



QUALITY MANUALS | FIRST EDITION

IAF GLOBAL WARRANTY CLAIMS AND RECALL MANAGEMENT MANUAL

Global claims control and
vehicle remedy operations

STABLE RELEASE

Document No. IAF-MAN-WCR-001 | Revision 01

Warranty decisions and dealer financial audits
Global recall logistics and repair verification
Damage assessment and campaign effectiveness

International Automotive Federation

English master text | 15 September 2026

iaf.com

Publication identity and use

IAF Global Warranty Claims and Recall Management Manual

This manual defines how automotive organisations assess warranty and damage claims, control dealer reimbursement and coordinate vehicle recalls across markets. It establishes distinct technical, customer, financial and safety decisions, with traceable repair evidence and review of campaign effectiveness.

Control	Publication record
Document	IAF-MAN-WCR-001 IAF Global Warranty Claims and Recall Management Manual
Edition and revision	First Edition Revision 01 Stable Release
Text issue	15 September 2026 English master text
Document owner	IAF Quality function and the relevant automotive technical committee
Custodian	IAF Secretariat and Document Controller
Institutional authority	Competent authority under IAF-CON-001. Publication does not amend the Constitution.
Operational adoption	Accountable operating director and competent technical leads record the actual approval, markets, scope and effective date.
Classification	Public core manual. Completed customer, technical and financial 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.

Contents

Entries link to their sections and include the cover in page numbering.

1 Purpose scope and required outcomes	7
2 Terms and case classification	8
3 Authority and separation of responsibilities	9
4 Market obligations and local implementation	10
5 Warranty terms and customer information	11
6 Vehicle dealer and entitlement master data	12
7 Claim intake and evidence capture	13
8 Immediate safety screening and escalation	14
9 Diagnostic quality and cause assessment	15
10 Coverage decisions and fair assessment	16
11 Procedure for repair authorisation	17
12 Estimates and cost structure	18
13 Labour operations and time validation	19
14 Parts eligibility pricing and traceability	20
15 Subcontracted work and external expenses	21
16 Goodwill and commercial contributions	22
17 Repeated repairs and unresolved complaints	23
18 Software battery and connected feature claims	24
19 Repair evidence and customer handover	25
20 Procedure for dealer claim submission	26

Contents continued 2

Entries link to their sections and include the cover in page numbering.

21 Automated claim validation and exception control	27
22 Technical and financial adjudication	28
23 Exceptions complaints and independent review	29
24 Payment taxes currency and reconciliation	30
25 Procedure for dealer invoice audit	31
26 Sampling analytics and evidence limits	32
27 Suspected fraud and evidence preservation	33
28 Supplier recovery and prevention of duplicate reimbursement	34
29 Cost forecasting accruals and campaign funding	35
30 Detection of recurring product concerns	36
31 Root cause investigation and technical evidence	37
32 Product risk assessment and decision criteria	38
33 Definition of the affected vehicle population	39
34 Traceability challenge and population reconciliation	40
35 Procedure for recall and campaign authorisation	41
36 Interim restrictions and protective measures	42
37 Global campaign command and market coordination	43
38 Owner notices and customer instructions	44
39 Owner tracing and communication records	45
40 Appointments capacity and customer mobility	46

Contents continued 3

Entries link to their sections and include the cover in page numbering.

41 Remedy parts forecasting and allocation	47
42 Supplier containment and remedy production	48
43 International shipment and customs coordination	49
44 Hazardous returns and reverse logistics	50
45 Dealer readiness before campaign activation	51
46 Procedure for recall part replacement	52
47 Software campaigns and remote remedy completion	53
48 Independent repair verification and quality sampling	54
49 Returned parts examination and final disposition	55
50 Failed remedies and campaign reopening	56
51 Campaign completion metrics and denominator control	57
52 Cross border and difficult to reach vehicles	58
53 Fleet dealer stock and used vehicle interfaces	59
54 Damage assessment and custody evidence	60
55 Insurance liability and recovery coordination	61
56 Public communication and crisis coordination	62
57 Data protection retention and audit history	63
58 Competence assurance and network audit	64
59 Exercises management review and continual improvement	65
60 Document control and IAF manual interfaces	66

Contents continued 4

Entries link to their sections and include the cover in page numbering.

Annex A Operational adoption and authority register	67
Annex B Claim intake and safety screening record	68
Annex C Coverage and authorisation decision worksheet	69
Annex D Estimate and invoice reconciliation sheet	70
Annex E Dealer audit plan and finding record	71
Annex F Worked claim valuation example	72
Annex G Product signal and risk assessment record	73
Annex H Affected population reconciliation record	74
Annex I Campaign authorisation and launch record	75
Annex J Owner communication preparation worksheet	76
Annex K Parts allocation and logistics control record	77
Annex L Dealer campaign readiness checklist	78
Annex M Recall repair and verification traveller	79
Annex N Returned component custody and disposition record	80
Annex O Worked campaign performance example	81
Annex P Damage assessment and cost allocation record	82
Annex Q Global recall tabletop exercise	83
Annex R Campaign closure and effectiveness review	84

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 scope and required outcomes

1.1 This manual governs global automotive warranty administration, damage claim handling and recall operations. It applies to manufacturers, importers, distributors, authorised dealers, repair partners, logistics providers and contracted claims administrators within their adopted responsibilities. It covers vehicles, components, software remedies and supporting customer services across the product lifecycle.

1.2 The required outcome is a supported decision for each claim and an effective remedy for each affected vehicle. Technical assessment, customer entitlement, dealer reimbursement, insurance recovery and recall completion shall remain distinguishable. Paying a dealer invoice does not prove a repair was effective, and a financial dispute shall not suspend urgent safety assessment.

1.3 Each participating organisation shall define its products, markets, contracts, service network and accountable authorities. Global procedures shall be supplemented by controlled market instructions where mandatory duties, warranty terms, taxation, reporting or customer rights differ. This manual supplies no universal warranty duration, recall deadline or financial authorisation amount.

1.4 Apply the requirements to normal cases and exceptional conditions, including recurring failures, missing records, cross-border vehicles, unavailable parts and service interruptions. Retain evidence sufficient to reconstruct what happened, why a decision was made, who authorised it and how the customer and affected vehicle were treated.

2 Terms and case classification

2.1 A warranty claim requests performance or reimbursement under an applicable warranty. A service contract is a separately defined contractual arrangement and shall not be described as identical to a warranty without support from its actual terms. Goodwill is a discretionary commercial contribution and shall not be used to relabel an existing mandatory customer entitlement.

2.2 A damage claim concerns alleged physical loss, deterioration or injury to property and may involve manufacturing, transport, storage, service or an external event. Record the allegation separately from the established cause and liability decision. A photograph showing damage does not establish when it occurred or which party is responsible.

2.3 A recall is a controlled action addressing an identified product issue through the applicable safety, compliance and market decision process. A technical bulletin communicates instructions; it does not automatically constitute a recall or eliminate the need to assess one. A non-safety service campaign shall not be used to conceal a safety-related condition.

2.4 Define case states consistently: received, awaiting evidence, under assessment, authorised, repaired, verified, financially settled and closed. A case may be technically open while an undisputed payment proceeds. Status changes shall have recorded conditions so that an administrative closure cannot silently imply that a safety concern or vehicle remedy has been resolved.

3 Authority and separation of responsibilities

3.1 The accountable director shall appoint owners for warranty policy, claims operations, technical investigation, product safety, recall execution, finance, legal assessment, privacy and customer communication. A delegation register shall state scope, limits, deputies and escalation routes. Committee participation or job title alone shall not establish authority for a particular decision.

3.2 Technical personnel determine the supported fault and appropriate repair. Claims personnel assess applicable coverage and documentation. Finance checks valuation, payment and recovery. The product safety authority determines safety escalation and recall recommendations through the approved process. None of these roles shall substitute its own approval for another required technical or mandatory decision.

3.3 Separate claim creation, consequential exception approval and payment release wherever practicable. A reviewer shall disclose personal or commercial conflicts. Where a small organisation combines roles, an independent competent reviewer shall assess high-risk cases and record the compensating control before the affected payment or release decision.

3.4 Personnel shall be able to report suspected defects, manipulated evidence or unsafe repair pressure without retaliation. A stop or escalation raised in good faith shall be recorded and assessed. Management shall not direct staff to postpone a safety review until a supplier accepts cost responsibility or a quarterly financial target has been achieved.

4 Market obligations and local implementation

4.1 Maintain a market obligations register for every territory in which affected vehicles are sold, imported or serviced. Identify responsible entities, customer rights, defect reporting triggers, notification methods, remedy duties, record retention and applicable time requirements. The competent local adviser shall verify the actual requirements and their current applicability.

4.2 The register shall distinguish the original sales market, current vehicle location, registration jurisdiction and responsible importer. A vehicle exported after sale may create obligations or operational needs in more than one territory. Uncertainty about jurisdiction shall be escalated promptly while necessary customer protection and evidence preservation continue.

4.3 Translate global instructions into controlled local procedures without weakening required protections. Record differences, responsible reviewers and the basis for each adaptation. A global template date shall not be copied into a market notice as though it were a verified legal deadline. Local changes affecting the remedy shall return to the technical authority.

4.4 Review the register when a new market, product, campaign, contractual model or material legal change arises. Preserve the requirement version used for each consequential decision. Internal targets may be shorter than applicable deadlines, but they shall not be described as statutory requirements or used to extend an external obligation.

5 Warranty terms and customer information

5.1 Publish clear warranty terms identifying the warrantor, covered products, start event, duration or usage limits, territorial conditions, exclusions and claim route. Explain the relationship to statutory rights and separately purchased service products. Sales teams shall not promise coverage that the approved terms or mandatory rights do not support.

5.2 Define how ownership transfer, demonstrator use, delayed delivery, replacement parts and authorised software changes affect coverage. Preserve the terms applicable at the relevant transaction date. A later policy revision shall not be applied retrospectively to remove an entitlement without a supported contractual or legal basis.

5.3 Exclusions shall be assessed against the actual facts and applicable rules. A modification, maintenance entry or use pattern shall not automatically justify rejection of every unrelated failure. The reviewer shall identify the relevant term, causal evidence where required and the route through which the customer may challenge the decision.

5.4 Provide accessible copies and explanations in the appropriate language and format. Warranty information shall remain available after the sales account closes or ownership changes. A customer acknowledgement confirms receipt of information; it shall not be treated as a blanket waiver of rights or acceptance of an undisclosed defect.

