest that allows another competent reviewer to find the exact original record. Where a conclusion depends on confidential evidence reviewed in place, record who examined it, what was verified and the remaining limitation without exposing unnecessary sensitive details.

TM02 Map the IAF quality adoption claim

A complete map

The adoption schedule identifies PSR and any additional IAF text by exact edition, approval status and intended conformity claim. Use one row per lowest practical requirement with applicability, accountable owner, practice, evidence ID, evaluation and gap. Aggregate partially applicable headings must resolve to clear decisions for subordinate requirements.

PSR supplies its own corporate quality baseline. Recognition under PSR alone does not certify an additional IAF quality, safety or product programme. Where additional conformity is publicly claimed, the independent review must examine its complete applicable requirements and any separate decision process that programme requires.

Resolve contradictions

If a working draft or a superseded edition appears in a marketing claim, correct the claim and identify the approved criterion before continuing. If two IAF documents impose incompatible duties, refer the conflict for a controlled technical interpretation rather than silently selecting the easier rule.

The requirement register should show when a new edition becomes applicable, who owns the change and what evidence needs updating. Preserve earlier versions used for historical decisions. Administrative form corrections must not be used to change substantive obligations without adoption and transition.

TM03 Define sites, families and outsourced responsibility

A defensible family

Group products where the design responsibility, principal process route, critical characteristics, technology and failure risks are sufficiently comparable. Explain differences in material, duty, software, environment and end use. A shared sales name is not a technical family definition.

Example: two housings from the same process may share a family if material, joining, inspection and relevant loads are comparable. A safety pressure housing and a cosmetic cover should not be pooled solely because both are cast. A new energy chemistry or a fundamentally different release route normally requires distinct evidence.

A defensible corporate boundary

List each legal entity and operating site, including remote engineering and digital support. A group headquarters can provide common policies and data, but the evidence must show implementation at each operational site. Every included operational site has mandatory physical assessment and annual physical surveillance.

For outsourced manufacture, assess the applicant control of specification, acceptance, change, traceability and field action and obtain necessary direct factory evidence. Supplier access does not itself award the supplier corporate status. If the contractor is independently included as an applicant entity, its undertaking and scope must be explicit.

TM04 Select cases and plan audit effort

Evidence selection

Initial recognition needs six months of implemented operation and at least three completed cases for each family/site. Define the actual population, dates and case identity. Select normal, changed and adverse examples where they exist, add cases for risk and differences and record any absent type. The floor is an assurance planning rule, not a statistical acceptance sample for product lots.

Example: two plants each make two distinct families. The minimum is $2 \times 2 \times 3 = 12$ completed cases, not three pooled across the group. If a new family at one plant has only two cases, review them but defer that family until the gate is met; a mature family elsewhere cannot compensate.

Duration example

Initial effort includes two central auditor-days plus site floors of two days for up to 100 effective workers, three for 101-500 and four above 500. Add the specified one-day factors for novel safety-critical technology, more than two material shifts, complex critical outsourcing and unresolved systemic risk at each affected site.

Illustration: a 70-worker assembly site has no additions and a 300-worker battery plant has novel safety-critical technology and three material shifts. The floor is $2 + 2 + (3 + 1 + 1) = 9$ auditor-days. An auditor-day means eight hours of substantive assessment work, excluding travel and breaks; two auditors working eight hours contribute two auditor-days. Coverage can require more time.

TM05 Verify process capability without false confidence

Understand the process first

Confirm measurement suitability, a stable process, representative data and meaningful specifications before interpreting a capability statistic. Separate machines, cavities, materials and shifts where pooling would conceal different behaviours. Preserve adverse runs and explain excluded observations.

For a stable approximately normal process with lower limit 8, upper limit 10, mean 9.2 and estimated standard deviation 0.2, an illustrative centred-to-limit index is $\min((10-9.2)/(3 \times 0.2), (9.2-8)/(3 \times 0.2)) = 1.33$. This number is not a PSR acceptance threshold and does not prove control of rare hazards or long-term drift.

When statistics are insufficient

For low volume, unstable, non-normal or heavily censored data, use a technically justified alternative and disclose limitations. Defined critical checks, validated process controls and independent release remain necessary even when an aggregate index looks favourable.

Zero observed failures does not establish zero failure probability. Under independent identical Bernoulli trials, zero failures in 100 trials gives a one-sided 95% upper failure-probability bound of $1 - 0.05^{(1/100)}$, approximately 2.95%. Correlation, selective testing or unrepresentative conditions invalidate that interpretation.

