



QUALITY MANUALS | FIRST EDITION

IAF GLOBAL HOMOLOGATION AND LEGAL COMPLIANCE MANUAL

Market approval management
and continuing production conformity

STABLE RELEASE

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Production conformity and configuration control
Regulatory change and release decisions

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Publication identity and use

IAF Global Homologation and Legal Compliance Manual

This manual establishes the quality system for determining vehicle market requirements, demonstrating conformity and maintaining compliant series production. It separates approval by an authority from manufacturer certification, and connects test evidence, vehicle configurations, production controls, market documentation and postmarket corrective action.

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Operational adoption	Accountable operating director and competent technical leads record the actual approval, markets, scope and effective date.
Classification	Public core manual. Completed operational, technical and security records follow their assigned access controls.

Application of requirements

“Shall” identifies a requirement when this manual is adopted by an organisation or agreement. “Should” identifies a recommendation. Worked examples are illustrative and supply no universal legal deadline, product limit or completed approval. Annexes provide record structures for controlled local implementation.

Publication and operational release

Stable Release identifies the completed publication text. Actual operating approvals, market obligations, technical validation and role authorisations shall be established by the responsible organisation. Mandatory law, applicable customer rights, approved product requirements and safe work instructions remain controlling for the specific operation.

IAF recognition

Using this manual does not itself confer membership, Corporate Recognised status, accreditation, certification or permission to use IAF marks. Those decisions follow the applicable IAF guides, independent evaluation and recorded scope.

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Using the operational annexes

Create a separate controlled record for each case. Expand the editable worksheets as needed and enter actual values, evidence links, responsible names and dates. Blank fields and worked examples are not proof of a completed activity.

1 Purpose and compliance outcomes

1.1 The manufacturer shall establish a documented system that connects each vehicle offered in a market to the applicable requirements, an identified vehicle configuration and credible conformity evidence. The system shall cover development, testing, approval or certification, series production, distribution and the correction of vehicles already supplied. Compliance is a continuing responsibility and shall not be treated as a single launch milestone.

1.2 The Homologation Manager shall define the products and activities within scope, including complete and incomplete vehicles, replacement systems, software features and locally completed vehicles. The scope shall identify manufacturing entities, assembly sites, importers and markets. Exclusions require a reasoned applicability assessment; omission from a commercial launch plan is not evidence that a legal obligation is absent.

1.3 Each programme shall demonstrate four outcomes: correct requirements, representative evidence, controlled production and accurate market release. A strong result in one outcome shall not compensate for an unresolved failure in another. Schedule pressure, customer acceptance, federation recognition and successful registration of a previous vehicle shall not establish conformity of the present configuration.

1.4 Management shall provide competent personnel, test capacity and authority to stop affected releases. This manual supplies a quality management process rather than universal vehicle test limits. Exact legal instruments, technical criteria, applicability dates and competent authority instructions shall be maintained in controlled operational records for each market and vehicle category.

2 Terms and controlled definitions

2.1 Homologation means the managed demonstration that a vehicle, system or component satisfies the applicable market requirements. Approval by an authority and certification by a manufacturer are different legal routes and shall be described accurately in programme records. A test report is evidence about the tested article and conditions; it is not automatically permission to sell every related product.

2.2 The programme shall define vehicle type, variant, version, model year, build configuration and production family using the meanings applicable to the target market. Commercial model names shall not substitute for these definitions. Where markets use different groupings, the configuration system shall retain the mapping between each legal grouping and the engineering identifiers used by the factory.

2.3 Conformity of production, abbreviated COP in this manual, means the continuing control of production against the applicable approved or certified requirements. A compliance relevant characteristic is any design, process, software or documentation attribute that could affect conformity. Such characteristics shall remain identifiable from engineering specifications through supplier controls and vehicle release.

2.4 An open issue is a requirement, evidence gap or change whose effect is unresolved. A concession is a documented disposition within the powers of its issuer; it cannot waive mandatory requirements. A release hold prevents the specified activity until authorised criteria are met. Records shall state whether a hold concerns manufacture, shipment, sale, registration or customer use.

3 Responsibilities and independent decisions

3.1 The accountable manufacturer shall own the compliance system even when work is delegated to laboratories, engineering contractors, importers or suppliers. The Homologation Manager shall maintain the market programme, the requirements register and the approval record. Design authorities shall substantiate technical conformity, while Plant Quality shall control production implementation and detect departures from the released configuration.

3.2 The Market Compliance Lead shall verify local applicability, communication routes and required commercial documentation. The Test Manager shall control specimens, methods and evidence integrity. Software and Cybersecurity Leads shall assess software dependent requirements and changes. Purchasing shall ensure that contractual specifications include the evidence, notification and access rights needed to sustain conformity throughout the supply relationship.

3.3 Approval to submit evidence shall be separated from the preparation of that evidence wherever practical. The person accountable for market release shall have access to unresolved findings and shall not rely solely on an aggregated dashboard. Disagreements between commercial, technical and legal functions shall be recorded and escalated without removing an existing compliance hold.

3.4 Each role shall have a named deputy and written limits of delegated authority. The responsibility matrix shall identify who prepares, checks, approves, implements and verifies each decision. External advice may support the decision, but no contract shall obscure the responsible manufacturer or create the appearance that IAF has issued a statutory vehicle approval.

4 Adoption and programme boundaries

4.1 Before operational use, the accountable director shall adopt this manual for identified entities, vehicle programmes, sites and markets. The adoption record shall name the responsible functions, the effective operating date and any local procedures required to implement the controls. A publication date is not evidence that a factory, test facility or importer has completed implementation.

4.2 The programme team shall compare existing processes against this manual and record gaps in requirement interpretation, configuration control, test evidence, production assurance and distribution release. Each gap shall have an owner, due date, interim containment and closure evidence. Activities whose prerequisites remain absent shall not be presented as fully implemented merely because the manual has been distributed.

4.3 Local supplements shall address language, document authentication, authority interfaces, required registrations and record access. They shall preserve the distinction between product safety approval, environmental obligations, customs clearance and customer registration. A successful step in one administrative process shall not be used as proof that all other market entry conditions have been satisfied.

4.4 The Document Controller shall publish an approved applicability map and withdraw obsolete operating copies. Management shall review adoption when adding a manufacturing location, vehicle category, propulsion system, sales market or responsible legal entity. The review shall identify the affected approvals and evidence before the changed activity begins, rather than attempting to reconstruct the decision after vehicles have shipped.

5 Controlled market requirements register

5.1 The Market Compliance Lead shall maintain a register for every destination and vehicle category. Each entry shall contain the exact obligation identifier, current text or controlled source location, responsible authority, language, territorial scope, commencement date, transitional provisions and retrieval or verification date. The register shall retain the historical version that governed each approved or certified production population.

5.2 For every requirement, the register shall distinguish design performance, test method, manufacturing control, labelling, documentation, reporting and postmarket duties. It shall identify whether the obligation applies to a new type, a new vehicle, an equipment item, an update or a particular use. A heading such as safety requirements without clause level applicability and evidence ownership is insufficient.

5.3 A qualified reviewer shall assess the original authoritative material and record interpretation questions. Translations and commercial summaries may assist understanding, but discrepancies shall be resolved against the legally controlling text and documented competent advice. Written clarifications shall identify their issuer, scope and limitations; informal verbal statements shall not be treated as a general exemption.

5.4 The register shall drive programme tasks and release gates. Changes shall generate an impact review for active designs, inventory, vehicles in transit and future builds. The published manual need not reproduce external reference lists, but operational compliance records shall contain precise, verifiable identifiers and applicable criteria so that decisions can be independently reconstructed.

6 Vehicle classification and legal entities

6.1 Engineering and Market Compliance shall classify the proposed product before selecting its compliance route. The assessment shall address intended use, seating, mass, body configuration, power source, operating domain and whether the product is a complete vehicle, incomplete vehicle, trailer or equipment item. Marketing descriptions such as urban mobility or special edition shall not determine the legal category.

6.2 The responsible legal entity shall be identified for manufacture, completion, import, distribution and aftersales duties. The programme shall establish whether a local representative, importer registration or designated contact is required. A trading name, group company relationship or shared brand shall not be assumed to transfer another entity's approvals or reporting responsibilities.

6.3 The configuration owner shall record category boundaries that could be crossed by optional seats, payload changes, towing equipment, body conversions or altered speed capability. Planned derivatives shall be reviewed before commercial commitment. If classification is uncertain, the issue shall be escalated for documented interpretation and affected release decisions shall remain open until the uncertainty is resolved.

6.4 The classification record shall link to the market register, technical description, responsible entity and approved product scope. Changes in ownership, business address or manufacturing arrangements shall be assessed for notification and approval consequences. The Legal function shall verify continuity of rights and obligations during acquisitions, insolvency transfers and contract manufacturing arrangements.