6 Vehicle dealer and entitlement master data

6.1 Maintain controlled master data for vehicle identity, build and delivery dates, hardware and software configuration, warranty start, mileage or usage records, selling entity and service history. Record the source and confidence of imported data. A changed registration number shall not create a second technical identity for the same vehicle.

6.2 Dealer records shall identify legal entity, authorised locations, permitted work, labour agreements, payment details and relevant tax status. Changes to bank details require independent verification through a trusted channel. A message attached to a claim shall not by itself authorise a new payment destination.

6.3 Configure entitlement rules using approved terms and market instructions. Test boundary cases such as delivery-date corrections, replacement assemblies, ownership transfer and cross-border service. Automated results shall show the rule version and permit authorised review when source data are incomplete or contradictory.

6.4 Correct data through a controlled amendment that retains the previous value, evidence, author and approval. Do not alter an in-service date or mileage merely to make a claim eligible. If a correction changes prior decisions or an affected recall population, identify and reassess those downstream records.

7 Claim intake and evidence capture

7.1 Provide intake routes for customers, dealers, fleets and other authorised reporters. Create a unique case identifier and acknowledge the report through the approved service commitment. Capture the reported symptom in the reporter's own terms before assigning standard codes that might narrow or distort the original concern.

7.2 Record vehicle identity, current location, contact route, dates, usage, relevant conditions and any prior repair. Ask whether there is smoke, unusual heat, loss of braking or steering, unintended movement, injury or another immediate hazard. Intake personnel shall follow approved safety escalation instructions rather than improvise technical reassurance.

7.3 Collect evidence proportionate to the case: diagnostic records, photographs, repair orders, invoices, component identities and relevant telemetry. Preserve original files and metadata where useful. Do not demand unrelated personal information or make access to ordinary complaint handling dependent on consent to marketing or unrestricted vehicle tracking.

7.4 Distinguish missing information from adverse evidence. The case owner shall explain what is needed and why, offer a practical route to provide it and record attempts to obtain it. Where urgent safety concerns exist, incomplete commercial paperwork shall not prevent immediate technical review and protective action.

8 Immediate safety screening and escalation

8.1 Every intake and technical review shall screen for potential safety consequences, including fire, electrical shock, loss of control, restraint failure, structural separation and hazardous fluid release. The screen considers the consequence and credible circumstances, not merely the number of reports or the value of the requested repair.

8.2 When an immediate risk is suspected, the case owner shall contact the designated safety authority and communicate the approved interim instruction. Any stop-use, no-charge, recovery or isolation advice shall be specific to the assessed condition. Do not tell a customer to drive to a dealer when the available evidence indicates that continued movement may be unsafe.

8.3 Preserve the vehicle and failed components where practicable without compromising emergency response. Record the customer account, event timeline and available diagnostics. Personnel shall not ask an untrained person to open a battery, touch exposed electrical equipment or reproduce a dangerous failure to improve evidence quality.

8.4 The safety authority shall record initial assessment, uncertainty, affected scope, protective action and the next decision time. A financial rejection, expired warranty or suspected misuse does not close the safety signal. Transfer to a formal investigation shall preserve the original case linkage and all material evidence.

9 Diagnostic quality and cause assessment

9.1 Diagnosis shall connect the reported concern to observed evidence, possible causes and the tests needed to discriminate between them. Use current product instructions, suitable tools and competent technicians. A diagnostic trouble code identifies a detected condition; it does not automatically prove that the named component caused the customer symptom.

9.2 Capture the vehicle configuration and relevant conditions before clearing codes or replacing parts. Record test results, measurement units, tool identity and limitations. Where a fault is intermittent, use an approved observation plan and preserve the original report rather than substituting a convenient no-fault conclusion.

9.3 Evaluate interactions involving software, calibration, installation, environment, wear and external damage. Separate confirmed facts from hypotheses and explain the causal basis for a repair recommendation. Replacing multiple expensive assemblies without a supported diagnostic route requires technical review and shall remain visible in the claim record.

9.4 Where remote data support the investigation, verify identity, freshness and completeness under IAF-MAN-MRD-001. Where software behaviour is involved, preserve the installed baseline and use IAF-MAN-SDV-001. An inability to reproduce the issue during one workshop visit shall not erase credible evidence of a consequential recurring failure.

10 Coverage decisions and fair assessment

10.1 Assess coverage using the applicable terms, verified vehicle data, failure facts and mandatory customer rights. Record each relevant condition and the supporting evidence. The review shall identify whether the request concerns a warranty remedy, service contract, recall, goodwill contribution or another claim route.

10.2 A rejection shall state the specific reason in understandable language and identify the evidence relied upon. Generic phrases such as customer abuse or outside policy are insufficient when the actual basis can be explained. Where a maintenance omission is relevant, assess its relationship to the failure under the applicable requirements.

10.3 Automated rules may assist consistent processing but shall not become an unreviewable final authority in disputed or consequential cases. Provide a competent human review route. Track overrides and recurring data errors to improve the rules rather than forcing staff to create misleading entries to obtain a fair result.

10.4 A coverage dispute shall remain separate from immediate safety instructions and recall eligibility. The customer shall receive the next step, contact route and applicable review opportunity. Preserve the original decision and any later change, including the reason and authority, so the case history remains intelligible.

11 Procedure for repair authorisation

Use this procedure when work requires prior technical or financial approval. Emergency protection follows the relevant safety instruction and shall not be delayed solely because a normal reimbursement workflow is unavailable.

Step and owner	Required action and retained evidence
1 Claims owner	Confirm case identity, entitlement route, reported concern and current safety status. Identify the approving roles and limits applicable to the proposed work.
2 Technical lead	Review diagnosis, intended repair, product instructions and alternatives. Define required parts, software, measurements and completion tests.
3 Dealer estimator	Prepare an itemised estimate with labour operations, quantities, rates, taxes, sublet work and any customer contribution. Disclose overlap and assumptions.
4 Authorised reviewer	Approve, request evidence or reject the named scope with reasons. Record conditions, validity and any required inspection of removed parts.
5 Repair facility	Obtain approval before a material scope change. Preserve safety controls, customer communication and the actual work record during execution.
6 Quality reviewer	Verify completion evidence and remaining issues before the vehicle is released. Link the authorisation, repair order and later claim without treating estimated cost as actual expense.

An approval number applies only to its recorded scope. It shall not authorise unrelated work, unsafe methods or an unsupported increase in claimed quantities. Retain any emergency exception and its subsequent review.

12 Estimates and cost structure

12.1 Estimates shall identify the causal repair, consequential damage, diagnostic work and optional customer work separately. Use approved part numbers, quantities and labour operations. State whether an amount is estimated, authorised, invoiced or paid so that the same value is not mistaken for several completed financial events.

12.2 Disclose labour rates, parts pricing basis, handling allowances, sublet charges, taxes and deductions. Include customer contributions only when supported by the applicable terms and consent requirements. A recall remedy shall not acquire an unrelated customer charge through a bundled maintenance package.

12.3 Where teardown is needed to establish scope, authorise the diagnostic stage and explain the conditions for further work and reassembly. Record the treatment of costs if coverage is not confirmed. Do not use an open-ended estimate to obtain apparent consent to any later repair or damage charge.

12.4 Reconcile the final invoice against actual authorised work. Variations shall identify the reason, evidence and approval before payment where required. Price changes, currency effects and technical scope changes shall remain distinguishable so reviewers can assess whether the difference reflects a legitimate event or a control failure.

13 Labour operations and time validation

13.1 The labour catalogue shall define each operation, included tasks, permitted combinations and applicable vehicle variants. Published standard time and actual technician attendance are different measures. The reimbursement agreement shall identify which basis applies and how authorised exceptions are assessed.

13.2 Review overlapping operations before authorisation and payment. Access, diagnosis, removal and setup tasks included in a principal operation shall not be claimed again unless the approved rule permits a distinct additional activity. Retain the rationale when unusual damage or configuration genuinely requires extra work.

13.3 Actual-time claims shall retain reliable start, stop and activity evidence appropriate to the task. Concurrent jobs, breaks, waiting for parts and automated programming periods shall be treated according to the approved policy. A timestamp overlap is a review signal, not automatic proof of dishonesty.

13.4 Changes to labour allowances shall be reviewed for technical adequacy and safe execution. Incentives shall not pressure technicians to omit checks or falsify time. Analyse repeated overruns and under-recording to distinguish unrealistic standards, training needs, process constraints and unsupported charging.

14 Parts eligibility pricing and traceability

14.1 Claimed parts shall be compatible with the actual vehicle and approved repair. Record part number, revision, quantity, source and serial or lot identity where required. A superseded part shall not be installed simply because it remains available when the remedy requires an improved design.

14.2 Define the pricing basis and permitted markups through the applicable agreement. Validate quantity, packaging unit and currency. A box containing several components shall not be billed as several boxes, and a kit shall not be claimed together with its included components without a supported reason.

14.3 Removed parts shall be identified and held according to the technical return instruction. Retain their relationship to the vehicle and repair before cleaning, disassembly or destructive examination. Failure to preserve a requested part shall receive a reasoned disposition rather than an automatic assumption that the customer complaint was invalid.

14.4 Core exchanges, remanufactured parts and deposits shall have separate accounting and physical controls. Track core receipt, credit and final disposition. Prevent duplicate recovery through a core credit, supplier reimbursement and full replacement payment for the same economic loss.

15 Subcontracted work and external expenses

15.1 Sublet work shall use an approved provider with competence and equipment appropriate to the task. The repair facility remains responsible for coordinating the vehicle result and retaining evidence. Outsourcing calibration, machining or specialist diagnosis does not remove the need to verify the actual delivered service.

15.2 The authorisation shall define work scope, cost basis, required records and any subcontracting restrictions. Obtain a genuine itemised invoice and evidence of completion. A dealer-created summary shall not replace the underlying provider evidence when that evidence is required to substantiate the charge.

15.3 Towing, rental vehicles, storage and customer travel expenses shall be assessed under the applicable entitlement or approved campaign support arrangement. Record dates, purpose, rate, duration and approval. Avoid charging overlapping mobility services unless the circumstances and policy support the overlap.

15.4 Review related-party providers and unusual pricing for conflicts or unsupported charges. Confirm tax and payment treatment through the responsible finance function. Disputes over a sublet invoice shall be managed without concealing an unfinished safety check or returning an inadequately repaired vehicle to the customer.

16 Goodwill and commercial contributions

16.1 Goodwill decisions shall identify the commercial purpose, eligible circumstances, approving authority and source of funds. Consider relevant facts consistently while allowing a reasoned assessment of individual circumstances. A discretionary contribution shall not be described as the customer's only remedy where an existing warranty or mandatory right applies.