TM06 Use measurements and decision rules correctly

Suitability and uncertainty

Identify the measurand, range, environment, fixture, operator, software and decision tolerance. Confirm calibration validity and relevant measurement variation. Consider whether systematic bias, drift or resolution could change the disposition; a current instrument certificate alone is insufficient.

Where uncertainty is material, document the model, inputs and coverage assumptions. For independent standard uncertainty components 0.04, 0.03 and 0.02 units, root-sum-square uncertainty is approximately 0.0539 units; a factor of two gives approximately 0.108 units. Correlated inputs require appropriate covariance treatment.

Agree the release rule

For a maximum limit L , one conservative illustrative rule is Pass when $y + U \leq L$, Fail when $y - U > L$, otherwise Inconclusive. With $L = 10$ and $U = 0.2$, results $y = 9.7, 10.1$ and 10.3 give Pass, Inconclusive and Fail respectively. Other rules require an agreed technically justified basis.

Apply the actual governing acceptance rule consistently and explain any consumer or producer risk allocation. A borderline or inconclusive result is not permission to release. Do not retest selectively until a favourable value appears without recording the original failure and the reason for repetition.

TM07 Connect design evidence to delivered configuration

The release chain

Trace customer and market requirements to approved design, critical characteristics, verification, intended-use validation and the final production baseline. Identify which tests used prototype, production-representative or modified samples. Explain any remaining difference from what the customer receives.

For a software-enabled component, the relevant configuration includes hardware revision, calibration, software build, dependencies, enabled features and installation environment. A test report from another version is not automatically transferable, even if the commercial model name is unchanged.

Control changes and concessions

Classify changes by their effect on risk, interfaces, process capability and prior evidence. Define revalidation, customer approvals, inventory treatment and the first affected identity. Review downstream service and field-action implications before authorizing release.

A concession records an authorized bounded deviation where lawful and technically acceptable. It does not redefine a failed safety requirement as conformity or permit unassessed scope expansion. Repeated concessions can indicate a systemic failure requiring corrective action and independent review.

TM08 Demonstrate traceability and recall readiness

A real retrieval test

Choose an actual delivered item independently and trace backward to critical inputs, process parameters, equipment, software, inspections and release authority. Then trace the suspect input or condition forward to all potentially affected output, locations and recipients. Reconcile splits, merges, rework, scrap and stock in transit.

Set the retrieval objective beforehand according to risk and obligations. Record actual elapsed time, unavailable data and unexplained quantities. The programme does not prescribe an arbitrary universal two-hour target; the organization must justify and demonstrate a target that supports timely effective protection.

Measure remedy, not activity

If a recall population is 1,200 units, 1,100 notified units represent 91.7% notification reach. If 900 have verified completed remedies, remedy completion is 75%, not 91.7%. Report the remaining 300 units, including unreachable, pending and unsuccessful cases, without counting messages or downloads as completed protection.

For software remedies, verify compatible installation and the intended functional outcome. For physical remedies, retain identity, work performed and post-work checks. Assess residual risk and practical escalation for users who cannot access normal service routes.

TM09 Verify supplier and contract-factory controls

Follow actual dependency

Prioritize suppliers whose failure could affect safety, traceability, continuity or truthful claims. Examine sub-tier dependency, control of changes, original evidence and the ability to contain affected output. A supplier score should guide inquiry, not conceal a critical gap behind good delivery performance.

Review a real purchased item from specification through order, receipt, production use and field response. Check whether a supplier change reached engineering and whether incoming acceptance was technically adequate. Verify that outsourced testing or inspection used the correct configuration and criteria.

Evaluate direct control

For a contract factory, test how the applicant detects unapproved materials, bypassed processes, excess production and falsified records. Reconcile customer-owned tooling and intellectual-property rights. Obtain necessary access to actual operations rather than relying only on contractual promises.

Where confidentiality limits copying, arrange competent on-site review and record sufficient conclusions. If the evidence cannot be independently verified, the affected claim remains unsupported. Recognition is not a mechanism for transferring the applicant responsibility to its supplier.

TM10 Assure software, AI and digital operation

Digital evidence chain

Create a versioned inventory linking software, hardware, dependencies, data, build and deployment evidence. Verify signing and privileged access controls, test adverse update conditions and confirm recovery. Review end-of-support dependencies and whether a customer can safely operate when connectivity or a provider fails.

For AI-based inspection or decision support, evaluate false acceptance and false rejection separately across relevant defect classes and operating conditions. Record dataset provenance, model version, drift limits and human intervention. A high average accuracy on a curated set does not prove performance on rare safety-critical defects.

