



Log of changes

Issue	Issue date	Change description	Applicability
001	20-03-2019	Creation of the document - initial version-	01/09/2019
002	09-10-2020	Correction & amendments: <ul style="list-style-type: none">- Alcohol testing procedures- Change of the foreword to better involve the RICS for any RIM and Appendices modification and avoid consultation when minor changes such as (typo, changes with no impact on procedures, no additional guidance...) are implemented- Clarification of definition of EASA PS- Minor clarification/improvements in text throughout the document- Included some additional best practices- Included information from training bulleting 1, 2 and 3- Addition of explanatory material on the GDPR- Addition of the explanation "Safety Report" which was formerly called "Standard Report"- Clarification of the "double penalty" principle- Added a chapter in findings on: "special cases, examples"	14/02/2021
003	20-05-2022	<ul style="list-style-type: none">- Addition of further details for SAFA/SACA/NCC/GA- Correction of several textual and formatting details- Addition of how-to search in the TCO web interface- Addition of several more "special cases"- Addition of Chapter 10.3 alcohol testing in ramp- Amended document with comments from RICS/OPS-TeB	01/08/2022
004	28-10-2022	<ul style="list-style-type: none">- Guidance to assess issue with transportation of animals in the cabin and under seat baggage restraining bar- Removed the "Combi" aircraft configuration from the POI	01/11/2022





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Foreword

Foreword

The information presented in this manual has been compiled to provide Participating States (PS) with guidance related to the implementation of ARO.RAMP requirements and as well with examples of ramp inspection best practices.

In particular, it addresses the conduct, management and administration of ramp inspections and, as well, the ramp inspector qualification process.

The first version of this manual has been developed taking into account the input of a dedicated EASA/PS working group and the comments received during a focussed consultation of EASA advisory bodies.

The ramp inspection manual in itself is considered as guidance. However, the appendices, since referred to in AMCs as provisions to be followed, are considered to have the same legal status as AMCs.

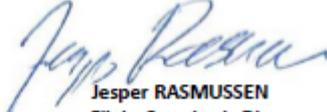
The use of such system provides more flexibility when amending these appendices, as the update of the ramp inspection manual is not in the scope of the rulemaking process.

However, as stated during the OPS TeB 02-2018, EASA will ensure that all amendments to this manual are subject to an adequate level of consultation with affected stakeholders. In practice, the following processes will take place.

- Amendments to the core part of the ramp inspection manual, to its attachments and to its appendices will be notified to all the RICS members before their publication. Depending on the urgency of the change, this notification will take place either via email or during RICS meetings. The RICS members will have in both cases the possibility to provide comments on the proposed amendments.
- Amendments to appendices to the ramp inspection manual will be subject to a focussed consultation of the OPS.TeB/FS.TEC Members, allowing them to provide comments on the draft amendments before the final version is adopted. EASA will then review the comments and prepare the final version for publication. In case of a major disagreement on a substantial change, the proposed amendment will be discussed at the next OPS.TeB meeting.
- Notwithstanding the above, minor changes to the appendices, such as typo corrections or references update will not be subject to a focussed consultation of the OPS.TeB/FS.TEC Members.

Aside from the consultation process, Participating States may provide comments and suggestions for improvement on the current version of the ramp inspection manual anytime by submitting them to [safo@easa.europa.eu](mailto:safa@easa.europa.eu).

The latest version of this manual may be obtained by visiting the EASA website under <https://www.easa.europa.eu/domains/air-operations/ramp-inspection-programmes-safa-saca>


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1 Introduction

1.1 History, background & purpose of the manual

Reference: GM1 ARO.RAMP.005

In 1996, the European Civil Aviation Conference (ECAC) launched its Safety Assessment of Foreign Aircraft programme (SAFA) to complement the ICAO audits by concentrating on actual aircraft checks at airports (“ramp inspections”) aimed at ensuring that relevant ICAO standards were being complied with.

In 2004, European Commission Directive 2004/36/CE created a legal obligation upon EU Member States to perform ramp inspections on third-country aircraft landing at their airports, where ‘third-country aircraft’ implied aircraft not used or operated under control of a competent authority of an EU Member State. Nevertheless, the Directive did not prohibit in any way EU Member States from inspecting aircraft from other EU Member States.

On 28 October 2012, the Implementing Rules on Air Operations entered into force as the new legal basis for the EU Ramp Inspection Programme, replacing the original system established by the SAFA Directive and its implementing regulations with a new system represented by the new EU Ramp Inspections Programme.

Under the EC SAFA programme as implemented until the 28th of October 2014, foreign aircraft (either EU or third-country) may be inspected. EU carriers are checked against EU standards (SACA) when inspected in EASA PS, whereas all other inspections are performed against international standards (SAFA). In case of significant irregularities, the operator and the appropriate Aviation Authority (State of Operator or State of Registry) are contacted in order for corrective measures to be taken not only with regard to the aircraft inspected, but also with regard to other aircraft which could be concerned in case of a generic nature irregularity. Where irregularities have an immediate influence on safety, inspectors may demand corrective actions before they allow the aircraft to leave.

The European Standard procedures for SAFA & SACA have been integrated into Commission Regulation under Part-ARO and is fully applicable from the 28th of October 2014.