16.2 Record the total repair value, contributions by each party and the amount remaining for the customer. Explain any conditions before the customer commits to work. Consent to a contribution shall not be combined with an undisclosed waiver, confidentiality demand or restriction on reporting a potential safety defect.

16.3 The organisation shall monitor patterns by dealer, product and customer segment for inconsistent treatment or disguised recurrent defects. Repeated goodwill payments for the same technical concern shall feed the product investigation process. A low accounting value shall not prevent escalation where the consequence of failure is significant.

16.4 Changes to an approved contribution require an identifiable decision and communication to the affected parties. Retain the relationship between goodwill, warranty and supplier recovery so the same cost is not funded twice. Budget availability may guide discretionary support but shall not override an established obligation.

17 Repeated repairs and unresolved complaints

17.1 Identify repeat visits by vehicle, symptom, system and prior repair rather than only identical claim codes. A changed description may still concern the same unresolved fault. The case owner shall review the full history and assess whether previous diagnosis, parts replacement or release testing was adequate.

17.2 Assign a technical escalation owner when the defined repeat trigger is reached or a consequential concern recurs. The trigger shall consider severity and customer experience, not only a fixed number of visits. A serious single recurrence may require immediate specialist review and a vehicle hold.

17.3 A no-fault-found result shall describe tests performed, conditions not reproduced and remaining uncertainty. Agree a safe next step, such as further controlled diagnosis or recovery, where appropriate. Do not close a credible complaint solely because a warning disappeared after codes were cleared or the customer could not reproduce it on demand.

17.4 Assess applicable remedies for prolonged loss of use, unsuccessful repair or repeated failure through the competent customer rights process. Avoid inventing a universal number of attempts that applies in every market. Preserve communications and decisions so the customer does not have to restart the entire explanation at each visit.

18 Software battery and connected feature claims

18.1 Software-related claims shall identify the installed executable, calibration, configuration and relevant service versions. Distinguish an installation defect, functional software defect, unavailable cloud service, feature entitlement issue and user misunderstanding. The diagnostic route shall preserve evidence before resetting accounts or replacing controllers.

18.2 Battery claims shall use the approved measurement method and product-specific criteria. Record state, temperature, usage and measurement conditions where these affect interpretation. A dashboard estimate of range or battery health shall not alone establish a capacity defect, and a warranty decision shall not substitute for assessment of an electrical or thermal safety concern.

18.3 Remote or workshop software remedies shall use approved artifacts, compatible versions and controlled installation under IAF-MAN-SDV-001. Record the actual result on the affected vehicle. Download availability, customer notification and server delivery are different states and shall not be reported as completed installation.

18.4 Feature subscriptions and connected service entitlements shall be assessed against their actual terms and disclosed functionality. Avoid promising that a software update will restore a physical fault without evidence. Escalate defects involving control, protection, cybersecurity or privacy to the appropriate specialist process even when the commercial complaint initially appears minor.

19 Repair evidence and customer handover

19.1 The repair order shall record the reported concern, supported cause, work performed, parts and software used, actual measurements and completion tests. Identify the technician and relevant approvals. A generic statement such as checked and repaired shall not support a complex or consequential intervention.

19.2 Verify the remedy against the acceptance criteria defined before work. Include calibration, coding, leak or functional checks and safe road testing where applicable and authorised. Required checks shall not be omitted because the vehicle starts, a diagnostic code clears or the customer is waiting.

19.3 The customer handover shall explain the completed work, remaining restrictions, relevant monitoring and the route for reporting recurrence. Separate optional future maintenance from the remedy already performed. Provide understandable records without exposing security credentials, unrelated personal data or internal allegations that have not been established.

19.4 The vehicle shall remain on hold where a critical result is missing, contradictory or failed. Customer collection or a signed receipt does not validate an unsafe condition. If the customer declines a recommended nonmandatory action, record the specific decision and applicable response without implying a waiver of unrelated rights.

20 Procedure for dealer claim submission

Submit a claim only after the applicable work and evidence gates are complete, except where the approved programme expressly permits an identified advance or staged payment.

Step and owner	Required action and retained evidence
1 Dealer administrator	Link the vehicle, repair order, customer concern, authorisation and entitlement. Confirm dates, usage and the actual repair location.
2 Technical reviewer	Verify the cause and correction narrative, parts identity, software baseline and required test results. Identify open issues or restrictions.
3 Claim preparer	Enter labour, parts, sublet and other costs using the correct operations and units. Reconcile quantities with the workshop and inventory records.
4 Independent check	Review duplicates, overlapping operations, approval limits and required attachments. Correct errors with a retained amendment history.
5 Authorised submitter	Submit through the controlled channel and record acknowledgement. Protect personal information and exclude unnecessary security secrets.
6 Case owner	Track acceptance, requests and settlement. Respond with actual evidence and preserve the original submission alongside revisions and final disposition.

A claim shall not be split into smaller records to evade review limits. A repaired vehicle may still require technical follow-up even after a claim is accepted for payment.

21 Automated claim validation and exception control

21.1 Automated validation shall check required fields, vehicle identity, entitlement, operation compatibility, duplicate indicators, pricing and arithmetic. Each rule shall have an owner, documented purpose and approved revision. Test new rules against representative valid and invalid cases before deployment.

21.2 The system shall distinguish a missing field, a suspected inconsistency and a confirmed ineligible charge. These conditions require different responses. An exception queue shall explain the specific issue and route the case to a competent reviewer rather than return an opaque rejection code that encourages arbitrary resubmission.

21.3 Controls shall identify repeated claims across dealer entities, invoices, dates and campaign codes while preserving legitimate staged work. Similar amounts or descriptions are screening indicators only. A match shall be investigated using the underlying repair and financial evidence before a fraud conclusion or recovery demand is made.

21.4 Monitor rule performance, false rejections and overrides. Preserve the input data and rule version used for each consequential decision. A system outage shall invoke an approved continuity route with later reconciliation; it shall not justify uncontrolled payment files or deletion of the audit trail.

22 Technical and financial adjudication

22.1 Adjudication shall establish which technical facts are supported and which costs are payable under the applicable agreement. Reviewers shall have access to the relevant terms, authorisations and original evidence. Technical uncertainty shall be referred to specialists rather than resolved through a purely financial assumption.

22.2 A partial approval shall identify each accepted, adjusted, rejected or pending line with reasons. Where policy permits, undisputed amounts may proceed while a disputed item is reviewed. The record shall avoid implying that partial payment settles every technical or customer issue associated with the vehicle.

22.3 Reviewers shall consider the reliability and provenance of evidence, including technician notes, diagnostic logs, photographs and supplier findings. A document bearing a signature is not automatically accurate. Conversely, a missing administrative attachment shall be assessed proportionately when other reliable evidence establishes that work occurred.

22.4 The decision shall include authority, date, applicable rule and the available challenge route. Retain communication to the submitting dealer and customer where relevant. Track inconsistent adjudications so that similar facts receive a supported and explainable treatment across locations.

23 Exceptions complaints and independent review

23.1 Provide a defined route for dealers and customers to challenge a decision, supply additional evidence and raise service concerns. Explain submission requirements and applicable time arrangements in the relevant market procedure. An internal review process shall not be represented as removing access to other rights or competent external remedies.

23.2 A reviewer of a contested consequential decision shall be sufficiently independent of the original decision and free from relevant conflicts. The review shall consider the original record and new evidence. It shall not begin from an assumption that either the dealer or customer acted improperly.

23.3 Record whether the result confirms, varies or reverses the original decision and explain why. Preserve both decisions and any resulting payment, repair or population change. A favourable review shall trigger correction of a defective rule or training issue where the problem may affect other cases.

23.4 Apply the IAF Appeals and Complaints Policy and Conflict of Interest Policy where their scope is engaged. Protected reports of manipulation or safety suppression shall follow the applicable reporting arrangements. Staff shall not discourage a complaint to improve customer satisfaction metrics or reduce the apparent number of disputed claims.

24 Payment taxes currency and reconciliation

24.1 Payment shall be based on an approved payable amount, a verified recipient and the applicable settlement terms. Separate payment preparation from release where practicable. Confirm bank changes independently and restrict access to payment files. The claim record shall retain the payment reference without exposing unnecessary banking information.

24.2 The responsible finance function shall determine applicable tax treatment, invoice requirements and recoverability for the actual transaction. Different markets may treat warranty reimbursement, goodwill, parts supply and labour differently. This manual provides a control process and shall not be used as a universal tax opinion.

24.3 Foreign currency claims shall identify transaction currency, settlement currency, approved exchange-rate source and conversion date. Keep rounding and exchange differences visible. A currency conversion shall not be used to hide an unauthorised repair charge or make a payment appear to match an estimate that used a different basis.

24.4 Reconcile approved claims, payment runs, bank results, credit notes and ledger balances. Investigate failed, duplicate or unallocated payments and preserve the correction trail. Financial settlement shall not automatically change the vehicle remedy status or remove an unresolved safety or quality action.

25 Procedure for dealer invoice audit

Audit the relationship between the claimed amount and actual authorised work. Select evidence independently and give the dealer a fair opportunity to explain discrepancies.

Step and owner	Required action and retained evidence
1 Audit lead	Define scope, period, population, criteria and independence. Secure a complete claim extract and reconcile it to payment and dealer records.
2 Analyst	Select representative and risk-focused items separately. Record selection logic, exclusions and the limits on generalising from the sample.
3 Auditor	Trace each selected claim to authorisation, repair evidence, parts movement, labour basis, sublet invoice and payment. Recalculate amounts.
4 Technical specialist	Assess whether the claimed operation and part were appropriate and completed. Use actual product evidence rather than invoice wording alone.
5 Review panel	Discuss findings and additional evidence. Distinguish error, unsupported cost, control weakness and suspected misconduct; approve reasoned dispositions.
6 Finance and Quality	Implement supported adjustments and corrective actions. Verify effectiveness and retain the dealer response, appeal route and final report.

An audit finding shall identify the exact criterion, condition and evidence. Extrapolated recovery requires a justified method and applicable authority; a few selected suspicious cases do not automatically establish the error rate of all claims.

26 Sampling analytics and evidence limits

26.1 Define the audit population before selecting records, including period, dealers, claim types, currencies and payment states. Reconcile population totals with source systems. Missing rejected or reversed claims can distort conclusions about control effectiveness and shall be disclosed.