Controlled automation in assessment

Automated tools may help index evidence and flag inconsistencies. A competent person must verify extracted facts against originals, resolve ambiguous interpretations and accept accountability. Uploaded files and generated text are evidence inputs, not authority to change programme rules or approve recognition.

No fully automated corporate grant, suspension appeal or material technical closure is permitted. Preserve the tool role, version and limitations if it materially supports the decision, and ensure that confidential industrial or personal information is used only through authorized processing arrangements.

TM11 Validate virtual and future-technology evidence

Credibility for a specific use

Define the physical question, decision consequence and intended configuration before selecting a model. Assess assumptions, sensitivity, numerical quality, data provenance and independent correlation. A digital twin should have a traceable relationship to the actual product state and current revision.

Use simulation to extend understanding within a validated envelope and target physical testing. Do not treat a visually convincing animation, a large scenario count or a model supplier reputation as evidence that untested conditions are safe. Record where physical confirmation remains necessary.

Prospective capability

New energy systems, advanced materials and autonomous functions may require expertise or criteria not yet available in programme operation. Keep such capability in controlled pilots until validation and adopted requirements support assessment. Experts should document unresolved scientific uncertainty and practical limits.

The programme can evolve through reviewed modules, consultation, failure-case pilots and prospective transitions. Existing corporate recognition covers only the demonstrated scope; a future-vision statement cannot expand that boundary.

TM12 Substantiate environmental and circular claims

A bounded claim dossier

State the claim, functional unit, geography, period, system boundary, data source and relevant allocation. Separate primary measurements from estimates and contractual instruments. Explain uncertainty and material exclusions, and preserve calculation versions for independent review.

For recovered content, trace source and quantity through mixing and production. A mass-balance allocation is not necessarily physical content in a particular unit and must be described accordingly. Validate technical suitability independently; circularity claims do not relax safety or performance requirements.

Compare fairly and maintain evidence

Compare options using consistent function, life, duty and quality assumptions. Test sensitivity to important choices and avoid promoting a small use-phase benefit as a verified whole-life advantage. Review whether a claimed improvement shifts harm into a supplier or another lifecycle stage.

Review claims after material changes in energy supply, production route, material source or measurement method. Correct earlier statements where needed. A future target may be communicated honestly as a target, with owners and milestones, but not as an achieved outcome.

TM13 Use performance indicators with honest denominators

Quality and delivery examples

First-pass yield is conforming units at the first completed pass divided by all units entering the defined process, with the treatment of incomplete work stated. If 970 of 1,000 units pass initially and rework later raises accepted output to 995, first-pass yield is 97%; final accepted yield is 99.5%. They answer different questions.

If 45 delivered nonconforming units are confirmed among 50,000 shipped units in the defined population, the unit defect rate is 900 per million. State whether the count concerns units or individual defects. For delivery, 180 complete on-time orders out of 200 due orders gives 90%; counting partial deliveries as complete would change the meaning.

Exposure and interpretation

Field claims need exposure by configuration, time or use where relevant. Ten complaints among 25,000 supplied units equal 40 per 100,000 units, but this does not establish a safety failure rate without confirmation and comparable exposure. A severe single event may require action despite a low rate.

Reconcile indicators to original records and preserve definition changes and restatements. Disaggregate by site, family and failure severity before concluding improvement. Financial or output growth shall not offset an unresolved essential safety or integrity gate.

TM14 Assess continuity, support and responsible business

Capability after disruption

Identify essential dependencies and test recovery of production, release data, customer support and field-action capability. Include loss of cloud services, key staff, power, critical material or a contract factory. Confirm safe restart and product disposition rather than measuring only how quickly equipment restarts.

An alternative supplier or material must satisfy technical approval even during an emergency. Consider how capacity constraints, financial distress or site closure affect promised support and remedy. Recognition assesses evidence of arrangements; it is not a guarantee of solvency or future commercial success.

Customer and workforce evidence

Review accurate contracting, complaint resolution, warranty commitments, worker reporting and remedy. Interview relevant people independently and protect good-faith concerns. Verify that translation, digital access or geographic barriers do not make essential safety support inaccessible.

For group operations, test whether central policy reaches local work. Explain differences in responsibilities and constraints; do not infer identical performance across sites. Address identified harm and systemic incentives rather than relying on a signed code of conduct alone.

TM15 Evaluate findings and effectiveness

Consequence and scope

A Minor is an isolated lapse with no demonstrated loss of essential validity, safety or integrity; a Major is systemic or consequential; a Critical involves serious harm or severe integrity failure. Missing evidence may remain Pending until assessed, but credible danger still requires immediate protective action.