The purpose of this manual is to describe best practices and give guidance to States performing ramp inspections. It covers the delivery, management and administration of ramp inspections as well as the ramp inspector qualification process.

The legal status of the core part of the manual and the attachment is guidance only, whilst the Appendixes (9.1, 9.2 and 9.3) are considered to have the status of an AMC as they are referred to in AMC to ARO.RAMP as means to comply with the relates implementing rule (unless an AltMoC is defined in accordance with ARO.GEN.120). If a non-EASA PS wishes to deviate from the guidance provided in the manual, it may do so providing such deviation is described and followed in accordance with a national procedure.

The manual chapters order follows, to a large extent, the logic structure of the ramp inspection process.





1.2 Glossary: definitions of words and acronyms

1.2.1 Acronyms

ACMI	Aircraft crew maintenance insurance (provided in a wet lease arrangement)
AD	Airworthiness Directive
AIP	Aeronautical Information Publications
AMC	Acceptable Means of Compliance
AMM	Aircraft Maintenance Manual
AMP	Approved Maintenance Programme
ARO	Authority Requirements for air Operations
ASC	Air Safety Committee
ATC	Air Traffic Control
CDL	Configuration Deviation List
CFMU	Control Flow Management Unit
CoA	Certificate of Airworthiness
EASA	European Union Aviation Safety Agency
EC	European Commission
ECAC	European Civil Aviation Conference
EU	European Union
GDPR	General Data Protection Regulation
GM	Guidance Material
ICAO	International Civil Aviation Organisation
IDEA	In-Depth Expert Analyses
MEL	Minimum Equipment List
MPD	Maintenance Planning Document
NAA	National Aviation Authority
NC	National Coordinator
NMIR	Network Manager Interactive Reporting
NOP	Network Operations Portal
POI	Proof Of Inspection
RAMP	Ramp inspection process
RICS	Ramp Inspection Coordination and Standardisation
RIM	Ramp Inspection manual
RITO	Ramp Inspection Training Organisation
SACA	Safety Assessment of Community Aircraft
SAFA	Safety Assessment of Foreign Aircraft
SANA	Safety Assessment of National Aircraft
SRM	Structural Repair Manual
SWC	System Wide Coordination
SWPM	Standard Wiring Practices Manual
TCO	Third Country Organisation
VMC	Visual Meteorological Conditions
WDM	Wiring Diagram Manual





1.2.2 Definitions

'EASA Member States' (EASA PS): All EU and EFTA States (Switzerland, Iceland, Norway) participating in the EU Ramp Inspection Programme.

'Participating States' (PS): States participating in the EU Ramp Inspection Programme, consisting out of EASA Member States and Non-EASA Member States that have entered into a working arrangement with EASA.

'Non-EASA Participating States' (non-EASA PS): All Non-EASA Member States that have entered into a working arrangement with EASA

'SACA inspections': Ramp inspections performed by an EASA Member State on aircraft operated by an operator under the regulatory oversight of another EASA Member State.

'SAFA inspections': Ramp inspections performed by a non-EASA PS on any aircraft and ramp inspections performed by EASA PS on an aircraft operated by an operator under the regulatory oversight of a non-EASA Member State.

'SANA inspections': Ramp inspection (by a competent authority) of aircraft used by organisations under its own regulatory oversight.

'System wide coordination (SWC)': In agreement with all EASA Member States, the Agency has developed a common risk-based system where the Agency calculates target number of inspections on certain operators meeting a pre-defined traffic threshold criterion. Overseas territories and the non-EASA Member States are not included in this system however, the latter have a possibility to opt-in.

'SWC Participating States': All EASA Member States and voluntary non-EASA PS.

'Layer 1 operators': Operators having traffic above a threshold established by the Agency as per chapter 4.1.1 in this manual.

'Layer 2 operators': All remaining operators/aircraft which could be inspected under ARO.RAMP as per Regulation (EU) 965/2012. Typically, but not limited to, low utility commercial operators, Business operators/aircraft, General Aviation and similar types of operation.

1.3 Data protection

All procedures described in the present manual involving processing operations shall comply with applicable data protection rules.

In particular, EU Member States shall comply with the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons concerning the processing of personal data and the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (Text with EEA relevance) and implement the corresponding data protection policies for the processing activities defined in the present manual, such as notification of findings, ramp inspection tool reporting and proof of inspection management.

1.4 Objectives

The purpose of ramp inspections is to perform on-the-spot assessments of aircraft on the ramp to check compliance with the applicable standards for the type of operation. The inspection covers a check of flight crew licences, flight operation documentation, relevant aircraft documents, aircraft condition, mandatory cabin safety equipment and cargo area.