7 European authority approval route

7.1 For European destinations using an authority approval route, the programme shall identify the applicable whole vehicle, system and component approval requirements and the competent approval authority. The approval strategy shall define the submission route, technical services, representative configurations, required information package and production conformity arrangements. National variations or alternative routes shall be assessed separately where relevant.

7.2 The Homologation Manager shall agree the evidence plan before testing and confirm which organisations may perform, witness or assess the required activities. General laboratory competence does not automatically establish legal designation for a particular approval task. A component approval shall be checked for installation conditions and scope; its existence does not by itself demonstrate conformity of the complete vehicle.

7.3 The manufacturer shall maintain an approved configuration baseline and the information needed for the authority's decision. Queries, corrections and supplementary evidence shall be version controlled. Vehicles shall not be released on the assumption that a pending application will be granted. Any limited or exceptional route shall have documented legal eligibility, conditions and quantity or use restrictions where applicable.

7.4 Following the approval decision, the responsible functions shall verify the scope, identifiers, conditions and continuing production obligations. Changes shall be evaluated for notification, extension or a new approval before implementation as required. The approval record shall remain connected to production identity and market documents, with no claim that one approval automatically covers every European destination or unrelated vehicle category.

8 United States manufacturer certification route

8.1 For United States safety compliance, the manufacturer shall operate a certification process supported by a reasonable and documented basis for conformity with all applicable requirements. The programme shall identify the responsible manufacturer, vehicle category, production date applicability, required certification information and relevant administrative duties. Manufacturer certification shall not be described as prior government approval of the vehicle design.

8.2 Engineering shall establish evidence sufficient to support the certification decision for the actual configurations produced. The evidence strategy may include testing, analysis and other justified technical work as permitted for the requirement, but shall consider the prescribed compliance test conditions and potential official verification. A declaration without a defensible technical basis shall not satisfy the internal release gate.

8.3 The configuration system shall control market specific equipment, labels, software, masses and options. Evidence from another market may be used only after a documented comparison shows that its conditions and results support the applicable United States requirement. Similar feature names, shared test facilities or a foreign approval number shall not establish equivalence by themselves.

8.4 The Market Compliance Lead shall separately manage manufacturer identification, import obligations, safety defect reporting and corrective action responsibilities where applicable. The organisation shall retain the evidence supporting its certification and respond to official information requests through authorised channels. Environmental, communications and other market obligations shall be assessed separately rather than assumed to be included in the vehicle safety certification route.

9 Other markets and recognition boundaries

9.1 The global programme shall create a separate route assessment for each additional destination. It shall identify whether the market requires local approval, recognition of specified foreign approvals, manufacturer declarations, inspection, registration testing or a combination of controls. Recognition shall be verified for the particular approval, vehicle category, technical version and intended transaction.

9.2 The Market Compliance Lead shall document local modifications, language requirements, labels, service information and importer responsibilities. A vehicle built for one market shall not be redirected solely because its physical specification appears similar. Sales and Logistics shall consult the market release system before allocating inventory to a destination not covered by the original build instruction.

9.3 Where foreign test evidence is accepted conditionally, the conditions shall be included in the evidence matrix. The programme shall identify additional tests, document authentication, local representative duties and production surveillance arrangements. Previous acceptance of an earlier model shall be treated as historical information, not as an assurance that a new configuration or revised requirement will be accepted.

9.4 Market launch approval shall include an explicit list of destinations and configurations. Unresolved interpretations shall have an owner and decision date, with affected vehicles held from the relevant activity. IAF membership, recognition, accreditation or cooperation agreements shall not be presented as a replacement for the destination's statutory approval, certification, import or registration requirements.

10 Multistage and special vehicle programmes

10.1 A multistage programme shall identify the responsibilities of the base vehicle manufacturer, intermediate modifiers and final stage manufacturer. The handover package shall define incomplete vehicle status, permitted modification boundaries, existing evidence and information required by the next stage. Each stage shall verify that its work preserves earlier conformity assumptions and addresses newly introduced obligations.

10.2 Engineering shall assess changes to body structure, seats, restraints, braking demand, axle loads, electrical architecture and sensing fields. The fact that a base vehicle was compliant before conversion shall not establish conformity after a body installation, payload increase or software change. Interfaces and limitations shall be clear enough for the completing organisation to implement and verify them.

10.3 Small series, individual, special purpose and prototype routes shall be used only after eligibility is documented. The record shall state the conditions, territorial limits, permitted quantities or uses and required authorisations where these apply. A route intended for development or limited use shall not be extended to ordinary series sales through a commercial description or internal waiver.

10.4 The programme shall maintain stage specific identity and evidence, including the parties responsible for final labels and customer documents. Changes in the completion process shall trigger review of both technical conformity and legal responsibility. Distribution controls shall prevent incomplete or restricted vehicles from entering an unrestricted customer channel without the required completion and release decisions.

11 Regulatory monitoring and change intake

11.1 The Market Compliance Lead shall assign monitoring responsibility for each market and subject area. Monitoring shall cover adopted changes, official interpretations, authority communications, enforcement findings and proposals relevant to future programmes. Proposed measures shall be distinguished from binding requirements so that planning assumptions do not become inaccurate claims about current legal duties.

11.2 Each incoming item shall receive an identifier, source record, publication date, status and preliminary applicability assessment. The reviewer shall compare the change with the existing register and identify affected product families, suppliers, test plans, production processes and market documentation. A no impact conclusion shall contain a technical or legal reason that another competent reviewer can evaluate.

11.3 Significant changes shall enter the programme change process with a responsible owner, decision deadline, resource estimate and evidence plan. The schedule shall allow for interpretation, engineering, test capacity, authority interaction, production implementation and inventory management. The date of an internal meeting shall not be confused with the date on which the obligation becomes applicable.

11.4 The monitoring process shall be checked for missed publications, unassigned topics and overdue assessments. Management shall review the completeness of coverage when entering new markets or changing responsible staff. Subscription alerts are an input rather than a complete control; the organisation shall verify that important obligations are captured even when an alert service fails or uses an incomplete summary.

12 Applicability dates and transition control

12.1 For every changed requirement, the programme shall identify the event that triggers applicability, such as a new type approval, manufacture, first registration, market placement or software deployment. The record shall include the exact date, product scope and transition conditions verified for the destination. One date shall not be applied indiscriminately to all vehicle populations and administrative events.

12.2 Planning shall map the requirement to engineering freezes, test bookings, approval decisions, factory conversion, shipping time and stock disposal or modification. Inventory in transit and vehicles held by dealers shall be assessed separately from future production. A shipment before a threshold date shall not be assumed sufficient if the relevant legal trigger occurs later in the distribution process.

12.3 The change owner shall construct a transition plan with old and new configurations, last permitted activities, identification rules and system release controls. Exceptions or transitional allowances shall require documented eligibility and any necessary authority action. Internal financial approval or a dealer promise to register quickly shall not substitute for verified compliance with the applicable transition conditions.

12.4 Before the transition, Plant Quality and Distribution shall test the block rules using representative vehicle records. After implementation, the team shall reconcile production, inventory and registration information to detect unintended releases. The historical applicability record shall be retained so that the organisation can explain why each vehicle population followed a particular compliance route.

13 Requirement allocation and evidence traceability

13.1 The programme shall convert the market register into a requirement to evidence matrix. Each row shall identify the applicable configuration, technical requirement, engineering owner, acceptance criterion, evidence method, test or analysis identifier, review status and release dependency. Requirements spanning several systems shall have an integration owner rather than being divided into unowned fragments.

13.2 Engineering shall allocate compliance relevant attributes to drawings, software requirements, supplier specifications, process controls and end of line checks. The allocation shall show which attributes require direct verification and which depend on validated design evidence. A production check shall not be credited with demonstrating a crash or dynamic performance requirement that it cannot measure.

13.3 The matrix shall distinguish planned evidence, evidence under review, accepted evidence and evidence invalidated by a change. Links shall resolve to controlled records, including raw data where necessary for independent review. A green status based only on a scheduled test, an unsigned report or a supplier's expected result shall not be accepted at a release gate.

13.4 Before submission and market release, a reviewer independent of the evidence preparation shall check completeness and configuration coverage. Any requirement marked not applicable shall have a recorded rationale. Changes to a linked part, software version, test method or legal interpretation shall reopen the affected rows and notify the persons responsible for dependent approval and production decisions.

14 Programme planning and compliance gates

14.1 The programme plan shall include classification, applicability confirmation, evidence strategy, specimen readiness, test execution, dossier review, approval or certification, production readiness and market release. Each gate shall specify entry conditions, required records, decision authority and permissible outcomes. Conditional progress shall identify the activity allowed and shall not imply permission for an unrelated release.

14.2 The Programme Manager shall reserve test facilities, representative hardware, instrumentation and competent personnel early enough to accommodate failures and retesting. Dependencies on supplier evidence and authority decisions shall appear in the critical path. A plan that assumes every first test will pass shall include a visible contingency assessment rather than conceal the resulting schedule risk.