26.2 Use random or otherwise representative selection when estimating a population characteristic, and separate targeted selection for known risks. Document sample size rationale, stratification and confidence limitations. Risk-focused samples identify issues but generally cannot be treated as an unbiased estimate of all dealer behaviour.

26.3 Analytics may examine duplicate parts, unusual labour combinations, abnormal frequency, repeated maximum amounts or improbable timing. Compare appropriate peer groups and vehicle mix. A dealer specialising in complex repairs may have a different legitimate cost profile from a general service outlet.

26.4 Review flags through competent investigation and retain both confirmed and cleared cases. Do not publish a dealer misconduct ranking based solely on anomaly scores. Before recovering money across a wider population, establish the contractual and legal basis, statistical method, uncertainty and available dispute process.

27 Suspected fraud and evidence preservation

27.1 Suspected misconduct shall be handled through a restricted, impartial investigation. Indicators may include altered invoices, fictitious repairs, reused evidence, diverted parts or collusion, but an indicator is not a finding. The investigator shall record allegations separately from established facts and avoid prejudicial language.

27.2 Preserve original records, access logs and relevant physical evidence through controlled custody. Limit access to those with a legitimate role and maintain confidentiality without preventing protected reporting. Do not alter the source system or confront a person in a way that destroys evidence or compromises a fair process.

27.3 Protect customers and vehicles while investigating. A suspected dealer billing issue does not prove the underlying vehicle complaint is false. Necessary safety action and authorised remedy shall continue through an appropriate alternative route where a provider's access or payment privileges are restricted.

27.4 Any suspension, recovery, referral or disciplinary action shall follow the applicable authority and process. Record the supported conclusion, response, corrective action and review rights. Close unfounded allegations clearly and correct inaccurate downstream records rather than leaving a permanent unqualified fraud label.

28 Supplier recovery and prevention of duplicate reimbursement

28.1 Supplier recovery shall identify the contractual basis, affected component, confirmed cause, recoverable cost categories and supporting evidence. A supplier's cost acceptance is a financial event; it does not determine whether the customer needs a remedy or whether a safety report is required.

28.2 Maintain a cost ledger linking dealer payment, customer reimbursement, insurer contribution, core credit and supplier recovery to the same underlying event. Define permitted allocation where several parties contribute. Recoveries shall not exceed the supported recoverable loss through duplicated claims against different parties.

28.3 Provide suppliers the agreed opportunity to inspect evidence and respond without delaying urgent protective action. Preserve representative failed parts and test records where feasible. Destructive testing shall have authority and custody controls so later technical review is not frustrated by undocumented examination.

28.4 Disputed recoveries shall be recorded separately from accepted amounts and assessed by finance and the responsible contract owner. Feed confirmed supplier causes into corrective action and verification. A commercial settlement without admission shall not be described as technical proof of a cause that remains uncertain.

29 Cost forecasting accruals and campaign funding

29.1 Finance shall maintain an approved method for estimating expected warranty and campaign costs using available evidence, accounting requirements and responsible professional judgement. Separate observed claims, committed costs, paid amounts and estimates of future obligations. This manual does not prescribe an accounting recognition rule for every entity.

29.2 Forecast assumptions shall identify affected population, expected remedy mix, participation, labour, parts, logistics, mobility support and uncertainty. Document the source and sensitivity of major assumptions. A convenient low participation assumption shall not be used to reduce the operational obligation to reach affected owners.

29.3 Reconcile forecasts with actual experience and explain changes in population, remedy scope, unit cost or completion. Keep estimate revisions distinct from operational results. Spending below budget is not evidence of success if owners remain uncontacted or repairs are incomplete.

29.4 Establish funding and authority sufficient for urgent containment and approved remedies. Supplier recovery, insurance proceeds or future budget approval shall not be prerequisites for necessary safety action. Management shall review resource constraints and authorise a response that addresses the actual risk and obligations.

30 Detection of recurring product concerns

30.1 Combine warranty claims, service complaints, field reports, returned parts, remote diagnostic signals and manufacturing findings into a controlled surveillance process. Preserve source quality and avoid counting the same event several times when it appears through different channels. A single severe event may justify investigation before a statistical trend emerges.

30.2 Define rates using an appropriate exposure basis, such as affected vehicles in service, usage or time at risk. Compare equivalent cohorts and disclose immature observation periods. Raw claim counts can rise because sales increased, while low counts can conceal under-reporting or vehicles that have not yet accumulated enough use.

30.3 Screen by symptom, component, build interval, software baseline, supplier lot, climate and operating conditions where relevant. Investigate clusters and changes in severity. An automated alert threshold shall support review, not establish a universal minimum number of failures required before protective action.

30.4 Assign each significant signal an owner, assessment date, evidence plan and escalation status. Preserve signals that are not pursued with the reason and reopening criteria. Financial rejection of individual claims shall not remove their technical information from the surveillance population.

31 Root cause investigation and technical evidence

31.1 The investigation plan shall identify the observed failure, plausible mechanisms, affected configuration and evidence needed to distinguish causes. Assign competent owners for product engineering, manufacturing, software, supplier and field analysis. Preserve alternative explanations until the evidence supports their disposition.

31.2 Failed parts shall be examined under a controlled sequence that protects relevant traces. Record incoming condition, custody, preparation, tests and changes caused by examination. Compare with suitable reference parts and representative operating conditions. A laboratory reproduction shall be interpreted within its actual setup and limitations.

31.3 Assess why the defect occurred, why existing controls did not prevent or detect it and whether the mechanism may affect other products. Include design assumptions, process variation, software interactions, ageing and service installation where relevant. Avoid stopping at operator error without examining the conditions and controls that made the error possible.

31.4 The technical conclusion shall state confirmed findings, unresolved uncertainty, affected hypotheses and proposed corrective action. Lack of a complete root cause shall not prevent interim protection when a credible serious risk exists. Review effectiveness after implementation using field and repair evidence rather than only successful laboratory results.

32 Product risk assessment and decision criteria

32.1 Risk assessment shall consider potential harm, failure behaviour, exposure, detectability, controllability and relevant operating conditions. Assess vulnerable users and foreseeable misuse where relevant to the product. Financial severity and safety severity shall remain separate; a low-cost part can create a high-consequence failure.

32.2 Use the best available evidence and identify uncertainty explicitly. Sparse reports, missing failed parts or inconsistent diagnostics may limit precision without eliminating concern. The decision record shall explain assumptions and why the selected protective action is appropriate while further information is obtained.

32.3 Consider common-cause failures and interactions across systems, including software that masks symptoms or a repair that changes another protection function. Review whether warnings are understandable and timely enough for the intended user. A dashboard message shall not be assumed to make an otherwise unacceptable failure safe.

32.4 The designated authority shall approve the assessment and its review triggers. Reassess when severity changes, new markets or variants are implicated, the remedy underperforms or field evidence contradicts assumptions. Do not use a numerical score to override a mandatory reporting trigger or a clearly consequential condition.

33 Definition of the affected vehicle population

33.1 Define the affected population through product and process evidence: vehicle identifiers, build dates, component serials or lots, software versions, supplier routes and service replacements. Record inclusion and exclusion rules in a controlled population specification. A model name or broad sales period alone may be insufficient.

33.2 Account for components installed after original manufacture and vehicles transferred across markets. Include warehouse, dealer, demonstrator, fleet, customer and returned inventory where the defect can be present. A component campaign may require tracing spare parts separately from completed vehicles.

33.3 Test the population logic against known affected and known unaffected examples. Investigate gaps between manufacturing, service and sales data. Where reliable exclusion cannot be established, the authority shall determine a suitably protective scope and document uncertainty rather than assume untraceable units are unaffected.

33.4 Freeze each issued population version and reconcile subsequent additions, corrections and removals. Removal requires evidence and authorised review. Keep original and current denominators visible so completion performance cannot be improved merely by deleting difficult-to-contact vehicles.

34 Traceability challenge and population reconciliation

34.1 Before campaign launch, perform a traceability challenge from a selected failure to related component lots and vehicle identities, then from selected vehicles back to their installed components. Include service replacements and repaired or reworked manufacturing units. Record where the chain depends on an assumption.

34.2 Reconcile counts across production, shipment, registration, dealer stock and service systems using defined cut-off times. Explain duplicates, cancelled builds, exports, scrapped units and missing records. A reconciled total does not establish correct membership if individual vehicle identities are mismatched.

34.3 Validate data transformations, joins and deduplication rules independently. Preserve source extracts and logic versions so the population can be reproduced. A spreadsheet filter or manual list edit that changes eligibility shall receive the same review as a coded rule change.

34.4 The traceability owner shall report unresolved gaps, their potential effect and the proposed containment. The campaign authority shall decide whether broader notification or additional inspection is required. Completion reporting shall retain a transparent bridge from the initial population to each later version.

35 Procedure for recall and campaign authorisation

The decision shall integrate technical evidence, market obligations and operational readiness. Commercial recovery and budget negotiations shall not postpone required reporting or protective action.

Step and owner	Required action and retained evidence
1 Safety authority	Review the signal, risk assessment, known events and uncertainty. Determine immediate protective measures and the required market escalation.
2 Technical owner	Define the defect mechanism, affected configurations, proposed remedy and evidence still needed. Identify limits of any interim action.
3 Market leads	Verify responsible entities, reporting and notification requirements, local contacts and applicable time commitments. Record country-specific obligations.
4 Campaign manager	Establish population control, parts and service capacity, customer support, logistics and completion records. Identify constraints requiring interim arrangements.
5 Authorised decision group	Approve the classification, scope, remedy strategy and responsibilities. Record the rationale, actual decision time and unresolved actions.
6 Document controller	Issue the controlled campaign package and market instructions. Track acknowledgements, reporting evidence and subsequent changes without replacing the original decision record.

A non-safety campaign designation requires a supported assessment. It shall not be selected merely to avoid a recall label, cost, notification or scrutiny. Reclassification shall preserve the original chronology.

36 Interim restrictions and protective measures

36.1 Where a final remedy is unavailable, define interim measures through competent technical and safety assessment. Measures may include specific use restrictions, recovery, charging restrictions, parking arrangements or inspection, depending on the actual defect. This manual does not prescribe a universal instruction for every battery, fire or control concern.

36.2 Interim communication shall explain what the owner should do, why the action matters, how to obtain support and how updates will be provided. Avoid vague reassurance and avoid instructions that require untrained people to perform hazardous work. Translate and test the clarity of consequential messages.