1.5 Inspection matrix

Operators licensed by EASA PS and inspected by other EASA PS are checked against EU Standards; those inspections are referred to as "Safety Assessment of Community Aircraft" (SACA) inspections. All other inspections use ICAO Standards and are commonly known as "Safety Assessment of Foreign Aircraft" (SAFA) inspections. In addition, each ICAO contracting State should perform ramp inspections on operators licensed by them; although out of the scope of the Programme, such inspections are called "Safety Assessment of National Aircraft" (SANA) inspections. A new type of inspection has been introduced for ICAO and EU inspections of General Aviation. These are now described in the INSPECTION INSTRUCTIONS AND PRE-DESCRIBED FINDINGS list as SAFA-GA and SACA-NCC:

Inspected Operator licensed by:	Operator inspected by:	
	EASA Member State	Non-EASA Participating State
EASA Member State	SACA-CAT & SACA-NCC	SAFA-CAT & SAFA-GA
Non-EASA State	SAFA-CAT & SAFA-GA	
Your own State	SANA	

Ramp inspections are part of a European Union safety programme and should be performed in a harmonised and standardised way by all EASA PS and all States with which EASA signed a working arrangement (Participating States). State aircrafts, as defined in the Chicago Convention (aircraft used in military, customs and police services and declared as such in the flight plan), are outside the scope of the EU Ramp Inspections programme.

SANA inspections should follow, as far as possible, the same principles as applied to SAFA and SACA inspections in accordance with Part ARO.RAMP.

2 EASA's role in the EU Ramp Inspections programme

The Agency is responsible for overall coordination of the programme to all the Participating States and for reporting the results thereof to the Commission.

The specific role and responsibilities of EASA in the EU Ramp Inspections programme are:

- to collect, using the ramp inspection tool, inspection reports of all the Participating States engaged in the EU Ramp Inspections Programme and results of alcohol tests performed on cabin crew and flight crew performed within EASA PS;
- to develop, maintain and continuously update the ramp inspection tool (e.g. explore possibilities to introduce update of ramp inspection tool to run on mobile devices) including tracking for ramp inspectors' currency;
- to provide necessary changes and enhancements to the ramp inspection tool application;
- to analyse all relevant information concerning safety of aircraft and its operators;
- to report potential aviation safety problems to European Commission and all the Participating States;
- to inform the European Commission and all the Participating States on follow-up actions;
- to propose coordinated actions to the Commission and the competent authorities, when necessary on safety grounds, and ensure coordination at the technical level of such actions;
- to liaise with other European institutions and bodies, international organisations and third-country competent authorities on information exchange;
- to submit a yearly report to European Commission, Participating States and public to reflect the activities of the EU Ramp Inspection Programme;
- to establish a list of prioritised operators, which includes:
 - third-country States (i.e. States outside the EU) deemed to have deficiencies in their safety oversight capability (all operators based in these states are subject to additional scrutiny);
 - third-country and European Union' operators that should be prioritised for regular inspections;
 - newly authorised third-country operators;





- individual aircraft/operators suspected of engaging in illegal commercial operations; and
- a list of European Union and third-country operators for prioritisation of alcohol testing based on a risk assessment performed by the Agency, taking into account robustness and effectiveness of existing psychoactive substance testing programmes.

Besides, the Agency has the following tasks and obligations:

- to monitor level of activities agreed upon for each non-EASA PS;
- to perform standardisation visits to confirm competency and activities;
- to organise regular meetings to facilitate exchange of information (RICS, IDEA) in cooperation with Participating States;
- to arrange for working groups on new or emerging topics;
- to develop the EU Ramp Inspection Programme globally;
- to harmonise inspection methodology between Participating States;
- to maintain and develop a risk-based model for fair number of inspections and distribution;
- to calculate and distribute inspection targets to SWC Participating States;
- to monitor State's compliance and adherence to SWC calculated targets and distribution for "layer 1" operators; and
- to collect and analyse traffic data with regards to SWC coordination and to provide it to SWC Participating States.





3 Organisation

3.1 Ramp inspection national coordinator duties and responsibilities

A ramp inspection national coordinator (NC) should be appointed by each competent authority of Participating States and tasked with the day-to-day coordination of the programme at national level to facilitate the implementation of the programme in accordance with ARO.RAMP applicable requirements. The national coordinator should preferably be full-time contracted, or at least be given sufficient hours to fulfil his/her tasks relating to all aspects of the national ramp inspections programme.

In addition to the ramp inspection national coordinator, the competent authority may appoint a coordinator for national operators to act as the focal point for other Participating States regarding ramp inspections performed on operators under its oversight.

The ramp inspection national coordinator is responsible for the following tasks:

- to facilitate the development of an annual ramp inspection programme, taking into account the list of prioritised operators and, for SWC Participating States, the assigned “layer 1” and “layer 2” operator’s targets and the list for the prioritisation of alcohol testing;
- to ensure that the annual ramp inspection programme leaves appropriate time and resources to enable the inspections of aircraft operated by “layer 2” operators suspected of non-compliance with the applicable requirements;
- for non SWC Participating States, to submit the annual ramp inspection programme to the Agency for the upcoming year as per the working arrangements or by the end of November latest and to address any change requested by the Agency;
- to supervise ramp inspectors’ planning process;
- to monitor the implementation of the annual ramp inspection programme, including alcohol testing and adherence to inspection targets assigned by the Agency to prevent both over- and under-inspections;
- to plan prioritised ramp inspections;
- to ensure that all staff involved in ramp inspections are competent, remain current and are trained in accordance with the individual needs;
- to ensure that ramp inspectors are equipped with appropriate, approved and properly maintained alcohol breath analyser testing device in accordance with national requirements;
- to schedule recurrent trainings in a timely manner;
- as far as practicable, to make use of the workflow function which is available in the ramp inspection tool;
- to implement a national ramp inspection quality control system in the respective ramp domain (e.g. the State’s system for quality control, or, when the overall State’s system does not include the ramp domain, a more specific ramp quality system on inspection reporting and staff qualifications);
- to enter ramp inspection reports into the ramp inspection tool as soon as possible after the inspection and in accordance with ARO.RAMP.145 (a);
- for non SWC Participating States, to collect and analyse all traffic data for their own country (using Eurocontrol’s online Extranet tool if available);
- for SWC Participating States, to collect and analyse traffic data (using Eurocontrol’s online Extranet tool) for “layer 2” operators;
- to support the Agency by participation in working groups, where possible;
- to represent the State at the RICS meetings and, when necessary, at other ramp inspection related meetings;
- to promote and implement an inspectors’ exchange programme between competent authorities from the Participating States;
- to provide support in handling requests for disclosure of data related to information recorded and reported in accordance with ARO.RAMP.145;
- to organise regular meetings with all ramp inspection staff to maintain a high-quality standard regarding:
 - any changes/updates to requirements relating to ramp inspections of aircraft of operators under the regulatory oversight of another State; and
 - feedback on quality issues regarding reports, e.g. incorrect entries, mistakes, omissions, etc.