Example: one incomplete training record may be Minor only if competence is independently demonstrated and no wider failure exists. An unqualified operator performing a critical joining process can be Major or Critical depending on actual risk and released output. Classification follows facts and consequences, not the department label.

Defensible closure

For a recurring torque error, changing an instruction is only one action. Verify equipment and measurement suitability, error-proofing, operator competence, process settings, affected-population containment and new production results. Check whether the same failure mechanism exists on other lines.

Initial recognition requires verified closure of all applicable findings. On active scope, continuing an isolated Minor within 90 days requires protected safety, validity and integrity; Major and Critical findings follow the specified protective route. Record why any unaffected scope can remain credible.

TM16 Prepare the independent decision dossier

Minimum decision package

Provide the legal and scope schedule, adoption/applicability map, competence and conflict records, approved audit plan and actual coverage, evidence manifest, findings, factual responses, closure verification and recommendation. Identify excluded and unresolved activities explicitly. The decision panel should not need to infer what a broad commercial description means.

The technical reviewer checks every gate and records contradictions. Three uninvolved panel members participate and each records a reasoned vote. Two affirmative votes are necessary but not sufficient if an initial requirement remains unmet; the panel cannot vote away a mandatory gate.

Record continuity and limits

The final record states the recognition ID, legal entities, sites, activities, family and technology boundaries, criterion editions, effective and expiry dates, monitoring and restrictions. Preserve scope versions and effective status history so a user can check what was covered on a particular date.

Publish only authorized, necessary data and verify the public or controlled manual route. A QR code or signature should lead to the same exact record. Keep proof of authenticity separate from evidence that a particular supplied product is fit for a customer use.

TM17 Worked recognition cases and scope decisions

Illustrative system-supplier case: missing source evidence

A system integrator presents eight months of quality records and three delivered module cases, but its contract factory refuses access to critical joining and end-of-line evidence. The integrator sales and design controls are well documented. The missing factory evidence remains essential to its claimed product responsibility and cannot be marked NA merely because manufacture is outsourced.

The proper response is a protected direct review arrangement or deferral of the unsupported industrial scope. Recognition cannot be granted by averaging strong commercial controls against unverified critical manufacture. A separate readiness report may identify the gap without a public Corporate Recognised claim.

Illustrative assembly case: bounded supported scope

An assembler requests two sites. Site A has seven months of operation, three cases per family, completed internal assurance, a full physical audit and verified closure. Site B opened two months ago. If shared causes and interfaces are controlled, the independent panel may assess a coherent Site A-only scope; Site B remains excluded and visibly identified as unrecognised.

The record must not use an unrestricted group claim. Site B requires its own operating history, cases, audit and independent extension decision before coverage. Neither planned capacity nor use of the same corporate manual transfers recognition to the new factory.

TM18 Evaluate the customer product and system approval dossier

Establish the approval boundary

Start with exact customer, part/system identity, revision, application, site, source and responsibility. Determine who owns design, process qualification, system integration and release. Record whether an explicit customer approval is required; do not invent that requirement where the contract permits independent supplier release, and do not assume silence is acceptance where approval is required.

Use the Product and System Approval and Change Dossier to index requirements, risk controls, validation, actual-route readiness, measurement, material/software identity and original case evidence. The summary should expose unresolved conditions rather than turn a collection of signatures into a conclusion. Preserve rejected and superseded submissions.

Test the conclusion

Take a delivered output and confirm that it matches the configuration and source route covered by the applicable disposition. Compare customer conditions with internal release checks, purchase requirements and service instructions. A permission for a limited development quantity cannot authorize indefinite serial supply.

The IAF auditor assesses whether the supplier controls this process. The auditor does not sign as the customer or issue product approval through corporate recognition. Where required approval is missing, the product may remain in controlled development, but affected serial-supply claims cannot be supported.

TM19 Control change across customers and supply tiers

A complete impact view

Map a proposed change to material, design, source, process, equipment, tool, site, software, inspection and support dimensions. Identify common parts and dependencies across customer programmes, including customers using an older revision. A source-name change can hide an actual factory transfer; a software patch can change timing or interface assumptions.

Before implementation define technical validation, customer notification and approval duties, revised records, stock segregation and the first affected identity. PSR sets no universal customer notice period: use the agreed contract and applicable obligations. The separate IAF material-scope-change notice does not replace customer authorization.

An auditable implementation boundary

For an illustrative adhesive-source change, compare composition, handling, cure window, bond performance, ageing, process settings and customer approval conditions. Test representative production joints rather than accepting an unchanged commercial product name. Link qualification to the actual new source and first released lot.