36.3 The campaign manager shall ensure practical support for the instruction, including transport or alternative mobility where applicable. An instruction to stop using a vehicle is incomplete operationally if the organisation has no way to receive the customer's request and coordinate the required next step.

36.4 Track the issue, delivery and acknowledgement of restrictions separately from remedy completion. Interim software or inspections shall not be counted as a final remedy unless the approved campaign explicitly establishes that outcome. Review restrictions when new evidence or the permanent remedy changes the basis for the instruction.

37 Global campaign command and market coordination

37.1 Create a campaign command structure with a global owner and named market leads. Define decision rights, meeting cadence, escalation, language support and a common evidence repository. Use a single campaign identity with controlled local identifiers where necessary to preserve reconciliation across systems.

37.2 The global plan shall coordinate product evidence and remedy configuration while market leads manage verified local obligations and operational conditions. Record who may change notices, parts allocation, repair instructions or completion criteria. Local improvisation affecting technical safety requires return to the responsible engineering authority.

37.3 Maintain a decision log that distinguishes proposed, approved and implemented actions. Record timestamps and time zones for consequential events. A meeting presentation shall not serve as the sole authoritative record of a changed population or repair restriction.

37.4 Escalate resource shortages, failed remedies, missed obligations and contradictory market reports through a defined route. The command team shall provide deputies and continuity arrangements for time-zone and staffing gaps. Closure of one market shall not automatically close outstanding obligations or affected vehicles in another.

38 Owner notices and customer instructions

38.1 Notices shall identify the affected product, nature of the concern, potential consequence, required action, remedy availability and a trusted contact route. Describe known facts accurately and distinguish interim measures from the final remedy. Avoid minimising a material risk through purely promotional or reassuring language.

38.2 The market lead shall verify required recipients, channels, language, timing and content before issue. Use approved translations and review consequential instructions for practical comprehension. Digital channels may supplement other required methods, but a convenient email campaign shall not replace a mandatory notification route without a supported basis.

38.3 Provide clear information about cost treatment, appointment arrangements, parts availability and mobility support where applicable. Do not bundle the remedy with an unrelated sales offer or make it conditional on paid maintenance. Owners shall be able to authenticate the notice without disclosing passwords or payment credentials to an unsolicited contact.

38.4 Retain issued versions, recipient logic, dispatch evidence, returned communications and corrections. A sent message is not proof that the owner received or understood it. Material changes in remedy or risk shall trigger a reviewed update plan rather than a silent website edit.

39 Owner tracing and communication records

39.1 Use authorised data sources to identify current owners, operators, fleets and relevant intermediaries. Record provenance, permitted use and update date. Separate vehicle identity from contact identity so a change in ownership can be handled without losing the technical campaign history.

39.2 Reconcile returned mail, failed digital delivery, disconnected numbers and reported ownership changes. Define repeated contact and escalation arrangements appropriate to risk and market requirements. Do not remove an affected vehicle from the population merely because the first contact attempt failed.

39.3 Protect contact and location data through role-based access and proportionate retention. Campaign communication shall use the appropriate legal basis and shall not depend on optional marketing consent. Where data rights or access restrictions create uncertainty, the privacy and market leads shall determine a lawful operational route.

39.4 Record communication outcomes using controlled categories such as delivered, returned, contacted, appointment agreed, declined or ownership unresolved. A declined appointment does not necessarily discharge the organisation's obligations or demonstrate that the vehicle is safe. Preserve the next action and responsible owner.

40 Appointments capacity and customer mobility

40.1 Capacity planning shall combine affected population, expected response, repair time, technician competence, bay requirements, parts and geographic access. Model peak demand and constraints rather than relying only on average weekly throughput. Include time for diagnosis, calibration, documentation and unsuccessful first attempts.

40.2 Appointment systems shall show remedy readiness and avoid booking work that cannot be completed safely with available resources. Where parts are delayed, communicate a realistic status and interim support. Do not mark an owner as nonresponsive when the network could not offer a practical appointment.

40.3 Define mobility support, collection, delivery or recovery arrangements according to the campaign and market obligations. Prioritise based on assessed risk and access needs using a documented rule. Commercial customer value shall not displace a more urgent safety case.

40.4 Monitor waiting time, cancellations, no-shows and incomplete visits with reasons. Separate customer choice from network failure. Escalate backlogs that undermine the protective plan and adjust capacity, logistics or communication while preserving the approved remedy and quality checks.

41 Remedy parts forecasting and allocation

41.1 Forecast remedy demand using the controlled affected population, repair mix, expected participation and service capacity. Identify components required for every repair and those needed only after inspection. Keep assumptions and uncertainty visible and update forecasts with actual results.

41.2 Allocate constrained parts using a documented rule that considers risk, vehicle immobilisation, geographic coverage and appointment readiness. Track allocations, shipments, receipts and installed quantities. Prevent duplicate reservations for the same vehicle from distorting availability across dealers.

41.3 Remedy kits shall have controlled identity, contents, revision and packaging. Verify that instructions, software or special tools align with the kit version. A component that looks interchangeable shall not be substituted without engineering approval and a traceable change to the remedy configuration.

41.4 Reconcile inventory at central, regional and dealer locations. Investigate missing, damaged or diverted remedy stock and manage excess returns. Completion reporting shall rely on verified installation, not parts shipped or allocated, and the financial record shall distinguish consumed parts from inventory still held.

42 Supplier containment and remedy production

42.1 Suppliers shall receive the controlled defect and remedy requirements, including affected lots, containment boundaries and change restrictions. Segregate suspect inventory and identify material already shipped. A promise of improved inspection is insufficient without a defined method, competent execution and retained results.

42.2 The corrective design or process shall be verified for the actual failure mechanism and assessed for new risks. Confirm material, tooling, software, measurement and production changes. An urgent campaign does not justify uncontrolled substitution or release of an unverified replacement component.

42.3 Assess ramp capacity and quality under representative production conditions. Track nonconformities, rework, traceability and delivery reliability. Additional inspection shall have a defined purpose, effectiveness check and exit condition rather than becoming an indefinite substitute for process correction.

42.4 Link each remedy lot to production evidence and installation records where required. If a replacement lot is later found suspect, the organisation shall be able to identify vehicles already repaired with it. Supplier recovery negotiations shall remain separate from technical acceptance and customer protection.

43 International shipment and customs coordination

43.1 Plan international movements using the actual item classification, condition, destination and permitted transport route. Identify exporter, importer, consignee and responsible logistics provider. Verify documentation and customs requirements through competent local specialists rather than copying a declaration from an unrelated shipment.

43.2 Distinguish new remedy parts, removed defective parts, samples for analysis and waste. Their legal and transport treatment may differ. A warranty label does not automatically create a customs exemption or permit movement of hazardous or restricted material.

43.3 Protect identification and chain of custody through packing lists, lot records, seals where appropriate and receipt reconciliation. Define temperature, moisture, shock or electrostatic controls where product requirements demand them. Expedite shipments without removing necessary packaging, inspection or transport safeguards.

43.4 Monitor border delays, loss, damage and delivery exceptions against campaign needs. Escalate constraints that leave vehicles immobilised or compromise required actions. The campaign record shall retain shipment and receipt evidence while the vehicle record separately establishes whether a part was actually installed and verified.

44 Hazardous returns and reverse logistics

44.1 Assess removed components before transport, including batteries, pyrotechnic devices, pressurised items, contaminated parts and damaged electrical equipment. Competent specialists shall determine classification, packaging, storage and permitted carriage for the actual condition. A routine parts-return label shall not be used for a damaged hazardous assembly.

44.2 Separate evidence preservation from shipping readiness. Photograph and identify the part where safe, record its condition and retain necessary incident information. Do not energise, open, clean or dismantle a suspect battery merely to satisfy an ordinary warranty return checklist.

44.3 The logistics plan shall identify approved carriers, receiving capability, emergency contacts and rejection conditions. A carrier or laboratory unable to receive the material safely shall be resolved before dispatch. Cross-border restrictions may require local examination or disposition through a separately authorised route.

44.4 Retain custody transfers and final disposition. Use IAF-MAN-IRB-001 for relevant battery incident and quarantine interfaces and the applicable packaging and logistics manuals for ordinary controls. Financial core-credit deadlines shall not pressure personnel to dispatch an unsafe or improperly classified return.

45 Dealer readiness before campaign activation

45.1 Each repair location shall demonstrate readiness for its assigned campaign scope. Verify competent personnel, current instructions, tools, diagnostic access, parts, work space and required safety controls. A dealer's general authorisation does not automatically qualify every site for a specialised battery, structural or software remedy.

45.2 Validate the repair process through an appropriate controlled trial and review actual timing, access, measurement and completion evidence. Identify steps that are ambiguous or prone to error. Engineering shall resolve material instruction defects before broad network deployment.

45.3 Test campaign eligibility checks, claim coding, parts traceability and hold enforcement in the dealer system. Confirm that a vehicle cannot be marked complete solely because an appointment or invoice exists. Provide a controlled route for failed installation, unavailable tools and contradictory diagnostic results.

45.4 Record readiness approval, permitted activities, limitations and review triggers. Suspend the affected activity when a critical tool, competence or protection becomes unavailable. The network manager shall arrange an alternative capable location or support so that suspension does not abandon affected customers.

46 Procedure for recall part replacement

Execute the current campaign instruction for the identified vehicle. The following gates govern identity, evidence and release; they do not replace the product-specific repair method or safety precautions.

Step and owner	Required action and retained evidence
1 Service adviser	Verify vehicle identity, campaign eligibility, owner contact and current restrictions. Confirm that the appointment has the required parts and capable personnel.
2 Technician	Record the installed component and relevant diagnostics. Establish the approved safe vehicle state and inspect for conditions that change the repair scope.
3 Repair technician	Install the authorised remedy using current instructions and controlled tools. Record part and lot identity, actual work and any approved deviation.
4 Verification technician	Perform required measurements, calibration, coding and functional checks. Preserve failed results and repeat history. Hold the vehicle if a mandatory criterion is unmet.
5 Parts custodian	Identify and secure removed material for the instructed return or disposal route. Reconcile the replacement and removed part to the actual vehicle.
6 Release reviewer	Confirm all completion evidence, update campaign status and explain the work to the customer. Retain restrictions and further actions where the authorised outcome is incomplete.

A customer signature or dealer claim submission shall not replace technical verification. If an unexpected condition makes the instruction unsuitable, stop the affected work and obtain an authorised technical disposition.

47 Software campaigns and remote remedy completion

47.1 Software campaigns shall identify the approved vehicle population, target baseline, compatibility, installation preconditions and verification criteria. Distinguish server publication, download, installation, activation and confirmed functional result. Only the campaign-defined completed outcome may count as a remedy.