- to ensure the quality of data and reports uploaded into the ramp inspection tool, including reports uploaded by other officials performing alcohol tests;
- to manage the access of national operators and the competent authority's staff and other national officials to the ramp inspection tool;
- to act as a sectorial focal point in the domain of ramp inspections in the context of standardisation activities performed by the Agency;
- to propose appropriate team members for ramp inspection standardisation visits;
- to provide information on safety reports to the Agency, the Commission and the Member States in the domain of ramp inspections; and
- to notify the Agency and the Commission of additional testing for psychoactive substances other than alcohol.

In addition to the above-described tasks, it is recommended that the national coordinator:

- manages an inspector's qualification and tracking tool (to keep control of staff qualifications);
- allocates adequate time, resources and budget, to participate in various EASA mandatory and/or voluntary meetings;
- monitors, as applicable, the various available information systems (Eurocontrol, EASA alerts, internal communications) relating to prioritised or potentially new operators;
- manages the finding follow-up information received through the ramp inspection tool, or by other means if operators have no connection to the ramp inspection tool;
- facilitates and promotes quality principles within the team's inputs and outputs with regards to the ramp inspection tool; and
- informs the Agency of newly certified national operators and/or operators ceasing activities (such information should be sent to safa@easa.europa.eu).

3.2 Ramp inspectors' duties and responsibilities

Ramp inspectors have the following duties and responsibilities:

- to follow the competent authority procedures and guidance on EU Ramp Inspection Programme implementation;
- to follow the defined criteria for unforeseen inspections of "layer 2" operators;
- to inspect items selected from the Ramp Inspection checklist according to assigned items of competence;
- to comply with the competent authority procedures related to inspections of aircraft not being prioritised or not being suspected ('unforeseen');
- to plan inspections (and items) based on the preparation module (use all available sources, e.g. EASA/National/Eurocontrol/local sources/etc.);
- to plan and perform alcohol tests according to the annual plan and procedures developed by the competent authority;
- to submit ramp inspections' paperwork and other evidence to the National Coordinator, i.e. Proof of Inspection forms, and to upload inspections' photos and other relevant information and evidence gathered while performing ramp inspector's duties;
- to attend the regular internal team meetings with the ramp national coordinator to discuss all aspects of the ramp inspection process (e.g. time management, efficiency of the inspection, team coordination, problems encountered, lessons learned, etc.); and
- to check serviceability of alcohol test equipment (when alcohol tests are planned).

3.3 Ramp Inspectors' equipment and access credentials

The competent authority should provide inspectors with the necessary access rights to all the airports they are eligible to perform the inspections, as well as necessary equipment (e.g. flashlights, digital camera, and mobile phone) and protective clothing suitable for various environmental circumstances (e.g. fluorescent vests, ear protection etc.). Besides when performing alcohol test ramp inspectors should be equipped with an appropriate and approved testing device following the national requirements on alcohol





testing of individuals. This equipment should be a breath alcohol analyser and should be maintained properly, additional guidance on equipment to be used can be found in chapter 10.3.

In addition, it is recommended that the competent authority provides the following tools to its inspectors:

- inspection mirror (mainly for cabin);
- technical documentation, if available (A/C manuals, MEL updates, etc.);
- operational documentation (status of NOTAMS, weather, charts, AIP, etc.);
- phone/laptop/tablet (document storage with internet data to access information sources or the ramp inspection tool, etc.);
- access to expected traffic data (e.g. from slot coordinator where there is a slot system in place for a specific airport);
- access to actual airport traffic data (e.g. public and non-public if available);
- suitable means of transportation at the airport/inspection site (e.g. dedicated car); and
- relevant contact information (e.g. airport phone numbers etc.).

3.4 Management of safety / third party information

Safety information may be received from various external sources (e.g. whistle-blower reports). Even ramp inspectors themselves may be a source of safety related information. A structured approach on how to process such information and who to notify should be in place.