14.3 Gate reviews shall examine open issues individually when they affect compliance. Commercial benefit, aggregate completion percentages and unrelated successful tests shall not offset a missing mandatory requirement. The decision record shall name the configuration reviewed, evidence versions, unresolved conditions and accountable signatories. Meeting attendance alone shall not count as technical approval.

14.4 If a milestone slips, the team shall revise the delivery plan, product scope or test resources through controlled decisions. It shall not reduce required test coverage without an approved technical and legal basis. Lessons from previous programmes shall be translated into specific planning controls, including specimen audits, data review time and production change notification obligations.

15 Configuration baseline and approval identity

15.1 The configuration owner shall maintain a baseline describing the tested and released vehicle through part numbers, revisions, software identifiers, calibration data, mass properties, options and manufacturing conditions. The baseline shall identify market differences and the features that affect the evidence strategy. A commercial bill of materials without software or option detail is insufficient for compliance traceability.

15.2 Each test specimen shall be reconciled to the intended baseline before testing, and every deviation shall be assessed for representativeness. Where a prototype uses temporary hardware, hand assembly or development software, the evidence owner shall explain how the results apply to series production. Unsupported assumptions shall remain open issues rather than being removed from the final report.

15.3 The approval or certification record shall map legal identifiers to engineering and production identifiers. The mapping shall enable a reviewer to determine which configuration was authorised, which evidence supports it and which vehicles were built accordingly. Renaming a model, changing a sales package or copying a product code shall not create coverage for an unassessed derivative.

15.4 Baseline changes shall require impact assessment before release to manufacturing or software deployment. The system shall preserve superseded configurations and their production intervals. Access to edit the baseline shall be restricted, with changes attributed to an authorised person and linked to an approved decision, so that later investigations can reconstruct the state of any affected vehicle.

16 Test coverage and representative configurations

16.1 The Test Manager and design authorities shall prepare a coverage plan for all relevant variants and options. The plan shall identify the attributes that influence each requirement, such as mass distribution, seat geometry, restraint calibration, braking hardware, battery location and sensor installation. The most demanding configuration may differ between tests and shall not be selected solely by maximum vehicle mass.

16.2 Where one specimen represents a family, the technical justification shall explain why its results support the untested configurations. The analysis shall address interactions, boundary conditions and uncertainty. A shared platform name or a common supplier shall not establish representative coverage. Required agreement with an approval authority or designated technical service shall be obtained and retained before relying on the strategy.

16.3 Simulation and engineering analysis shall have defined intended use, input quality, validation evidence and limitations. They shall replace physical testing only where the applicable route permits that approach and the model is fit for the decision. The team shall identify conditions outside the validated domain and provide additional evidence instead of extending conclusions through unsupported extrapolation.

16.4 The coverage matrix shall be updated after option changes, structural revisions or new market requirements. Test scheduling shall preserve the relationship between the chosen specimen and the approved plan. A late substitution of a more convenient vehicle shall trigger review of coverage before the test proceeds or its result is accepted for the programme.

17 Laboratories and technical service competence

17.1 Purchasing and the Test Manager shall evaluate facilities for the actual tests required, including equipment capability, competent staff, measurement control, data integrity and safe handling of test articles. Commercial availability and a general capability statement shall not be sufficient. The evaluation shall consider the relevant operating range, specimen size, software tools and ability to retain complete evidence.

17.2 Where the approval route requires a designated technical service, witness or accepted laboratory, the programme shall verify the legal scope and current status of that organisation. Technical competence and statutory designation are separate checks. IAF recognition may support an internal supplier evaluation but shall not be represented as automatic acceptance by a market authority.

17.3 The work order shall state the controlled method, specimen configuration, acceptance criteria, reporting content, deviation approval and data access requirements. Subcontracting shall require prior review of the subcontractor and the effect on evidence acceptance. The manufacturer shall know where critical tests occur and which organisation is responsible for the resulting report.

17.4 Performance monitoring shall address report corrections, unexplained repeat tests, calibration failures, missing raw data and delays that compromise sample condition. Suspected evidence integrity problems shall trigger containment of affected reports and an independent review. A change of laboratory shall not break traceability between specimens, test versions, previous failures and the final conformity decision.

18 Test methods and acceptance criteria

18.1 Before test execution, the evidence owner shall issue a controlled test instruction with the applicable method version, setup, conditioning, operating sequence, measurement channels, data processing and acceptance criteria. Criteria shall be taken from the verified requirement and any authorised interpretation. This manual shall not be used to invent universal impact speeds, injury limits, braking distances or electrical thresholds.

18.2 The instruction shall distinguish mandatory test conditions from additional development investigations. Where tolerances, rounding, filtering or uncertainty affect the decision, the treatment shall be defined before results are known. The team shall record the rationale for any supplementary internal margin, making clear that a favourable internal metric does not override the controlling legal acceptance criterion.

18.3 A readiness review shall confirm that equipment, software, fixtures, specimens and competent personnel match the instruction. Deviations shall be documented before use where foreseeable, and their effect on validity and acceptance shall be assessed by the authorised technical function. A convenient fixture or unapproved processing script shall not silently replace the prescribed arrangement.

18.4 After testing, the reviewer shall compare the executed conditions with the authorised method as well as the measured result. Passing data obtained under invalid conditions shall remain unresolved. The report shall identify any deviation, retest and limitation clearly enough for an independent reader to understand whether the evidence supports the intended compliance claim.

19 Specimen build and custody procedure

19.1 Step one is to select the specimen from the approved coverage plan and assign a unique identity. The build coordinator shall issue the required parts, software, manufacturing conditions and inspection points. The record shall show whether the specimen is a prototype, production representative build or sample from ordinary production, with the consequences for evidence use explicitly assessed.

19.2 Step two is to verify the as built condition. Quality shall reconcile critical parts, serial numbers, software hashes or controlled identifiers, calibration versions, mass and relevant geometry. Deviations shall be photographed or otherwise recorded where appropriate and assessed before release. A development label shall not conceal uncertainty about which hardware or software was actually tested.

19.3 Step three is to control transport, storage, conditioning and access. The custodian shall record handovers, damage, repairs and environmental exposure that could affect results. Preparatory work at the laboratory shall be authorised and recorded. Replacement of a restraint, sensor, battery or structural item shall trigger a configuration review rather than being treated as routine housekeeping.

19.4 Step four is to reconcile the specimen after testing and retain the required evidence. Destructive articles shall remain identifiable through photographs, retained components and custody records. Disposal shall follow an authorised instruction after evidence and investigation needs are resolved. The final report shall reference the actual specimen record and not merely the intended build specification.

20 Instrumentation and measurement assurance

20.1 The laboratory shall identify every measurement channel that contributes to the compliance result and maintain its calibration, range, resolution and installation history. The Test Manager shall verify suitability for expected dynamic and environmental conditions. Equipment that is calibrated but used outside its valid range or mounted incorrectly shall not be considered adequate for the test.

20.2 The test plan shall define channel checks, time synchronisation, data acquisition settings, filtering and integrity verification. Processing software and calculation files shall be version controlled, with access restricted to authorised users. Manual data edits shall be traceable and technically justified; original raw data shall remain preserved so that another competent reviewer can reproduce the reported result.

20.3 When a measurement system is found out of tolerance, the laboratory shall identify potentially affected tests from the last known valid state and assess the effect on decisions. The assessment shall consider magnitude, direction, uncertainty and proximity to acceptance limits. A later successful calibration shall not retrospectively validate all earlier results without a documented technical evaluation.

20.4 The evidence package shall include required calibration status, channel validity and processing records. Missing or saturated channels shall be disclosed and assessed against the method. The manufacturer shall not accept a summary pass statement when essential measurement validity remains unresolved, and shall define additional testing or analysis needed to close the gap.

21 Crash test readiness and execution

21.1 The crash test lead shall conduct a readiness review covering specimen configuration, required conditioning, occupant surrogates, restraint settings, instrumentation, facility setup and emergency arrangements. The review shall use the approved method for the relevant market and test. Commercial crash ratings and development tests shall be kept distinct from evidence intended to support legal conformity.

21.2 The specimen record shall capture seat positions, interior settings, tyre and suspension condition, mass distribution, energy state and other method dependent parameters. The team shall verify restraints and safety critical connections without making unrecorded improvements to the test article. Any departure from production intent shall be assessed for its effect on representativeness and evidence acceptance.

21.3 Only competent facility personnel shall execute the impact sequence under the laboratory's safe operating instructions. The test lead shall confirm exclusion areas, communication, emergency readiness and post impact hazards before authorising the event. This manual does not provide instructions for operating impact equipment or approaching a damaged high voltage battery; those actions require the facility's approved technical procedures.

21.4 After the event, the team shall secure the article, validate measurement channels and document structural, restraint and occupant response evidence required by the method. Photographs, video, raw data and inspection findings shall share a consistent specimen identity and time basis. Initial impressions shall not be communicated as a final pass until the technical review is complete.