47.2 Use IAF-MAN-SDV-001 for trusted artifacts, controlled programming, multi-controller compatibility and recovery. A remote installation shall not proceed solely because a vehicle is online. The process shall establish the required vehicle state and provide a safe response to interrupted power or communication.

47.3 Track vehicles that are offline, ineligible for remote installation, interrupted, failed or awaiting confirmation. Provide a capable workshop or mobile route where authorised. Unknown telemetry shall not be interpreted as success, and an owner declining an update shall remain visible under the appropriate campaign status.

47.4 Assess whether the software action corrects the defect or only reduces risk temporarily. A temporary monitor or restriction shall not be represented as a permanent physical repair without supporting evidence. When the remedy changes, preserve earlier installation histories and identify vehicles requiring further action.

48 Independent repair verification and quality sampling

48.1 Define vehicle-specific completion checks and any additional campaign quality sampling before launch. Consequential repairs may require independent review of critical steps or results. The verification plan shall specify competence, evidence and action when the work cannot be confirmed.

48.2 Sampling shall examine installation quality, part identity, software configuration and customer symptom resolution as relevant. Select cases across sites, technicians, remedy lots and operating conditions. A sample of only easy repairs or highly experienced technicians shall not support a claim about the whole network.

48.3 A failed sample shall trigger containment proportional to the possible scope and consequence. Review whether related vehicles need reinspection, rework or renewed communication. Do not average a safety-related failure into an acceptable overall pass percentage.

48.4 Retain the original repair evidence and the independent result. Where they disagree, investigate the measurement method, instruction, configuration and actual vehicle condition. Update training or the remedy process only through controlled review and verify that the change addresses the identified problem.

49 Returned parts examination and final disposition

49.1 The return plan shall define which parts are retained, sampled, returned or disposed of and why. Link each item to its vehicle, campaign, repair date and condition. Preserve enough representative evidence for investigation while respecting safe storage and applicable retention requirements.

49.2 At receipt, reconcile identity, quantity, packaging condition and custody. Photograph relevant damage before unpacking where safe. Record contamination, missing components or alterations that may affect interpretation. An incomplete return shall not be silently substituted with another part of the same type.

49.3 Examination shall use an approved plan and competent personnel. Record each destructive or irreversible step and retain findings with the original case. Share necessary technical results with the investigation and supplier teams through controlled access, while keeping unsupported liability conclusions separate.

49.4 Dispose of material only through the authorised route after evidence and hold requirements are satisfied. Prevent unsafe parts from re-entering normal supply or resale. Retain destruction, recycling or other disposition evidence and reconcile any associated core credits or inventory adjustments.

50 Failed remedies and campaign reopening

50.1 Monitor failures after remedy by vehicle, symptom, replacement lot, software version and repair site. Distinguish recurrence of the original defect from a new repair-induced issue or an unrelated failure. All three may require action, but their technical and population implications differ.

50.2 A credible consequential recurrence shall return to the safety and technical authorities promptly. Review whether the remedy was correctly installed, whether instructions were adequate and whether the original corrective design was effective. Do not assume every post-repair failure is a dealer workmanship problem.

50.3 Where the remedy is ineffective or introduces unacceptable risk, contain affected stock and vehicles and reassess the campaign. Determine whether earlier completion statuses must be revised and whether owners require new instructions. Preserve prior reports so the history of the failed remedy remains visible.

50.4 Reopening shall identify its scope, revised action, approvals, communication and reporting implications. Financial closure or supplier settlement shall not prevent a technical campaign from reopening. Verify the revised remedy under representative conditions and monitor its field effectiveness before declaring the issue controlled.

51 Campaign completion metrics and denominator control

51.1 Define completion as the approved remedy outcome supported by vehicle-specific evidence. Maintain separate counts for affected, notified, contacted, scheduled, inspected, remedied, failed, deferred and unknown vehicles. A vehicle can appear in several process stages over time, but the current status and cumulative events shall be clearly distinguished.

51.2 Report the population version and cut-off time with every rate. For example, 7,600 verified remedies among 10,000 affected vehicles gives a completion rate of 76%. If 500 additional affected vehicles are confirmed, the same 7,600 remedies represent approximately 72.38% of 10,500; the change shall be explained rather than concealed.

51.3 Define the treatment of scrapped, exported, stolen, inaccessible or duplicated records according to the applicable requirements and evidence. Show exclusions separately with reasons and approvals. Operational reachability and legal reporting denominators may differ; neither shall be substituted silently for the other.

51.4 Review time to remedy, repeat visits, unsuccessful repairs, geographic gaps and customer burden alongside the aggregate rate. A high percentage does not close unresolved high-risk vehicles or mandatory obligations. Management shall act on the remaining exposure and effectiveness evidence, not only the headline completion figure.

52 Cross border and difficult to reach vehicles

52.1 Establish a route for vehicles outside their original market, including temporary travel, private import and permanent export. Verify actual identity and configuration before assigning a remedy. A vehicle absent from one public or local lookup tool shall not automatically be declared unaffected.

52.2 Coordinate responsible manufacturers, importers and service networks to provide accurate instructions and practical access. Record differences in parts, software or market configuration. Do not install a remedy intended for another variant without engineering confirmation merely because the original market is difficult to contact.

52.3 Use proportionate tracing and outreach for remote areas, inactive accounts and changed ownership. Consider accessible service options and language needs. Failed contact attempts shall remain visible with a next action rather than being reclassified as completed or out of scope.

52.4 Where physical access remains unavailable, record the assessed risk, communication attempts, restrictions and continuing responsibilities. Escalate unresolved cases through the applicable market process. A customer's nonresponse shall not be treated as technical proof that the defect is harmless or the vehicle no longer exists.

53 Fleet dealer stock and used vehicle interfaces

53.1 Campaign controls shall include unsold dealer stock, demonstrators, rental and company fleets and vehicles awaiting transfer or resale. Assign responsibility for checking eligibility at relevant custody changes. A stop-sale or stop-delivery instruction shall be enforced through both physical controls and the order system where applicable.

53.2 Fleet arrangements shall identify who schedules work, informs drivers, receives notices and confirms completion for individual vehicles. A fleet-level acknowledgement shall not replace vehicle-level remedy records. Coordinate downtime without allowing operational convenience to override a required restriction.

53.3 For used vehicles, reconcile historical completion with current configuration and later replacement parts. A prior repair record may be insufficient if the affected component was subsequently reinstalled or replaced with another suspect unit. Preserve evidence and obtain a supported technical decision.

53.4 Integrate IAF-MAN-DCS-001 for dealer sales and delivery and IAF-MAN-ASI-001 for spare parts inventory. Relevant campaign status shall be communicated accurately at handover. A sales disclaimer shall not be used to bypass a prohibited delivery or transfer the organisation's mandatory remedy duties to the buyer.

54 Damage assessment and custody evidence

54.1 Damage assessment shall document the vehicle's condition, location, custody and reported event without assuming liability. Capture photographs with useful scale and context, relevant measurements, prior condition records and witness accounts where available. Preserve originals and distinguish observed damage from estimates or inferred hidden damage.

54.2 Classify the affected systems and determine whether movement, charging, lifting or further use is safe. Cosmetic damage can coexist with structural, battery, restraint or sensor concerns. A valuation inspection shall not be used as a substitute for the specialist safety assessment required by the actual condition.

54.3 Trace custody through manufacturing, transport, storage, dealer handling, test drives, service and delivery. Record exceptions at each transfer and investigate missing evidence. A signature acknowledging receipt shall be interpreted according to its actual scope and shall not automatically establish that hidden damage was absent.

54.4 The repair or replacement proposal shall identify technical feasibility, required methods, residual limitations and customer disclosure. Keep valuation, repair acceptance and liability decisions distinct. Do not conceal a consequential repair through cosmetic refinishing or a changed description on the final invoice.

55 Insurance liability and recovery coordination

55.1 Assign an owner for coordination with insurers and responsible contractual parties when a damage event may involve coverage or liability. Record notice requirements and evidence preservation duties applicable to the actual arrangement. This manual does not determine insurance coverage or legal liability for a particular event.

55.2 Provide accurate factual information and distinguish allegations, technical findings and professional opinions. Do not make unsupported admissions or accusations. Equally, a concern about liability shall not justify deleting evidence, discouraging a safety report or withholding necessary hazard information from those protecting people.

55.3 Track deductibles, contributions, recoveries and customer reimbursements against the same event ledger. Prevent duplicate compensation for the same cost while ensuring that eligible distinct losses are not improperly combined or omitted. Finance shall reconcile settlements with prior warranty or campaign payments.

55.4 A settlement shall record its scope and shall not be described as resolving technical uncertainty beyond the evidence. Preserve ongoing product investigation and remedy actions where needed. Any release, consent or waiver shall be handled through the competent process and shall not silently remove unrelated customer rights.

56 Public communication and crisis coordination

56.1 Appoint authorised spokespeople and maintain a verified fact record for consequential campaigns or incidents. Communication shall distinguish confirmed facts, current uncertainty, protective instructions and planned next steps. Avoid speculation about cause, blame or the number of affected vehicles before the relevant evidence is reconciled.

56.2 Customer-facing teams shall receive consistent approved instructions and a route for questions they cannot answer. Record material changes and withdraw obsolete scripts. Staff shall not minimise a serious concern to reduce call duration, retain a sale or prevent a complaint from being recorded.

56.3 Monitor whether public messages and direct notices remain consistent across websites, applications, dealers and markets. Correct inaccurate information visibly where its consequences require it. A silent update shall not be used to obscure an earlier material error or avoid necessary renewed notification.

56.4 Coordinate operational communication with privacy and legal requirements while preserving candour. Release only necessary personal or confidential data. Campaign information shall help affected people act; it shall not be turned into an unsolicited marketing campaign or an unsupported claim of external endorsement.

57 Data protection retention and audit history

57.1 Classify warranty, damage and recall records by sensitivity and operational importance. Apply access restrictions to personal data, financial information, incident evidence and confidential engineering content. Collect only information needed for the authorised purpose and maintain a controlled route for legitimate access requests.

57.2 Set retention periods through applicable obligations, contracts, product support needs and the IAF Documents and Records Guide. A single generic period shall not govern every record without assessment. Litigation, investigation or other valid holds shall suspend ordinary disposal for the affected scope.

57.3 Preserve identities, timestamps, original attachments, decision reasons and amendment history. Control time zones when combining global events. Backups shall be recoverable and records readable for their required life; an inaccessible archive does not provide effective traceability.