In most cases, the NC is responsible for reviewing and assessing the credibility of the available information to determine if it can be verified during a ramp inspection. If the suspicions or allegations of any kind of deficiency can be investigated during a ramp inspection, such inspection should be planned. If the operator or airframe cannot be checked by the related State, the NC may decide to file a safety report (the former Standard Report) to alert the other Participating States. Alternatively, the EASA ramp coordination section could be contacted for a proposed coordinated action by the State of Inspection. A further information could be retrieved through the TCO WEB-INTERFACE via the confidential info exchange tab (if a registered user).

3.4.1 Safety reports

Reference: AMC1 ARO.RAMP.145

Collected safety related information on operators may be distributed using the safety report form (the formerly called Standard Report) in the ramp inspection tool. However, it should be verified by the reporting authority, as far as possible, before insertion in the ramp inspection tool. Examples of important safety related information could be, but are not limited to:

- communication failure or difficulties;
- ATC reports on shortage of fuel (declared fuel emergencies), problems with TCAS system, abnormal take-off lengths;
- information received from maintenance organisations concerning lack of AD compliance or incorrectly performed maintenance work;
- reports from the general public/whistle-blowers concerning perceived unsafe situations;
- reports from pilots on incorrect use of radio-telephony phraseology;
- reports from airport personnel on observed unsafe practice;
- relevant information concerning accidents and incidents which occurred in Member States' airspace; or
- unsafe practice observed by ramp inspectors outside the scope of ramp inspections programme.

Safety reports entered into the ramp inspection tool may be further enhanced with useful information like documents, pictures, etc.

3.4.2 TCO WEB-INTERFACE

The TCO web-interface is only accessible for EASA PS, which may use this information under a separate confidentiality agreement. This repository includes the TCO authorisation and its associated OPS Specs issued by EASA for those third country operators to





perform commercial operations. Non EASA PS have to rely on their own systems or intelligence information received or obtainable from other sources.

Except for the TCO authorisation and its associated OPS Specs, the documents accessible via the TCO WEB-INTERFACE might not reflect the actual status, therefore it is recommended to use the data with caution. The TCO web interface has documents stored for each operator within the database and these can be found as follows:

- Login as registered user
- Search TCO files => select operator
- Tab Basic Operator Data => click "view"
- Under each sub-tab the relevant documents may be found by scrolling down to the relevant item, and download the (if available) documents within the brackets (0,1,2..)

4 Coordination (alcohol testing)

Reference: ARO.RAMP.106

4.1 With other officials

When alcohol tests are performed outside of the scope of the EU Ramp Inspection Programme by other officials, the national coordinator may need to define appropriate national requirements for coordination with other national bodies.

This coordination may address the following (not limited to):

- the transmission of the priority list developed in accordance with ARO.RAMP.106;
- the quality check of reports before approval in the ramp inspection tool;
- overlapping of ramp inspections and alcohol test on the same operator at the same moment; and
- the follow-up of a positive test.

4.2 With legal enforcement bodies

Competent authorities and law enforcement bodies should agree on follow-up procedures in case of positive test and refusal of alcohol test during ramp inspection, including the appropriate location to handover the process.

The competent authority may coordinate the necessary exchange of information between ramp inspectors and legal enforcement body (e.g.: reporting of time of inspection, license numbers, proof to be collected, photography of results...).

NOTE: *Further guidance can be found in the dedicated [Chapter 10.3. on alcohol testing](#)*

5 Annual ramp inspection programme

Reference: AMC1 ARO.RAMP.100(c)

Ramp inspections should always be planned on a long, mid and short-term basis to ensure that sufficient inspecting resources are available and adequate to inspect foreign operators and individual aircraft landing in the State. Based upon updates received from the Agency, States should amend their annual planning. Furthermore, apart from planned inspections, States should have sufficient flexibility in their system to allow for unforeseen inspection demands on prioritised operators and aircraft suspected of non-compliances. Additionally, the planning should take into account the principles of non-discriminatory approach, widest possible coverage and over-/under- inspection.





5.1 Annual ramp inspection programme for the SWC Participating States

When defining their annual ramp inspection programme, the SWC Participating States should take into account:

- the target number of inspections assigned by the Agency on each “layer 1” operator;

Based on analysis made by the Agency, the competent authorities receive every year inspection target numbers per “layer 1” operators for the annual planning, only and if the operator’s traffic exposure to State is above the defined threshold and reliable data is available.

and

- the total target number of inspections assigned by the Agency on “layer 2” operators.

Based on analysis made by the Agency, the competent authorities receive every year a minimum total number of inspections to be planned on “layer 2” operators.

Note: The annual targets assigned by the Agency should be treated as confidential.

Specific case of territories outside ICAO EUR region

Inspections to be performed in territories of the SWC Participating States, which are outside the ICAO EUR region, should be included in the annual ramp inspection programme defined by these States, in addition to the target numbers assigned by the Agency.

5.1.1 Annual programme on “layer 1” operators

The list of “layer 1” operators is established by the Agency with the help of the SWC Participating States, taking into account the traffic exposure and the level of confidence on these operators.

Determination of the list of “layer 1” operators

Every year before 1st of December, the Agency communicates the list of “layer 1” operators. Moreover, each year before 1st July a mid-year update is foreseen.