22 Failed tests and evidence integrity procedure

22.1 When a result fails, is invalid or cannot be interpreted reliably, the Test Manager shall open a nonconformity and preserve the original evidence. The record shall distinguish product failure, setup error, measurement failure and unresolved interpretation. A repeat test shall not erase an earlier result or remove the obligation to understand its relevance to the released product.

22.2 Engineering shall assess the affected configurations and determine immediate containment for development, production or market release. A potential safety issue discovered during testing shall be escalated through the product safety process even if the commercial launch is distant. The issue owner shall identify whether related vehicles, parts or software already exist in production or customer service.

22.3 The corrective action plan shall establish the cause, proposed change, revised evidence coverage and approval consequences. Retesting shall use an authorised plan that states what has changed and why the new evidence addresses the original failure. Selecting only favourable runs, deleting adverse channels or changing acceptance criteria after seeing results is prohibited.

22.4 Closure shall require reviewed evidence, an updated configuration baseline and confirmation that the corrective action reached all affected processes. The decision shall preserve the history of failures and retests in the dossier. If the evidence remains incomplete, the appropriate release hold shall continue; management shall adjust the programme rather than label the unresolved result as an acceptable commercial risk.

23 Occupant protection and restraint systems

23.1 The restraint design authority shall maintain the relationship between vehicle structure, seating, belts, airbags, sensors and control software. The compliance plan shall identify relevant seating positions, occupant conditions and installation variations. A component test or supplier declaration shall be evaluated within the installed vehicle system and shall not be treated as complete evidence of occupant protection.

23.2 Engineering shall control seat anchorage, belt routing, interior geometry, airbag deployment space and sensor calibration through drawings and configuration records. Optional seats, trim, child restraint interfaces and accessibility adaptations shall be included in the change assessment. The team shall identify features whose apparently cosmetic alteration could affect deployment, injury response or correct user operation.

23.3 Production Quality shall translate compliance relevant attributes into supplier controls, assembly verification and traceable release checks. Controls may include correct part selection, fastening confirmation, connector assurance and software identification, with methods validated for their intended detection capability. End of line diagnostics shall not be used as proof that all structural or dynamic restraint performance requirements have been satisfied.

23.4 Field information about unintended deployment, failure to deploy, incorrect installation or misleading instructions shall enter the safety evaluation process. Design and service changes shall be assessed against the original evidence and affected populations. The programme shall retain the rationale connecting production controls and customer instructions to the validated restraint configuration for each market.

24 Vulnerable road user protection

24.1 The responsible engineering team shall identify requirements concerning pedestrians, cyclists and other vulnerable road users for each vehicle category and destination. The evidence plan shall consider front end geometry, exterior projections, active protection devices and relevant detection functions. Applicability shall be established from the market register rather than inferred from the presence of a particular sensor or feature name.

24.2 Design changes to bonnet systems, bumpers, lighting assemblies, badges, accessories and underbody structures shall be assessed for their effect on the validated configuration. Replacement parts and dealer installed accessories shall be included where they can alter the relevant characteristics. A styling approval shall not substitute for the compliance review of exterior geometry and energy management.

24.3 Where active systems contribute to protection, engineering shall control sensing assumptions, software versions, diagnostic behaviour and interaction with passive structures. The test plan shall identify the conditions and limitations relevant to the requirement. Optional equipment that changes sensor visibility or physical response shall have documented coverage or a separate evidence plan before release.

24.4 Production and service controls shall ensure correct installation, calibration and restoration after repair. The programme shall monitor complaints and incident information for patterns that may reveal a conformity or safety concern. Advertising and user instructions shall describe the system's verified capabilities and limitations without implying that the vehicle can prevent every collision or protect all road users in all circumstances.

25 Braking steering tyres and running gear

25.1 The chassis design authority shall identify the market requirements for braking, steering, tyres and related running gear. The coverage plan shall address mass, axle loading, tyre options, towing configurations, propulsion behaviour and relevant control software. Evidence shall reflect the interaction of components and vehicle states rather than relying solely on independent supplier approvals.

25.2 Engineering shall control hardware, friction materials, hydraulic or pneumatic elements, control calibrations and warning strategies that affect performance. A substitute tyre, sensor or electronic controller shall undergo change assessment even when its catalogue description appears equivalent. Test and analysis records shall explain the configuration boundaries within which results remain valid.

25.3 Manufacturing shall verify the compliance relevant assembly characteristics using approved process controls and validated checks. These may include correct parts, fastening, leak integrity, alignment, diagnostic status and calibration completion. The organisation shall distinguish an end of line functional screen from the broader dynamic performance evidence required for the destination and intended vehicle use.

25.4 Abnormal test results, repeated production deviations and field reports shall be reviewed together. The programme shall define containment when a critical component lot or software version becomes suspect. Release decisions shall consider both the immediate defect and the possibility that existing test evidence no longer represents the production population, with corrective action coordinated through supplier quality and product safety functions.

26 Lighting visibility controls and information

26.1 The programme shall identify market requirements for lighting, signalling, mirrors or camera based visibility, glazing, controls, telltales and driver information. The configuration matrix shall distinguish market specific components, installation positions, software behaviour and language content. Physical similarity between parts shall not establish interchangeability where markings, performance or operating logic differ.

26.2 Engineering shall validate installed performance and interaction with vehicle structure and software. Changes to body geometry, ride height, displays, camera processing or user interface logic shall be assessed for their effect on existing evidence. A component approval shall be checked against installation conditions, permitted combinations and any limitations relevant to the complete vehicle.

26.3 Plant Quality shall establish controls for correct variant selection, orientation, aim or calibration where required, software coding and warning function. The checks shall use controlled acceptance criteria and calibrated equipment as appropriate. Records shall link failed checks, rework and final verification to the affected vehicle identity so that a later investigation can reconstruct its released condition.

26.4 Customer information and service instructions shall remain consistent with the approved or certified function. Translation and display changes shall undergo review when they affect warnings, required information or user action. Cosmetic redesigns and over the air interface updates shall not bypass compliance assessment simply because the underlying hardware remains unchanged.

27 Active safety and driver assistance functions

27.1 The programme shall establish the applicability and evidence requirements for each active safety or driver assistance function in each market. The function description shall distinguish assistance from automation, identify operating conditions and define the driver's role. Product naming shall not imply capabilities beyond those supported by the technical design, approval scope and customer information.

27.2 The evidence plan shall cover relevant sensors, control software, calibration, warnings, driver interaction and failure behaviour. Engineering shall identify variations in body installation, wheels, loads, accessories and software that could affect performance. Scenario coverage shall be justified against the applicable requirement; a collection of successful demonstrations shall not substitute for a controlled verification plan.

27.3 The factory shall verify correct hardware and software identity, sensor installation and required calibration. Rework that disturbs sensor geometry shall trigger the prescribed recalibration and release checks. The production system shall prevent a market from receiving an unapproved feature state or an incompatible combination of control modules even when the vehicle starts and passes basic diagnostics.

27.4 Field performance information shall feed the safety and conformity review. Feature expansion, revised warnings or remote activation shall be treated as configuration changes and assessed before deployment. The programme shall maintain traceability between the tested behaviour, released software, customer explanation and actual vehicles enabled for the function, including any market specific restrictions.

28 Driver monitoring event data and privacy

28.1 Where driver monitoring, event recording or connected safety functions apply, the programme shall identify both product conformity and personal data obligations. The functional requirement shall define what the vehicle must detect, record or communicate, while the privacy assessment shall establish lawful processing, access, security and retention. Neither assessment shall be assumed to replace the other.

28.2 Engineering shall document the data elements, triggering conditions, storage locations, interfaces and software versions relevant to compliance evidence. The team shall distinguish mandatory information from optional analytics. Test data containing faces, location or identifiable driving behaviour shall receive appropriate access controls and minimisation without altering information needed to verify a safety requirement.

28.3 Customer notices, service tools and authority access arrangements shall be reviewed for accuracy and lawful scope. Access shall be attributable to an authorised role and limited to the purpose. A general customer consent statement shall not be used to justify unrelated collection, and confidentiality controls shall not obstruct a lawful safety investigation or required disclosure.

28.4 Changes to recording logic, camera processing, cloud services or retention settings shall enter the compliance change process. The review shall assess functional performance, privacy effects and market variation. Test evidence and operational records shall remain retrievable for their required purpose, with legal holds overriding routine deletion when applicable and deletion resuming through an authorised decision when the hold ends.

29 Electric propulsion and battery conformity

29.1 The high voltage and battery design authorities shall identify the applicable electrical, mechanical and environmental requirements for the vehicle and installed energy storage system. The evidence plan shall include the actual battery design, mounting, protection, charging interfaces, software and relevant failure responses. Cell supplier evidence alone shall not establish conformity of the assembled pack or complete vehicle.