57.4 Apply the IAF Data Protection and Privacy Policy and relevant connected systems controls. Restrict analytics exports and de-identify data where practical without destroying authorised vehicle traceability. Record disposal and access revocation at the end of the approved lifecycle.

58 Competence assurance and network audit

58.1 Define competence by task, including claims assessment, technical diagnosis, high voltage work, invoice audit, customer communication, campaign management and hazardous returns. Training attendance alone shall not authorise consequential practical work. Use appropriate assessment and supervised demonstration before independent performance.

58.2 Maintain a competence matrix with scope, limitations, authorisation, refresher needs and suspension triggers. Changes in remedy, software, tools or legislation may require targeted reassessment. A person authorised for ordinary service shall not automatically perform a specialised structural or battery campaign.

58.3 Audits shall trace selected cases across technical, customer, financial and physical records. Test whether holds, approval limits and evidence requirements operate in practice. Use safe controlled demonstrations rather than deliberately creating an unsafe live vehicle condition.

58.4 Record findings with criteria and evidence, assign owners and verify corrective action. Review recurring weaknesses across the network and update instructions where the system contributes to error. Audit incentives shall support accurate reporting rather than encourage concealment of difficult cases.

59 Exercises management review and continual improvement

59.1 Conduct proportionate exercises of recall activation, owner tracing, parts logistics, system outage and failed-remedy response. Define objectives and realistic constraints before the exercise. Simulated events shall be clearly identified and shall not create actual customer alarm, payment or campaign status changes without an authorised purpose.

59.2 Evaluate decision speed, evidence quality, role clarity, data reconciliation and practical service capability. Record what participants actually did and which dependencies failed. A well-attended meeting is not proof that the organisation can execute a global remedy operation.

59.3 Management review shall consider safety signals, customer burden, claim accuracy, dealer performance, campaign completion, cost uncertainty and audit results. Separate operational improvement from financial savings. Lower claim cost is not a success if legitimate access to repair has deteriorated or defects are being suppressed.

59.4 Actions shall have owners, resources, dates and measurable effectiveness criteria. Feed lessons into product design, supplier development, service instructions and digital controls. Reassess earlier closed actions when new evidence shows that the underlying weakness remains.

60 Document control and IAF manual interfaces

60.1 This manual operates with IAF-QM-001 and the applicable IAF governance and document controls. Operational adoption shall identify actual owners, market instructions, approval limits and retained records. Stable Release describes the publication text and does not assert that a particular recall, dealer or repair has already been approved.

60.2 Use IAF-MAN-ASM-001 for authorised service methods, IAF-MAN-MRD-001 for remote and mobile service, IAF-MAN-DCS-001 for customer sales and delivery and IAF-MAN-SDV-001 for software quality. The responsible owners shall reconcile shared decisions rather than assume one manual replaces another discipline's evidence.

60.3 Use the IAF supplier quality, logistics, spare parts, packaging and incident manuals for the relevant supporting activities. Membership and Corporate Recognised status follow the applicable Membership Guide. Recognition or mark permissions shall not be inferred from a successful claim audit or campaign review.

60.4 Revision proposals shall identify the changed requirement, reason, affected interfaces and transition needs. Issue revisions through the authorised IAF process and require operating organisations to assess their effect on active campaigns and cases. Preserve the instruction version used for each completed action and retain open obligations during transition.

Annex A Operational adoption and authority register

Complete before adopting the manual. Expand the record by market and operating entity. The register identifies actual authority and does not confer approval merely through use of an IAF document.

Record field	Required entry and evidence
Scope	Entity, markets, products, service network and excluded activities: _____
Accountability	Director, warranty owner, safety authority, campaign manager and finance lead: _____
Delegations	Decision type, approving role, financial or technical limit, deputy and expiry: _____
Market basis	Verified obligations register, local reviewer, update date and applicable instructions: _____
System controls	Case platform, payment system, population register, access and hold arrangements: _____
Competence	Required role assessments, authorised specialists and identified gaps: _____
Adoption decision	Approved scope, unresolved restrictions, effective date and actual signature references: _____
Review triggers	New market, product, remedy, contract or material requirement change and responsible owner: _____

Resolve missing critical authority or a required local instruction before activating the affected process. Retain the actual decision evidence and the superseded register when responsibilities change.

Annex B Claim intake and safety screening record

Use one record for each reported event, linking related visits rather than deleting earlier cases. Preserve the customer's original description and distinguish confirmed facts from allegations.

Record field	Required entry and evidence
Identity	Case ID, vehicle identity, location, reporter and authorised contact route: _____
Concern	Reported symptom, occurrence date, usage, conditions and prior repairs: _____
Safety screen	Heat, smoke, control loss, electrical concern, injury or other consequential condition and escalation: _____
Evidence	Original photographs, diagnostic files, invoices, telemetry and custody references: _____
Missing information	Needed evidence, reason, request date and practical collection route: _____
Initial action	Approved safety advice, recovery, inspection or ordinary assessment and owner: _____
Customer response	Acknowledgement, next step, communication needs and agreed contact arrangement: _____
Review	Case owner, technical reviewer, current status and next assessment date: _____

Incomplete commercial paperwork shall not block assessment of a credible serious hazard. Do not request hazardous demonstrations or unnecessary personal data to complete the record.

Annex C Coverage and authorisation decision worksheet

Record the basis for the actual entitlement and repair decision. A conclusion shall remain linked to the applicable terms and evidence rather than a generic approval or rejection code.

Record field	Required entry and evidence
Applicable route	Warranty, service contract, recall, goodwill or other basis and market: _____
Terms and facts	Relevant version, start date, usage, ownership and supported failure facts: _____
Assessment	Satisfied conditions, disputed conditions, exclusions and causal evidence where relevant: _____
Proposed work	Diagnosis, repair scope, parts, software, completion tests and alternatives: _____
Cost approval	Estimate, limits, contributions, conditions and change authorisation rule: _____
Decision	Approved, partly approved, pending or rejected with specific reasons: _____
Customer rights	Required explanation, review route and unresolved safety action: _____
Authority	Reviewer, conflicts check, approval reference, date and validity: _____

Separate a financial decision from vehicle safety and campaign eligibility. A later reversal shall preserve the original record and identify any other cases affected by the same error.

Annex D Estimate and invoice reconciliation sheet

Use a line-level continuation sheet for large repairs. Retain both the original estimate and final invoice and identify each authorised variation.

Record field	Required entry and evidence
Case linkage	Vehicle, repair order, authorisation, invoice and dealer entity: _____
Labour	Operation, included tasks, quantity or time, rate, overlap review and evidence: _____
Parts	Number, revision, quantity, unit, price basis, lot and inventory movement: _____
External costs	Provider invoice, towing, rental or storage basis, dates and approval: _____
Adjustments	Discount, core credit, customer share, tax treatment and reason: _____
Currency	Transaction and settlement currency, approved rate source, date and rounding: _____
Comparison	Estimated, authorised, invoiced and payable amounts with explained differences: _____
Review	Recalculation, evidence gaps, held lines and approving identities: _____

Do not infer that a billed activity occurred solely because its arithmetic is correct. Technical completion and cost eligibility require their own supporting evidence.

Annex E Dealer audit plan and finding record

Prepare the audit plan before selection. Keep representative sampling and targeted risk cases separate so the conclusion does not overstate what the evidence can support.

Record field	Required entry and evidence
Audit scope	Entity, period, claim population, criteria, auditor and independence: _____
Population check	Source extracts, count and value reconciliation, missing categories and exclusions: _____
Selection	Method, strata, sample rationale, targeted cases and inference limitations: _____
Trace test	Claim to authorisation, repair, labour, parts, sublet, invoice and payment evidence: _____
Finding	Criterion, observed condition, exact evidence, consequence and affected scope: _____
Response	Dealer explanation, additional records, accepted facts and unresolved disagreement: _____
Disposition	Correction, supported adjustment, escalation or cleared finding with authority: _____
Follow-up	Owner, deadline, effectiveness test, review rights and closure evidence: _____

A statistical or algorithmic flag is not a misconduct finding. Any population-wide recovery shall have a justified method and the applicable contractual and legal authority.

Annex F Worked claim valuation example

This invented example demonstrates arithmetic and separation of cost states. It does not establish an IAF labour rate, tax rate, entitlement or dealer payment agreement.

Illustrative line	Calculation and treatment
Labour	2.4 approved hours x 75 currency units per hour = 180.
Replacement parts	Two parts x 120 each = 240. Verify quantity and that the parts are not already included in a claimed kit.
Approved sublet	Supported external invoice = 90.
Gross before credits	180 + 240 + 90 = 510.
Core credit	Approved credit of 40 gives 510 - 40 = 470 before any applicable tax or other adjustment.
Unsupported duplicate	An additional 0.5 hours for a task already included would add 37.50. Hold that line for review rather than pay it automatically.
Settlement	If the duplicate is unsupported, the illustrative base payable amount remains 470. Actual tax and currency treatment require the local finance decision.

Review application

The auditor shall still verify that the repair occurred, the labour basis applies, the parts were installed and the core credit is genuine. Correct arithmetic does not establish technical validity. Record the actual approved amount, payment reference and any unresolved vehicle action separately.

Annex G Product signal and risk assessment record

Use for a potentially recurring or consequential concern. A single serious event can justify escalation; the worksheet imposes no minimum number of failures.

Record field	Required entry and evidence
Signal	ID, source, reported behaviour, first awareness date and linked cases: _____
Exposure	Vehicles or usage at risk, observation period, duplicates and reporting limitations: _____
Evidence	Failed parts, diagnostics, software, process history and confirmed observations: _____
Potential consequence	Harm, operating conditions, detectability, controllability and affected users: _____
Uncertainty	Unconfirmed mechanism, missing records, alternative causes and evidence plan: _____
Protection	Interim action, scope, customer instruction and responsible authority: _____
Decision	Investigate, contain, escalate or monitor with specific rationale: _____
Review	Owner, approval, next decision time and triggers for immediate reassessment: _____

Retain rejected hypotheses and the reason for closing a signal. Warranty rejection or low financial cost shall not remove the event from technical surveillance.

Annex H Affected population reconciliation record

Maintain a versioned specification and count bridge. Attach the controlled vehicle list through protected access rather than exposing personal details in a public report.