The methodology used by the Agency, to determine if an operator is to be considered a “layer 1” operator, is in line with the following principles:

- An operator (a) may be considered a “layer 1” operator for the year (Y) when its traffic exposure (T) in the year (Y-1) exceeds 250, provided they have more than 50 landings in at least 2 States.
- In the targets calculation matrix, the x-axis is the traffic group, which is based on operator’s traffic in the States with more than 50 landings.
- (T) is calculated with the use of Eurocontrol data, applying the following formula:

$$T = \frac{\text{Number of landings of (a) in all EASA PS}}{\text{Number of EASA PS with more than 50 landings}}$$

Assignment of target numbers of inspections on “layer 1” operators

A number of inspections is then established for each of these “layer 1” operators, considering a “confidence level” (C) and the “traffic exposure” calculated as explained above. The calculations are based on reliable data and all “layer 1” operators are processed towards the same parameters.

Note: Only operators for which the Agency has reliable basic data for confidence and traffic exposure are considered.





The calculation matrix used to determine the number of inspections to be performed on “layer 1” operators is defined by the Agency, after consultation with the SWC Participating States, and has two axes:

- The x-Axis is displaying the “traffic exposure” (T), calculated as explained above;
- The y-axis is displaying the “confidence level” (C) whereby the Agency has established a sufficient level of confidence in an operator and/or the operator’s competent authority.

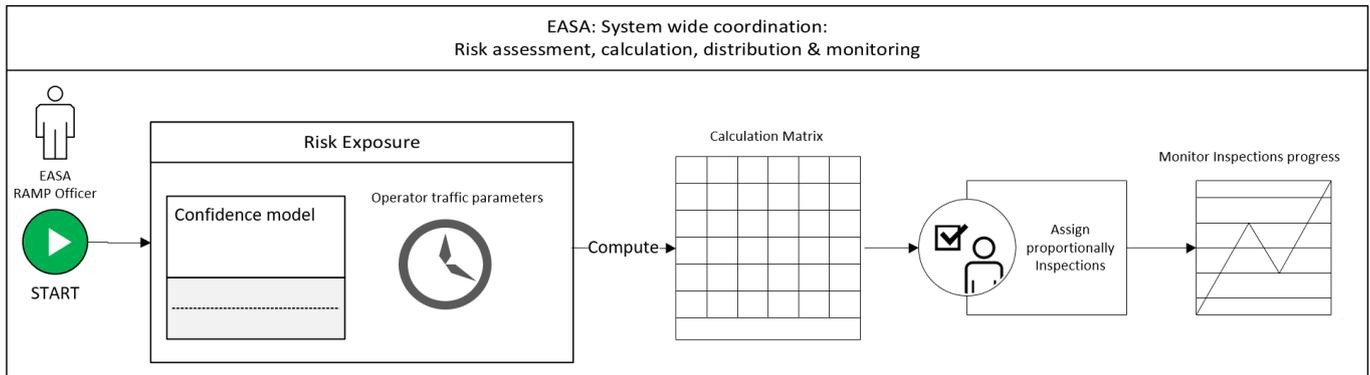
Once the traffic exposure (T) and the confidence level (C) are established for a specific “layer 1” operator, the Agency can then define the target number of inspections to be performed on this operator, using that matrix.

Once the target numbers of inspections are determined for each “layer 1” operator, the Agency assigns national targets for each SWC Participating State, based on the following principles:

- 1) a target of “0” inspection is assigned to States where the historical traffic level of the operator is below a defined threshold;
- 2) each State in which the historical traffic level of the operator is above this defined threshold should receive a target number of inspections of 1 or more;
- 3) the Agency may redistribute the target numbers of inspections defined per State, in case one state has an extraordinary amount of inspections on one operator.

Inspection target numbers on “layer 1” operators are updated by the Agency at least once a year, after consultation with the SWC Participating States.

The drawing below illustrates the system schematically:



Establishment of the national annual ramp inspection programme

Each SWC Participating State defines its annual ramp inspection programme on “layer 1” operators, based on the target numbers of inspections assigned by the Agency. Any request to change such inspection numbers (e.g. in case an operator ceases, increases or starts its operation to the State) needs to be documented and forwarded to EASA for update. In cases where the programme requests more than one inspection, these should as far as possible be evenly spread over the year, depending on the operator’s schedule, type of operation and cover as many aircraft types as possible.

The annual ramp inspection programmes defined by the SWC Participating States for “layer 1” operators should not exceed the allocated inspection targets, except for prioritised operators (identified as such in the list provided by the Agency as per ARO.RAMP.105(a)) or for safety reasons which should be documented.

Unexpected and unforeseen traffic may occasionally occur at the aerodrome(s) where and when the inspecting team is onsite. This kind of traffic might, in some cases, be more important to inspect from a flight safety perspective than the pre-planned





operators, and therefore, the ramp inspectors should have the flexibility to deviate from the plan and inspect those operators instead.

The list below is a non-exhaustive list of situations where the ramp inspectors might, and in some cases should, deviate from the plan in favour of valuable unforeseen inspections:

- identification of immediate aviation safety hazards which seriously threaten flight safety (potential CAT3 situation) or any other safety related information justifying an inspection;
- operators or aircraft suspected of non-compliance in accordance with the principles listed in AMC1 ARO.RAMP.100(b), including those listed on the priority list, as provided by the Agency as per ARO.RAMP.105(a);
- series of incidents or accidents on a certain operator with a suspected root cause that could be confirmed via a ramp inspection;
- third-country operators not holding a TCO WEB-INTERFACE authorisation identified by the EUROCONTROL alert system;
- operators identified by a safety report included in the ramp inspection tool and containing information that could be checked via a ramp inspection;
- operators identified by whistle blower information that could be checked via a ramp inspection; or
- “Layer 2” operators which were not inspected during the last 12 months in any of the Participating States.