29.2 The programme shall control changes to cell chemistry, supplier, interconnections, cooling, enclosure, protective devices and battery management software. A commercially equivalent replacement shall undergo technical and market impact assessment before use. Evidence coverage shall address the changed characteristics and installation, including the effect on crash behaviour, mass distribution and vehicle controls where relevant.

29.3 Production shall verify compliance relevant assembly, insulation related checks, identification, software and traceability under approved safe work instructions. This manual establishes governance and evidence requirements; it does not prescribe universal high voltage test values or hazardous test execution methods. Competent personnel shall use the validated technical procedure for the particular product and facility.

29.4 Transport qualification, vehicle approval and service safety shall be treated as connected but distinct obligations. Abnormal battery test results or production findings shall trigger containment and product safety evaluation. The programme shall preserve the link between battery serial identity, vehicle build, test evidence and field changes so that affected populations can be identified promptly and accurately.

30 Software cybersecurity and update compliance

30.1 The software compliance plan shall identify functions whose behaviour affects market requirements and define the approved hardware, software and calibration combinations. The evidence matrix shall include software dependent tests, configuration integrity and relevant cybersecurity or update management obligations. A software release shall not be considered compliant merely because it passes a general functional test suite.

30.2 Engineering shall retain the build identity, requirements, verification results, known issues and approval decision for each released version. Security related evidence shall demonstrate the intended control without exposing private keys, credentials or unnecessary implementation secrets in public documents. Supplier software shall have defined change notification and evidence access arrangements sufficient for the manufacturer's responsibilities.

30.3 The update process shall assess changes before deployment, including their effect on approval scope, certified behaviour, customer information and production conformity. Remote activation of an existing feature shall receive the same applicability review as a software change when it alters the vehicle's legal configuration. Required authority actions shall be completed before the affected deployment or release.

30.4 The factory and field systems shall verify compatibility, authenticity and successful installation using controlled procedures. Failed or interrupted updates shall have a safe recovery path and a clear release decision. The programme shall retain vehicle population mapping and evidence for both original and updated states so that a later investigation can identify what behaviour was present at the relevant time.

31 Emissions noise and energy obligations

31.1 The Market Compliance Lead shall identify environmental, noise, energy consumption and range related obligations separately from vehicle safety requirements. The programme shall establish the responsible authority or certification route, evidence methods, production controls and customer information for each applicable topic. Completion of a safety approval shall not be represented as completion of all environmental market entry duties.

31.2 Engineering shall control powertrain hardware, software, calibration, vehicle mass, tyres, aerodynamic options and other attributes relevant to the applicable test or declaration. The evidence strategy shall state the tested family, permitted interpolation or extension method where allowed, and the boundaries of the claim. Marketing values shall be traceable to the appropriate verified basis.

31.3 Production and field change reviews shall assess whether substitutions, software updates or accessories affect declared or regulated performance. Test recognition and family grouping shall be confirmed for the destination rather than assumed from another market. Any prohibited manipulation of test detection or real world performance shall be escalated as a serious compliance concern and preserved for investigation.

31.4 The organisation shall monitor required in service information and respond to findings through the relevant corrective action process. Records shall distinguish laboratory results, official declarations and real world customer observations so that their different purposes are understood. Public claims shall be reviewed for accuracy, including conditions, limitations and the exact configuration to which the statement applies.

32 Mass dimensions identity and labels

32.1 The programme shall control vehicle identity, dimensions, rated masses, seating information and required labels for each market configuration. The responsible engineer shall verify the technical basis for declared values and the effect of options or conversions. Sales systems shall not offer combinations that exceed approved limits or produce documentation inconsistent with the actual vehicle.

32.2 The identity process shall maintain unique vehicle identifiers and the relationship to type, variant, production site and build record. Labels and plates shall use approved content, language, placement and durability appropriate to the requirement. A correct identifier in a database shall not compensate for an incorrect physical label or establish approval of an otherwise nonconforming vehicle.

32.3 Plant Quality shall verify label selection and application, with controlled access to printing systems and reconciliation of reprints. Rework shall prevent duplicate or conflicting identity information. The release record shall capture any correction and the person who authorised it, preserving the original information where needed to explain the history of the vehicle.

32.4 Market documents, customer instructions and commercial specifications shall be reconciled with the approved or certified configuration. Changes to rated mass, towing capacity or seating shall trigger technical and regulatory assessment before publication or physical modification. Distribution shall hold vehicles with identity discrepancies until the responsible functions establish the correct configuration and complete the authorised correction process.

33 Submission dossier preparation procedure

33.1 The Homologation Manager shall open a controlled dossier for each approval or certification scope. The dossier index shall identify the responsible entity, vehicle configurations, applicability assessment, test evidence, technical descriptions, production controls and required declarations. Every document shall carry a version and owner, with a clear distinction between working material and evidence authorised for external use.

33.2 The evidence owners shall reconcile reports against the configuration baseline and requirement matrix. The review shall check specimen identity, method applicability, acceptance results, deviations, signatories and coverage of untested derivatives. Missing annexes, inconsistent software identifiers and unresolved report corrections shall be treated as substantive gaps, not administrative matters that can be silently deferred until after submission.

33.3 A submission reviewer shall verify completeness and consistency across drawings, forms, labels and reports. The authorised signatory shall approve the exact package transmitted and retain proof of delivery. Sensitive engineering information shall be protected through agreed channels, while access needed by a competent authority or authorised technical service shall remain available within the lawful process.

33.4 Queries and resubmissions shall be linked to the original package and answered through controlled revisions. The team shall preserve the sequence of evidence considered in the final decision. A final dossier shall enable a competent reviewer to reconstruct the compliance basis without depending on personal email archives, informal explanations or files that have been overwritten since the application was made.

34 Approval and certification decision procedure

34.1 Before a decision, the responsible function shall verify that all applicable requirements have accepted evidence and that the production configuration falls within its scope. The review shall examine open issues, evidence validity, production readiness and market documentation. A planned approval, test booking or supplier commitment shall not be recorded as completed evidence.

34.2 For an authority approval route, the Homologation Manager shall verify the actual issued decision, identifier, scope, conditions and related information package. For manufacturer certification, the authorised manufacturer signatory shall approve the documented basis and required certification actions. The record shall accurately name the route and shall not imply that a public authority endorsed a self certification decision.

34.3 Plant Quality and Distribution shall receive the released configuration, permitted markets and any conditions affecting manufacture, shipment or sale. Restrictions shall be implemented in operational systems and communicated to responsible staff. A conditional internal gate may authorise a defined preparatory activity, but it shall not override an outstanding legal prerequisite for placing a vehicle on the market.

34.4 The decision record shall include signatories, date, evidence versions and the trigger for future review. It shall not invent a universal expiry interval for approvals or certification evidence. Continuing validity shall be assessed against applicable rules, changes, authority conditions and production conformity, with superseded decisions retained for the historical populations they governed.

35 Conformity of production planning

35.1 Plant Quality shall establish a COP plan that translates the compliance baseline into ongoing manufacturing controls. The plan shall identify relevant product families, critical characteristics, supplier dependencies, process verification, sampling activities, test methods, acceptance criteria and reaction rules. It shall cover all sites and shifts producing the configuration, including contract assembly and final completion operations.

35.2 The plan shall connect design evidence to the production attributes that preserve it. For example, a restraint test may depend on material, geometry, joining and software characteristics that require separate factory controls. An end of line diagnostic result shall not be credited as verification of an unmeasured structural attribute merely because both relate to the same system.

35.3 Sampling frequency and sample selection shall follow applicable approval requirements and a justified production risk assessment. The programme shall consider process capability, volume, changes, previous failures and required authority arrangements. An internal frequency shall not reduce a mandatory obligation, and a favourable average shall not conceal a nonconforming safety critical result.

35.4 The COP plan shall specify who evaluates deviations, defines the potentially affected population and authorises release after correction. Records shall show that the controls operate in practice, including failed checks and rework. Management shall provide test capacity and protected escalation routes so that production targets cannot quietly remove or postpone required conformity activities.

36 Incoming compliance critical components

36.1 Purchasing and Supplier Quality shall identify components whose identity, performance or approval status affects vehicle conformity. Contracts shall specify technical requirements, traceability, evidence retention, process change notification and access to relevant verification records. A supplier's commercial description or general quality certificate shall not replace confirmation of the exact component and revision required by the vehicle baseline.

36.2 Incoming controls shall verify identity, markings where applicable, approved source, lot information and the required evidence. Inspection depth shall reflect the risk of substitution, counterfeiting, transport damage and undetected supplier changes. Electronic records shall be reconciled to physical goods; a correct delivery document shall not automatically establish that the material received matches it.

36.3 When shortages arise, emergency sourcing shall follow IAF-MAN-BCP-001 and the technical change process. The Homologation function shall assess the proposed alternative before it is released to production. Commercial urgency shall not permit a nonconforming component, unsupported approval claim or incompatible software version to enter a vehicle intended for an affected market.