Record field	Required entry and evidence
Population version	Campaign, version, cut-off time, owner and source systems: _____
Inclusion logic	Vehicle, component, build, supplier, software and service replacement criteria: _____
Exclusion logic	Evidence and approval supporting every excluded category: _____
Validation cases	Known affected and unaffected examples, test results and unresolved gaps: _____
Count bridge	Prior total, additions, duplicates, approved removals and current total: _____
Market and custody	Customer, dealer, fleet, export, stock and unknown location categories: _____
Reproducibility	Retained extracts, transformation logic, manual changes and independent review: _____
Acceptance	Uncertainty, protective scope decision, reviewer and actual approval: _____

A change in the denominator shall be explained in every affected performance report. Unreachable owners shall not be deleted merely to improve the completion percentage.

Annex I Campaign authorisation and launch record

This record supports the actual campaign decision. It shall identify both the technical remedy and the market actions required to implement it.

Record field	Required entry and evidence
Identity	Campaign, product, affected population version and decision date: _____
Basis	Defect evidence, risk assessment, classification and mandatory obligation review: _____
Remedy	Permanent action, interim measures, validation and remaining limitations: _____
Markets	Responsible entities, local leads, notices, reporting and verified time requirements: _____
Resources	Parts, capable sites, tools, workforce, logistics, mobility support and funding: _____
Controls	Eligibility, holds, completion evidence, failed-remedy escalation and reporting: _____
Open actions	Owner, deadline, restriction and effect on launch or customer protection: _____
Decision	Approved scope, conditions, actual authorities and communication references: _____

Do not delay required safety or market action while commercial cost recovery is negotiated. A conditional launch shall state exactly which activities are permitted and which remain blocked.

Annex J Owner communication preparation worksheet

Use to prepare a market-reviewed notice. Replace every field with verified campaign information; this worksheet is not a ready-to-send legal notification.

Record field	Required entry and evidence
Recipient and product	Current owner or operator basis, vehicle identification method and applicable population: _____
Concern	Plain-language description of the defect and supported potential consequence: _____
Immediate action	Specific approved instruction, restrictions and emergency or recovery route where relevant: _____
Remedy status	Available final remedy or interim position, expected next update and appointment process: _____
Cost and support	Applicable no-charge remedy or other verified cost treatment and mobility arrangements: _____
Trusted contact	Verified contact channels and method for authenticating the notice without sharing passwords: _____
Issue controls	Language, accessibility, required channels, market approval and dispatch evidence: _____
Follow-up	Returned communication, changed ownership, repeated contact and correction plan: _____

A dispatch record does not establish receipt or repair completion. Keep marketing offers separate from safety instructions and retain every materially different issued version.

Annex K Parts allocation and logistics control record

Plan both forward remedy supply and removed-part movement. Hazardous material requires its own competent assessment and approved transport route.

Record field	Required entry and evidence
Demand	Population, remedy mix, participation assumptions, service capacity and forecast version: _____
Kit identity	Part and revision, contents, software or tool dependencies and approved substitutions: _____
Allocation	Risk and immobilisation priority, location, quantity, reservation and vehicle linkage: _____
Shipment	Exporter, importer, carrier, classification, packaging and required documentation: _____
Receipt	Quantity, condition, lot identity, discrepancy and storage status: _____
Consumption	Installed units, held stock, damaged items, excess returns and reconciliation: _____
Reverse flow	Removed condition, evidence hold, hazardous assessment, receiving capability and custody: _____
Exceptions	Border delay, loss, shortage, unsafe return or diversion with owner and action: _____

Parts shipped and parts installed are separate measures. Do not dispatch a damaged hazardous assembly under an ordinary warranty label or remove protective packaging to accelerate delivery.

Annex L Dealer campaign readiness checklist

Complete for each repair location and campaign scope. Status shall be Ready, Hold or Not applicable with a reason and supporting evidence.

Record field	Required entry and evidence
Scope	Dealer entity, site, campaign version, permitted vehicle variants and work: _____
Personnel	Technician competence, specialist support, independent verification and deputies: _____
Instructions	Current repair method, eligibility, safety measures and failed-repair route: _____
Equipment	Required tools, software access, measurement status, work space and protections: _____
Parts	Correct kit, traceability, storage, removed-part custody and return capability: _____
System demonstration	Claim code, vehicle hold, completion fields and rejection of missing evidence: _____
Controlled trial	Actual repair evidence, timing, instruction issues and corrective action: _____
Release	Approving roles, restrictions, date and suspension or requalification triggers: _____

General dealer authorisation does not prove readiness for every specialised campaign. A missing critical protection, tool or competence prevents activation of the affected repair activity.

Annex M Recall repair and verification traveller

Use one traveller for each affected vehicle. Preserve failed attempts and subsequent recovery in the same history.

Record field	Required entry and evidence
Vehicle and campaign	Identity, actual configuration, eligibility version, site and work order: _____
Preconditions	Current restrictions, safe state, parts, tools and authorised technician: _____
Original condition	Installed part, diagnostics, damage and unexpected findings: _____
Work performed	Instruction revision, actual operations, replacement identities and approved changes: _____
Software	Required baseline, installed readback, programming result and recovery history: _____
Verification	Measurements, calibration, functional tests, acceptance criteria and actual results: _____
Removed material	Identity, condition, custody, evidence hold and return or disposal instruction: _____
Release	Complete or held, remaining action, reviewer, date and customer handover evidence: _____

An invoice, appointment or customer receipt does not establish completion. A failed mandatory result keeps the affected vehicle on hold until the authorised technical process resolves it.

Annex N Returned component custody and disposition record

Start the record at removal and continue it through examination or final disposition. Preserve evidence without exposing personnel to unnecessary hazards.

Record field	Required entry and evidence
Identity	Component, serial or lot, vehicle, campaign, repair order and removal date: _____
Condition	Observed damage, contamination, stored energy or hazardous characteristics: _____
Preservation	Photographs, seals, packaging, prohibited handling and evidence hold: _____
Transport decision	Competent classification, permitted route, carrier and receiver capability: _____
Custody transfers	Sender, receiver, date, condition and discrepancy at each handover: _____
Examination	Approved plan, actual tests, irreversible changes, findings and retained samples: _____
Disposition	Return, retained evidence, destruction or recovery route with authority: _____
Financial linkage	Core credit, inventory adjustment, supplier recovery and duplicate-payment check: _____

Do not substitute another part to complete a missing return. If identity or condition is uncertain, retain the uncertainty and assess its effect on both the technical conclusion and financial disposition.

Annex O Worked campaign performance example

The following invented figures illustrate denominator control. They are not targets or evidence of an actual IAF campaign.

State at reporting cut off	Illustrative count and interpretation
Initial affected population	10,000 vehicles in population version 1.
Verified remedies	7,600 vehicles have the required completed remedy evidence.
Initial completion rate	$7,600 / 10,000 \times 100 = 76\%$.
Newly identified population	500 additional affected vehicles are confirmed; version 2 contains 10,500.
Revised completion rate	$7,600 / 10,500 \times 100 = \text{approximately } 72.38\%$.
Remaining affected vehicles	$10,500 - 7,600 = 2,900$ requiring an appropriate remaining disposition or remedy.
Reporting caution	Notified, booked, shipped and paid counts are operational measures. None is interchangeable with verified remedies.

Management interpretation

Explain why the population changed and retain the count bridge. Break down the 2,900 remaining vehicles by actual status, risk, market and next action. Do not remove unreachable cases or count an interim inspection as the permanent remedy merely to restore the earlier percentage.

Annex P Damage assessment and cost allocation record

Record condition and evidence before assigning liability. Use additional specialist assessments where structural, electrical, battery or restraint concerns are present.

Record field	Required entry and evidence
Event	Vehicle, location, date, reported circumstances and reporting party: _____
Custody	Previous and current custodians, transfer records and known condition history: _____
Observed damage	Photographs, measurements, affected systems and distinction between visible and suspected damage: _____
Safety decision	Movement, charging, lifting or use restrictions and competent assessment: _____
Cause assessment	Confirmed facts, alternative mechanisms, uncertainty and further examination: _____
Repair proposal	Approved method, parts, calibration, validation, residual limitations and disclosure: _____
Cost and coverage	Estimate, warranty or insurance route, contributions and duplicate-recovery control: _____
Decision	Technical disposition, separate liability authority, customer communication and review: _____

A valuation estimate is not proof that repair is technically suitable. Cosmetic restoration shall not conceal a consequential defect or remove the need for accurate disclosure and release evidence.

Annex Q Global recall tabletop exercise

Exercise scenario: a recurring thermal concern is reported in two markets; traceability is incomplete, remedy parts are constrained and one dealer reports a failed repair. Use simulated records only and define the scope before starting.

Record field	Required entry and evidence
Initial signal	Who screens consequence, preserves evidence and issues approved interim advice? Record actual decisions and elapsed time.
Population gap	Which sources identify affected components and service replacements? Record assumptions, protective scope and count reconciliation.
Market response	Who verifies local reporting and notice requirements? Record responsibility, communication channels and unresolved obligations.
Supply constraint	How are parts and service slots allocated by risk? Record mobility support and the treatment of unreachable owners.
Failed remedy	Who stops the affected process and reassesses previously completed vehicles? Record revised instructions and reporting impact.
Evidence challenge	Can a selected vehicle be traced from notice through installed part and verification to payment and returned-part custody?
Review	Record observed gaps, owners, completion dates and a repeat exercise or other effectiveness test.

The exercise does not authorise an actual recall, customer message or payment. Evaluate demonstrated capability and unresolved dependencies, not attendance or the visual quality of the presentation.

Annex R Campaign closure and effectiveness review

Closure is a scoped decision based on obligations, remaining exposure and remedy effectiveness. It does not erase outstanding vehicle actions or prevent reopening when new evidence emerges.

Record field	Required entry and evidence
Scope and population	Campaign, markets, current population version and reconciliation history: _____
Completion evidence	Verified remedies, remaining statuses, denominator rules and reporting cut-off: _____
Effectiveness	Recurrence, repair quality samples, failed remedies and field observation limits: _____
Remaining obligations	Hard-to-reach vehicles, reporting, support, parts availability and responsible owners: _____
Financial reconciliation	Paid costs, credits, recoveries, estimates and unresolved disputes: _____
Records and material	Evidence retention, returned-part disposition, access and custody completion: _____
Lessons	Product, supplier, dealer, logistics and communication actions with effectiveness evidence: _____
Decision	Operational closure scope, conditions, continuing responsibilities and actual approvals: _____

Reopen the technical process if credible evidence shows that the remedy is ineffective, the population is incomplete or a material obligation remains unmet. Financial settlement alone shall not determine closure.