Note: The national target number of inspections to be performed on prioritised “layer 1” operators and operators from prioritised States, should be reasonable and based on the national planning guidelines, in cases where such number is different to that assigned by the Agency.

Note: Ramp inspectors from a SWC Participating State should refrain from performing such unforeseen inspections on “layer 1” operators if it would result in exceeding the State’s target number per operator, unless justified by safety reasons clearly evidenced. These pieces of evidence should be well documented and recorded.

5.1.2 Annual programme on “layer 2” operators

SWC Participating States will not receive individual targets for “layer 2” operators, which are operators with traffic exposure below the defined threshold and/or for which no reliable data is available. Instead, a total planned number of inspections to be performed on “layer 2” operators is calculated and assigned by the Agency for each SWC Participating State. This target for “layer 2” operators is defined as a statistical assumption for the State without individual risk assessment or distribution of inspections.

Note: The SWC Participating States receive their individual total number of inspection targets for “layer 2” operators at the same time as the targets for “layer 1” operators.

The total planned number of inspections to be performed on “layer 2” operators, as defined by the SWC Participating State, should not be less but may exceed the number assigned by the Agency for this State.

5.1.3 Annual programme for alcohol testing

The Competent Authority (CA) should include alcohol tests as part of the annual ramp inspection programme and make use of the list provided by the Agency in accordance with ARO.RAMP.106.

CA should avoid planning ramp inspections consisting only of alcohol tests. However, whenever operational reasons or tight time constraints prevent completion of alcohol test during regular ramp inspections (e.g.: short turn-around), CA can programme ramp inspections with a stand-alone alcohol test. For operators including in layer 1 of System-Wide Coordination (SWC), stand-alone alcohol tests won’t be counted as ramp inspections within the framework of SWC. The number of stand-alone alcohol tests conducted for operational reasons should not exceed the SWC target number of inspections for layer 1 operators not included in the priority list for alcohol testing; for operator included in the priority list for alcohol testing the number of stand-alone alcohol tests may exceed the SWC target.





Example:

- if the target was two (and even if those two inspections were already performed but without alcohol tests), up to two additional stand-alone alcohol tests may be performed.
- If the target was zero and the operator is included in the priority list for alcohol testing, stand-alone alcohol test may be performed.

Stand-alone alcohol tests will be defined as ramp inspection strictly limited to alcohol test on crew members.

Further guidance can be found in [Chapter 10.3](#).

5.2 Annual ramp inspection programme for Non-SWC States

5.2.1 Principles to be followed

For those States, which are not, SWC Participating States, the following principles apply:

- the annual ramp inspection programme should be defined using risk and exposure based approach;
- the annual ramp inspection programme for the upcoming year should be sent to EASA latest by 1st of December;
- to avoid over-inspecting “layer 1” operators, the annual number of inspections on those operators should be kept to a minimum unless the operator or its State is prioritised and/or suspected of non-compliance. Inspections of “layer 1” operators should focus on aircraft types not previously inspected or operations different than those normally seen in Europe (e.g. short haul TCO web-interface or long-haul European operations);
- the selection should enable the widest possible sampling rate of the operator and aircraft types flying into its territory;
- no discrimination based on the nationality of the operators; and
- the annual number of landings should be considered when defining the planned number of inspections on each regular operator.

5.2.2 Use of the annual minimum number of inspections “I”

As an indication for the expected contribution from the States not taking part in the SWC, the following formula may be used to calculate the minimum number of inspections for the upcoming year:

$$I = (Opr \geq 50) + 0,2 * (Opr < 50) + \frac{Lnd}{2000}$$

where:

- I = minimum number of inspections;
- (Opr \geq 50) = number of operators¹ whose aircraft have landed at least 50 times in the previous 12 months at aerodromes in the territory of the State ;
- (Opr $<$ 50) = number of operators whose aircraft have landed less than 50 times in the previous 12 months at aerodromes in the territory of the State;
- (Lnd) = number of landings performed by those operators’ aircraft at aerodromes located in the State in the previous 12 months.

¹ third country operators or operators under the regulatory oversight of another Member State





5.3 Follow up Inspections

The need for follow-up inspections should be determined by the competent authority based on the results of an inspection and/or if the follow-up process indicates that corrective action(s) might have been ineffective.

Follow-up inspections could be foreseen to verify:

- implementation of corrective action(s);
- reoccurrence of non-compliance;
- maintenance or operational measures taken after an earlier ramp inspection which identified non-compliances or operations outside limits in breach of requirement; and
- information given by another State requesting follow-up inspection.

If a follow up inspection is required on a “layer 1” operator, but the State has already reached its target number for such operator, one of the following options should be considered:

- requesting another state to perform the follow up inspection (providing that State has enough inspections left to do so); or
- exchange an inspection with another State via the trading system, as defined in chapter 5.4.3.