36.4 Nonconforming or uncertain lots shall be identified, segregated and traced to any consumption already recorded. Supplier corrective action shall include the effect on vehicle evidence and existing production populations. Release after sorting or rework shall require an approved method and verification of the attributes relevant to conformity, with the original discrepancy retained in the record.

37 Manufacturing process conformity controls

37.1 Manufacturing Engineering shall identify the processes that create or preserve compliance relevant characteristics, including joining, fastening, material treatment, software loading and sensor calibration. The control plan shall define approved settings, equipment capability, operator competence, verification methods and reaction rules. Process parameters shall remain linked to the product and market configuration they support.

37.2 Plant Quality shall verify that instructions, tooling and inspection systems reflect the current baseline. Changes to fixtures, robots, process software or subcontracted operations shall undergo impact assessment before use. A machine's ability to produce a visually acceptable part shall not establish that the required structural, functional or traceability characteristics remain controlled.

37.3 The factory shall monitor failed checks, bypasses, rework and loss of traceability. Temporary deviations shall have a defined scope, duration and authorised technical basis, and shall never waive mandatory conformity requirements. Bypassed controls shall generate a visible hold or alternative verification plan that provides equivalent evidence where technically and legally acceptable.

37.4 Process records shall support reconstruction of the affected vehicle population when a defect is found. The review shall include start up, changeover, maintenance and restart conditions, not only stable production. Recovery from disruption shall confirm that machines, people, materials and software have returned to the controlled state before normal release resumes.

38 End of line compliance verification

38.1 The end of line plan shall specify the checks needed to confirm vehicle identity, correct market configuration, software state, diagnostic status and other measurable release characteristics. Each check shall have a validated method, acceptance criterion and record linkage. The plan shall state its detection limits and shall not imply that a short functional sequence proves every legal performance requirement.

38.2 The release system shall prevent a vehicle from progressing when required checks are absent, failed or performed with an invalid configuration. Manual overrides shall require defined authority and a documented equivalent verification where permitted. A production supervisor shall not clear a compliance hold solely because the vehicle drives normally or has already been assigned to a customer.

38.3 Rework shall identify which checks must be repeated after a component replacement, software reload, calibration or structural repair. The system shall preserve the original failure and the final verification rather than overwrite it with a pass. Test equipment changes and data interface failures shall be assessed for their effect on previously released records.

38.4 Quality shall periodically challenge the detection and interlock controls using approved, safe verification methods. The results shall show that the system identifies representative errors and prevents unintended release. Where records are lost or unreliable, the organisation shall define the affected population and restore defensible evidence before issuing market documents or transferring vehicles to unrestricted distribution.

39 COP sampling and nonconformity reaction

39.1 The COP coordinator shall select samples according to the approved plan and maintain evidence that they represent the intended production population. Selection shall not exclude difficult variants, recent process changes or ordinary production variation without justification. Sample preparation shall be controlled so that special adjustment does not conceal conditions present in vehicles supplied to customers.

39.2 When a sample fails or evidence becomes invalid, Quality shall open a nonconformity and identify the potentially affected interval, configurations and distribution status. The reaction shall follow the applicable obligation and approved internal rule. Repeating the test until a pass appears shall not establish that the original failure was irrelevant or that the remaining population conforms.

39.3 Engineering shall evaluate root cause, extent and required correction using manufacturing, supplier and test information. The team shall determine whether authority communication, additional sampling, vehicle inspection or field action is required. A statistical argument shall not be used to disregard a known nonconforming vehicle or an unresolved safety concern.

39.4 Release after containment shall require verified corrective action, an updated population assessment and the responsible technical decision. The COP plan shall be revised where the event exposes inadequate controls. Records shall preserve selection logic, failed and repeated results, disposition and effectiveness checks, allowing an independent reviewer to understand why production was stopped, restricted or allowed to resume.

40 Manufacturing site and supplier change procedure

40.1 The change initiator shall describe the proposed site, supplier, tooling, material or process change and identify affected parts and vehicle configurations. The request shall reach Homologation before implementation commitments make the decision irreversible. Purchasing shall ensure that lower tier changes with potential compliance impact are reported through the supply chain rather than discovered after shipment.

40.2 The cross functional review shall compare the changed condition with the evidence baseline and COP plan. It shall determine the need for new testing, updated analysis, authority notification, approval extension, revised certification support and production validation. A supplier's claim of equivalence shall be an input requiring review, not the final decision.

40.3 Implementation shall use an authorised transition plan with first and last affected lots, vehicle population rules, document changes and release gates. Existing inventory shall be assessed for mixed configurations. Where an emergency change is proposed, the continuity process may accelerate coordination and resources but shall preserve technical acceptance and legal prerequisites.

40.4 After implementation, Quality shall verify the actual product and process, reconcile traceability and review early production results. Closure shall confirm that the dossier, market register, control plan and distribution systems reflect the new state. The previous baseline shall remain retrievable for vehicles produced before the transition and for any later field investigation.

41 Software and remote update change procedure

41.1 The software change owner shall identify the functions, hardware combinations, markets and vehicle populations affected by a proposed release. The request shall describe behavioural changes, calibration differences, security effects and known limitations. A maintenance label or unchanged user interface shall not be accepted as proof that the update has no compliance impact.

41.2 Homologation and the relevant design authorities shall compare the change with the approved or certified baseline. The review shall identify required verification, regression coverage, authority action, customer information and restrictions on deployment. Updates that activate a feature, alter warnings or change performance shall receive the same disciplined assessment as physical product changes.

41.3 Before deployment, the release board shall verify evidence, compatible configurations, installation prerequisites, failure recovery and population targeting. The update system shall prevent unintended markets or vehicle variants from receiving an incompatible release. Required approval actions shall be completed before the applicable implementation event, and operational records shall identify the evidence supporting that decision.

41.4 After deployment, the organisation shall reconcile successful, failed and deferred installations and monitor relevant field behaviour. Unexplained failures or adverse safety signals shall trigger containment and investigation. Historical software states shall remain linked to each vehicle so that conformity can be assessed at manufacture, delivery and later service, without assuming that every vehicle has the latest version.

42 Market specific vehicle release procedure

42.1 Distribution shall request release for a defined vehicle identity, destination and intended transaction. The release system shall confirm the as built configuration, applicable approval or certification record, completed production checks and required documents. An allocation to a dealer or an invoice shall not itself authorise shipment, sale or registration.

42.2 The responsible reviewer shall check open holds, transition dates, field actions and any market specific restrictions. Vehicles in transit, storage and dealer inventory shall remain within the control scope. A vehicle may be technically complete yet restricted from a destination because of documentation, configuration or applicability conditions that must be resolved before the relevant activity.

42.3 Release shall be recorded with the destination, decision date, evidence version and authorised role. If a vehicle is redirected, the new destination shall be assessed before transport or commercial commitment. The system shall prevent staff from copying another vehicle's release status or treating a regional market code as proof of acceptance in every country within that region.

42.4 Where a discrepancy is found after release, the organisation shall identify the current location and customer status promptly and apply the appropriate hold or corrective process. The record shall preserve both the original decision and its correction. Releasing personnel shall have access to current compliance information and a clear route to escalate uncertainty without commercial retaliation.

43 Import registration and customer documents

43.1 The Market Compliance Lead shall define the documentation required for import, registration, distribution and customer delivery in each destination. The document set may vary with vehicle category and compliance route. Customs clearance, tax processing and successful registration shall be treated as distinct administrative outcomes rather than substitutes for the manufacturer's technical conformity obligations.

43.2 Document generation shall draw from the controlled vehicle and approval records. The responsible function shall verify identity, masses, configuration, required declarations, language and authorised signatory information. Templates shall be protected against uncontrolled editing, and any document reissue shall retain a reason, revision history and linkage to the original vehicle record.

43.3 Importers and dealers shall receive instructions for handling discrepancies, lost documents and market redirection. They shall not alter technical declarations or approval identifiers to facilitate a transaction. Where local completion or inspection is required, the organisation shall define the evidence needed before the final customer release and the party responsible for obtaining it.

43.4 Quality shall sample completed document sets against physical vehicles and source records. Errors shall trigger an assessment of the affected population and downstream consequences, including vehicles already registered. Corrective action shall address the data source and system rule rather than merely replacing an individual form while leaving the same defect active for future deliveries.

44 Nonconformity containment and field action

44.1 Any credible indication of nonconformity or a safety defect shall enter the product safety and compliance triage process. The receiver shall preserve the information, identify affected configurations and notify the responsible technical and market functions. A matter shall not be closed solely because the vehicle passed end of line testing or the original approval remains on file.

44.2 The assessment shall distinguish known facts, uncertainty, potential harm, distribution status and the evidence needed for a decision. Quality shall establish appropriate containment for parts, production, inventory and field populations. The scope of a hold shall be clear, and commercial staff shall not narrow it without an authorised technical reassessment.