After the change, verify production execution and field/customer feedback against the acceptance basis. Retain the old/new genealogy and any controlled temporary deviation. Emergency sourcing does not permit unsafe output; if the evidence is insufficient, contain the affected supply and explain the limitation.

TM20 Review a critical sub-tier without losing accountability

Locate the controlling operation

Follow the characteristic to the operation that actually determines it. A direct supplier may assemble the product while a lower-tier processor determines strength, composition or electronic integrity. Record actual location, process, source identity, change authority and access to evidence; a chain of invoices is not a chain of technical assurance.

Select direct observation, original process records, technical interviews, independent test evidence and customer/source information according to the criticality and uncertainty. Assessment depth should increase when a process is hidden, a source changes, defects recur or declarations conflict. A purchasing score cannot close these questions.

Protected access with usable evidence

Agree restricted review for trade secrets, preserve provenance and record the competent reviewer conclusion and limitations. Challenge whether the same protection still allows independent verification of parameters, sample identity, deviations and release. If it does not, the supplier must obtain another sufficient route or retain a hold on the unsupported scope.

Keep evaluated sub-tier controls separate from the recognised entity list. The programme can establish that the applicant manages a source effectively without issuing status to that source. The recognition record must not suggest that every lower-tier supplier, process or product was independently recognised.

TM21 Verify delivered software and future digital dependencies

From source to deployed artifact

The software component inventory should identify delivered dependencies, versions, origin, rights, integrity identifiers and support ownership, including generated code and model artifacts where relevant. Compare it to the actual compiled or packaged output. A source-repository dependency list may omit libraries embedded during build or installed later.

Preserve toolchain and build provenance, review evidence, signing authorization and recipient/configuration records. Evaluate reproducibility or an alternative technically justified identity check. Safeguard secrets and use a controlled demonstration rather than disclosing private credentials to prove access.

Maintain the evidence after release

Assess vulnerabilities for the installed configuration, reachable functions, operating conditions and possible safety effects. Prioritize immediate containment where a credible threat requires it, independently of a commercial support schedule. State any uncertainty and update the decision when new evidence arrives.

AI-assisted development, remote feature activation and future cryptographic migration need the same bounded responsibilities. Validate the actual model or function and preserve the right to disable or contain unsafe behaviour through a competent decision. A future roadmap, automated review score or supplier assurance letter is not release evidence.

TM22 Distinguish authenticity, conformity and circular capability

Three different questions

An authentic item is from the claimed source; a conforming item meets its acceptance criteria; a suitable item performs within the declared application. These conclusions need different evidence. A genuine old electronic component may be degraded, and a carefully tested anonymous item still lacks a defensible original-source claim.

For scarce or recovered supply, examine provenance, age, storage, condition, identifiers, prior processing and screening limitations. Quarantine disputed identity. Preserve evidence for coordinated investigation and avoid returning suspect items into an uncontrolled market without a lawful, technically justified disposition.

Circularity with a declared capability

For remanufactured output define the restoration target, remaining-life assumptions, changed components, software configuration and final acceptance. Record what is equivalent, changed or unknown and communicate those limits. A circularity claim cannot replace validation of strength, electrical safety, durability or compatibility.

Keep environmental and commercial statements tied to the actual process and population. Where a source or restoration-route defect appears, trace all affected customer applications and verify the remedy. Avoid destroying identity history when a restored unit receives a new internal number.

TM23 Calculate capacity and interpret supplier outcomes

Capacity at the constraint

Illustrative case: a constraint station has 420 available minutes after planned breaks; observed unplanned losses leave 360 productive minutes. At 0.50 minute per unit, the supported gross count is 720 units. With 97.5% demonstrated first-pass yield, expected first-pass accepted output is 702 units. A commitment of 750 accepted units is not supported by these assumptions.

Do not subtract the same loss twice or count rework recovery as first-pass capacity. Check staffing, inspection, downstream flow, demand mix and sub-tier limits. The calculation is an example, not a PSR performance threshold; validate assumptions with representative operating evidence and explicit uncertainty.

Define the performance population

If 20 confirmed nonconforming delivered units arise from a defined 40,000-unit shipment population, the delivered-unit rate is 500 per million. Count each nonconforming unit once for that metric even if it has multiple defects. Keep reported symptoms, unconfirmed returns and distinct defect-event measures separately defined.

If 92 of 100 due orders arrive within the agreed window but only 88 are both on time and complete, the on-time rate is 92% and the on-time-complete rate is 88%. State the denominator and contractual window. These figures do not prove safe design or authorize ignoring a serious isolated field event.