44.3 The accountable manufacturer shall determine required reporting and corrective action using the applicable market obligations and verified deadlines. The IAF Global Warranty Claims and Recall Manual, IAF-MAN-WCR-001, shall govern the operational coordination of customer notification, service remedies, parts and campaign tracking. This manual retains responsibility for the conformity basis and approval consequences of the remedy.

44.4 Closure shall require evidence that the correction addresses the cause, reaches the affected population as required and preserves conformity of the repaired configuration. The organisation shall retain decision history, authority communications and unresolved limitations. Confidentiality, customer settlements or supplier disputes shall not be used to suppress a required safety disclosure or delay a necessary protective action.

45 Authority communication and market surveillance

45.1 The organisation shall appoint authorised contacts for approval authorities, market surveillance bodies and other competent public agencies. The contact register shall identify responsibilities, deputies and secure communication routes. Incoming requests shall be logged with their scope, verified sender, applicable response requirement and accountable owner, avoiding reliance on an individual employee's unmanaged mailbox.

45.2 Responses shall be accurate, complete within the lawful scope and supported by controlled records. Technical and legal reviewers shall assess consistency without obstructing truthful disclosure. Where information is incomplete, the response shall distinguish confirmed facts from ongoing work and provide updates through the agreed process rather than presenting an assumption as a verified conclusion.

45.3 Requested vehicles, parts, software or records shall preserve identity and custody. Confidential material shall receive appropriate handling requests, but confidentiality shall not be used to deny lawful access. The team shall retain what was provided, when, by whom and in which version, including corrections to an earlier submission.

45.4 Findings from surveillance, official tests and information requests shall enter the corrective action and regulatory monitoring processes. Management shall assess whether the issue affects other markets or programmes. The organisation shall not treat a closed request as proof that every related product complies, and shall track commitments until their completion is supported by evidence.

46 Competence independence and internal audit

46.1 The competence programme shall define the knowledge and practical skills needed for applicability assessment, testing, dossier review, COP and market release. Personnel shall demonstrate competence for their assigned vehicle categories and subject areas through supervised work, evidence review or assessed exercises. Attendance at a general training session shall not automatically authorise a person to sign technical decisions.

46.2 Internal audits shall sample the chain from a market requirement to a released vehicle and from a physical vehicle back to its evidence. Auditors shall examine configuration changes, failed tests, release overrides and authority commitments in addition to successful routine cases. Audit selection shall include recent transitions and outsourced activities where responsibility may become unclear.

46.3 Auditors shall have sufficient independence from the work reviewed and access to relevant records. Findings shall state the requirement, observed evidence, affected scope and risk. Corrective action shall address the cause and verify effectiveness using subsequent records or product checks, rather than closing the finding when a revised procedure is merely issued.

46.4 Management shall review competence gaps, overdue findings and repeated evidence weaknesses. Conflicts of interest shall be declared and managed under the IAF policy. Personnel shall be able to report pressure to misstate results or release unsupported vehicles through protected channels, with investigation separated from the commercial programme whose conduct is being questioned.

47 Performance review and scenario exercises

47.1 The compliance dashboard shall measure requirement coverage, accepted evidence, open critical issues, overdue changes, COP completion and release control failures. Every metric shall define its numerator, denominator, period and source. A high completion percentage shall be accompanied by the list of unresolved mandatory requirements, since one critical gap can prevent release of the affected configuration.

47.2 Management shall review leading indicators such as late supplier evidence and unassessed software changes as well as outcomes such as failed surveillance tests. The review shall assign actions, resources and decision dates. Targets shall not reward the concealment of failures, the exclusion of difficult variants or premature closure of technical issues.

47.3 Exercises shall test a new applicability date, a failed COP result, a substituted electronic controller and a market redirection request. Participants shall demonstrate how they identify affected vehicles, retrieve evidence, impose holds and decide communication obligations. The exercise shall measure decision quality and traceability rather than the speed with which staff can produce a favourable status report.

47.4 Lessons shall revise system rules, competence plans and programme assumptions. The exercise record shall distinguish simulated facts from actual operational records so that no false approval or field action is created. An independent reviewer shall verify that corrective actions improve the relevant control and that unresolved weaknesses remain visible to the accountable director.

48 IAF interfaces records and revision control

48.1 This manual operates with IAF-QM-001 and the IAF Documents and Records Guide. Supplier evidence and change control connect to IAF-MAN-SQA-001; emergency sourcing to IAF-MAN-BCP-001; software release to IAF-MAN-SDV-001; and field corrective action to IAF-MAN-WCR-001. Each interface shall have an owner so that the handover does not leave an unassigned compliance decision.

48.2 Records shall be classified, version controlled and retained according to their legal, approval, product lifecycle and investigation purpose. The retention schedule shall identify the event from which the period runs, the responsible custodian and any hold. A universal short retention period shall not be imposed on evidence needed to support vehicles that remain in service.

48.3 The document owner shall review this manual after significant regulatory, product or process changes and recurring control failures. Revisions shall follow the competent IAF authority and document control process. Publication shall include the revision identity, change summary and communication to affected users; an editorial update shall not silently alter an operational approval or historical evidence record.

48.4 Adopting organisations shall update local procedures and train affected personnel before implementing changed requirements. Corporate and Corporate Recognised participation shall follow the applicable IAF membership and committee rules, without creating statutory approval powers. The operating organisation remains accountable for its vehicles, evidence, truthful declarations and lawful market activities throughout the product lifecycle.

Annex A Operational adoption and authority record

Complete one adoption record for each responsible entity and defined operating scope. Confirm implementation through evidence rather than treating publication as operational approval.

Record field	Required entry and evidence
Record identity	Enter entity, programme, document code, revision, actual adoption date and record owner.
Product scope	List categories, complete or incomplete status, propulsion, derivatives and excluded activities with reasons.
Operating scope	Identify plants, contract assemblers, importers, completing organisations and destination markets.
Accountability	Name the accountable director, Homologation Manager, design authorities, Quality and market leads with deputies.
Decision limits	Record submission, technical acceptance, production hold and market release authorities; separate preparation from review.
Local implementation	Link procedures, systems, training, market registers and evidence repositories required for the scope.
Readiness gaps	Enter each missing control, interim containment, owner, due date and objective closure evidence.
Release and review	Record actual signatories, permitted activities, remaining restrictions and triggers for reassessment.

Use this record with Section 4. Do not enter an invented approval date or assume that IAF publication grants an operating organisation statutory authority.

Annex B Market requirements register worksheet

Create one row in the local register for each distinct obligation and applicability condition. The fields below define the minimum record structure and may be expanded in the editable version.

Record field	Required entry and evidence
Market and product	Enter destination, responsible entity, vehicle category, legal grouping and affected configurations.
Exact obligation	Record the authoritative identifier, clause, version, controlling language and verified source location.
Applicability	State the trigger event, effective date, transition conditions, exemptions if verified and reasoned applicability result.
Required outcome	Specify the performance, test, process, label, documentation or reporting obligation and exact acceptance criterion.
Responsible owner	Name the technical owner, market interpreter, evidence reviewer and release authority.
Evidence route	Identify test, analysis, inspection, declaration or authority action and the permitted use of each form of evidence.
Verification status	Record retrieval date, reviewer, interpretation questions, accepted clarification and next monitoring action.
Change impact	Link affected programmes, production intervals, inventory, deadlines and controlled implementation decisions.

The core manual omits external reference lists. This operating register shall nevertheless retain exact identifiers and verifiable criteria; a generic statement of compliance is insufficient.

Annex C Requirement coverage and gap matrix

Use one row per requirement and configuration coverage claim. Preserve nonapplicability reasons and all unresolved mandatory items alongside any overall completion metric.

Record field	Required entry and evidence
Requirement identity	Link the market register entry and the exact vehicle configuration or family covered.
Technical allocation	Identify system, part, software, manufacturing characteristic and integration owner.
Acceptance basis	Enter the applicable criterion, method version and approved interpretation or permitted analysis route.
Planned evidence	Name the specimen, test or analysis, responsible facility and planned completion date.
Actual evidence	Link signed report, raw data where needed, configuration record and review decision.
Coverage rationale	Explain representation of untested variants, boundary conditions, assumptions and required authority agreement.
Gap and containment	State missing or invalid evidence, affected release activity, hold owner and resolution plan.
Review history	Record acceptance date, reviewer, superseded evidence and change triggers that reopen the row.

Planned, received, reviewed and accepted are separate states. Do not mark a requirement complete merely because a report exists or a test is scheduled.

Annex D Test coverage and worst case selection

Prepare a separate selection record for each test family. The most demanding configuration shall be justified for that test and shall not automatically be the heaviest vehicle.

Record field	Required entry and evidence
Test objective	Identify market requirement, evidence purpose, method and acceptance criteria.
Configuration universe	List variants, options, masses, seats, restraints, batteries, tyres and software states relevant to the objective.
Influencing attributes	Explain which attributes affect the result and how interactions or boundary conditions were assessed.
Selected specimens	Record identities, intended builds, quantity rationale and relationship to ordinary production.
Representation logic	State why each untested configuration is covered, with analysis and validation evidence.
Limits and gaps	Identify unsupported extrapolation, uncertain interactions and additional evidence required.
External acceptance	Record any required authority or technical service agreement and its scope; do not assume general recognition.
Change control	Name approvers and define reassessment triggers for specimen substitution, options or revised requirements.

Retain rejected selection options where they explain the final decision. A common platform name alone shall not establish representative coverage.

Annex E Specimen readiness and evidence custody

Complete before test release and update at every material handover, repair or configuration change. Preserve the actual tested state after destructive events.

Record field	Required entry and evidence
Specimen identity	Enter unique identity, build site, build date, programme, market and coverage plan reference.
As built condition	Record critical parts, serials, revisions, software identifiers, calibration state and measured configuration attributes.
Representativeness	Identify prototype features, hand operations, temporary parts and approved justification for production relevance.
Readiness checks	Confirm method, instrumentation, calibration, conditioning, personnel, safety arrangements and authorised deviations.
Custody trail	Record sender, receiver, time, location, condition, transport exposure and protective measures.
Test evidence	Link execution log, raw data, photographs, video, processing version and signed report.
Failures and changes	Preserve deviations, failed runs, repairs, retests and their effect on validity and coverage.
Final disposition	Record retention, retained components, disposal authority, legal holds and evidence repository location.

A specimen shall not be released with unresolved identity or representativeness. Original results remain part of the record when a later test is performed.

Annex F Dossier and conformity decision checklist

Use at submission and again at the final approval or manufacturer certification decision. Verify the exact package and configuration rather than a programme status summary.

Record field	Required entry and evidence
Decision scope	State market, route, responsible manufacturer, configurations and activity being authorised.
Requirements review	Confirm the verified register, applicability dates and closure of all mandatory evidence gaps.
Technical package	List information documents, drawings, software identity, test reports, deviations and coverage analyses.
Production readiness	Link COP plan, site controls, supplier assurance, traceability and release system verification.
Independent review	Record reviewers, findings, corrections, unresolved conditions and actual signatory authority.
Route specific result	Record the issued authority approval and conditions, or the manufacturer certification basis and authorised decision.
Operational communication	Identify released markets, permitted configurations, labels, documents, restrictions and system updates.
Historical record	Retain submitted versions, delivery proof, queries, final evidence and future change triggers.

Do not record a pending application as an approval. Do not describe manufacturer certification as prior government endorsement of the design.

Annex G Conformity of production control plan

Create one control line for each compliance relevant characteristic or required production verification. The plan shall connect design evidence with actual manufacturing controls.

Record field	Required entry and evidence
Product and process	Enter vehicle family, site, shift coverage, process step and relevant supplier or subcontractor.
Characteristic	State the controlled attribute, its compliance effect and link to the evidence baseline.
Control method	Define equipment, approved instruction, measurement capability, settings and operator competence.
Selection and frequency	Record mandatory sampling conditions and justified internal frequency, population and selection method.
Acceptance rule	Enter exact criterion, treatment of uncertainty where relevant and authority for interpretation.
Failure reaction	Define immediate hold, population tracing, escalation, additional checks and required communication assessment.
Release evidence	Identify records, rework verification, authorised disposition and independent review where needed.
Review triggers	List product, software, supplier, site and process changes; record effectiveness checks and plan revision.

A production screen shall not be claimed to prove a performance requirement that it does not measure. Sampling does not permit release of a known nonconforming vehicle.

Annex H Compliance change impact assessment

Open before a supplier, material, site, process, hardware, software or market change is implemented. Emergency changes retain the same conformity prerequisites.

Record field	Required entry and evidence
Change identity	Record initiator, reason, old and new states, urgency and proposed implementation event.
Affected population	List parts, versions, vehicle variants, markets, sites, inventory and field vehicles.
Evidence comparison	Identify impacted requirements, original assumptions, test coverage and production controls.
Required actions	Define tests, analysis, COP updates, authority notifications, approval changes and certification evidence.
Transition plan	Record first and last affected lots, software targeting, mixed stock controls and traceability rules.
Decision and limits	Name technical, homologation and Quality approvers; state permitted preparatory activities and release holds.
Implementation check	Verify as built configuration, early production results, updated documents and system rules.
Closure record	Link accepted evidence, actual implementation date, residual issues and retained superseded baseline.

A no impact conclusion requires a reasoned assessment. A purchasing substitution or maintenance label shall not bypass technical review.

Annex I Vehicle market release record

Use for a vehicle or a controlled batch whose identical applicability and evidence are demonstrated. Individual identity shall remain retrievable for every batch member.

Record field	Required entry and evidence
Vehicle and destination	Enter vehicle identity, build date, actual configuration, destination and intended transaction.
Conformity basis	Link the relevant approval or certification decision and verified configuration coverage.
Production evidence	Confirm required checks, software identity, calibration, rework closure and traceability completeness.
Current restrictions	Check compliance holds, field actions, transition dates and destination specific limitations.
Document reconciliation	Verify labels, technical declarations, import or registration documents and customer information.
Decision	Record release or hold, the precise activity allowed, authorised role, date and evidence version.
Redirection control	Require a new destination review before changing market allocation or shipment instructions.
Correction history	Preserve discrepancies found after release, vehicle location, containment and revised decision.

An invoice, allocation or customs clearance shall not substitute for this conformity release decision. Hold uncertain configurations until the responsible functions resolve them.

Annex J Compliance nonconformity and field action record

Open for test, production, surveillance or field findings that may affect conformity.
Coordinate operational remedies with IAF-MAN-WCR-001.

Record field	Required entry and evidence
Signal and evidence	Record source, discovery date, actual facts, affected characteristic and preserved original data.
Risk and uncertainty	State potential safety effect, known failures, assumptions and information needed for evaluation.
Population	Identify configurations, parts, software, production intervals, inventory, transit and customer vehicles.
Containment	Record manufacture, shipment, sale or use restrictions as applicable, owner and implementation evidence.
Market obligations	Link verified reporting, authority communication and corrective action requirements with actual deadlines.
Cause and remedy	Document root cause, proposed correction, validation and effect on approval or certification evidence.
Deployment	Track service instructions, parts, customer communication, completion and exceptions through the recall process.
Closure and learning	Record effectiveness, residual cases, authority commitments and changes to prevention controls.

Confidentiality and commercial disputes shall not suppress required safety disclosures.
Preserve the decision trail even when the initial suspicion is later disproved.

Annex K Worked coverage and production example

Illustrative exercise only. These numbers are internal learning data and do not define legal sampling levels or an acceptable compliance failure rate.

Record field	Required entry and evidence
Evidence population	Assume 40 distinct applicable requirement rows for a defined market configuration.
Accepted evidence	There are 36 accepted rows, 3 planned tests and 1 failed requirement. Accepted coverage is 36 divided by 40, or 90 percent.
Release consequence	The 3 planned rows and failed mandatory row remain open. The 90 percent metric does not authorise vehicle market release.
COP scenario	A required check finds a suspect restraint part. Production records initially identify 600 potentially affected vehicles.
Population tracing	Of the 600 vehicles, 420 remain at the plant and 180 have shipped. All 600 remain in the assessment until evidence supports a narrower scope.
Containment decision	Hold affected plant vehicles and locate shipped vehicles. The safety and market teams determine applicable downstream action.
Evidence resolution	Verify actual part lots, installation and correction. A successful retest on one vehicle does not automatically clear the other 599.
Learning question	Ask participants to identify the responsible decision makers, required records and conditions for revising the population or lifting holds.

Record the exercise answers separately from live production systems. Evaluate the logic and traceability of decisions rather than rewarding a rapid return to a green dashboard.

Annex L Regulatory transition and substitution exercise

Run a coordinated exercise involving Homologation, Engineering, Purchasing, Quality, Software, Logistics and Market Compliance. Use fictional vehicles and clearly labelled simulation records.

Record field	Required entry and evidence
Initial situation	A model serves two destinations with different applicability triggers. A requirement change affects one destination before the planned launch.
First inject	A controller shortage prompts Purchasing to propose a substitute with the same connector and commercial function.
Second inject	The substitute uses different software. Existing test evidence covers only the original controller and configuration.
Third inject	Sales requests redirection of 120 stored vehicles while Logistics reports a delay that may cross an applicable transition event.
Required decisions	Identify applicability, evidence gaps, change approval needs, inventory segregation and permitted activities before any release.
Expected records	Produce a change impact record, coverage update, market release hold, transition plan and communication log.
Evaluation	Check decision authority, use of actual trigger events, preservation of uncertainty and prevention of unsupported equivalence claims.
Improvement actions	Assign owners and dates for weak system rules, missing evidence, unclear handovers and competence gaps; verify effectiveness.

The exercise is complete when decisions are defensible and records can be reconstructed. Simulated approvals shall never be entered as live market permissions.