5.4 Monitoring of the annual ramp inspection programme

5.4.1 Updates of the annual ramp inspection programme

Once defined, the annual ramp inspection programme should be regularly updated. These updates should be based on, but not limited to, operational information on the operators (ceasing of operation, start of new regular services, increase or decrease in traffic level...), updates of the priority list provided by the Agency as per ARO.RAMP.105(a), updates of the priority list provided by the Agency as per ARO.RAMP.106, and update of the assigned targets by the Agency and feedback from ramp inspections. In order to ensure that the annual ramp inspection programme is adequately implemented, the State should continuously monitor the programme and take appropriate actions with the aim of achieving the following (below list is non-exhaustive):

- the assigned numbers for “layer 1” operators (for SWC Participating States);
- the widest possible coverage of operators;
- proportionate distribution of inspections throughout the year;
- inspecting different aircraft types and types of operation;
- performing alcohol tests on flight crew and cabin crew according to a risk based approach; and
- avoiding over-/under-inspection.

A control mechanism that prevents over-inspection should be put in place, either through automation or via procedures, that includes the obligation to check annual plan and the ramp inspection tool during any inspection preparation phase.

Further guidance on alcohol testing procedures can be found in Chapter 10.3.

5.4.2 Updates on the target numbers of inspections assigned by EASA for the SWC Participating States

The target numbers of inspections on “layer 1” and “layer 2” operators are to be updated and communicated by the Agency to the SWC Participating States at least once a year. Any such update gives new range of possible target numbers of inspections on “layer 1” operators, giving the State an option to either update its objectives or to keep the previous ones. Here are examples of how to deal with such updates:

- Situation 1 on “layer 1” operator “YYY” for a SWC Participating State:
 - First target number of inspections: 4 inspections
 - Already performed inspections: 4 inspections





- Updated target number of inspections: 6 inspections
- New range of possible targets: 4 to 6 inspections
- Situation 2 on “layer 1” operator “ZZZ” for a SWC Participating State:
 - First target number of inspections: 2 inspections
 - Already performed inspections: 2 inspections
 - Updated target number of inspections: 0 inspections
 - New range of possible targets: 0 to 2 inspections

5.4.3 Trading System of Inspections on “layer 1” operators

In cases where a SWC Participating State is unable to fulfil its target number of inspections or needs an extra inspection on a particular “layer 1” operator, other States may be approached for exchange of such inspections. It is the State’s responsibility to keep track and records of any confirmed exchanges and to inform EASA about such exchange.

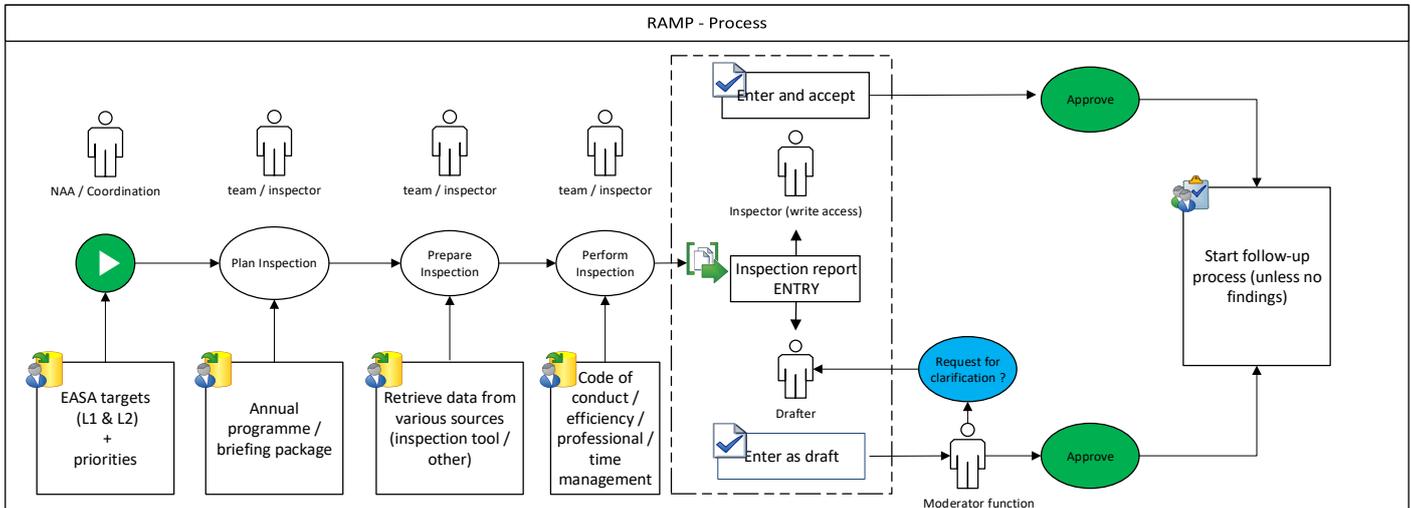
Trading of inspections may be helpful with training delivery when one State provides OJT to another. In cases where the trainer’s State does not have enough allocated numbers for the “layer 1” operators to deliver required OJT, the candidate’s State could offer to trade their inspection numbers for training.





6 Ramp inspection process

The drawing below visualises the ramp inspection process.



6.1 Planning/Preparation

6.1.1 Ramp inspection team composition

As a general rule, ramp inspections should be performed by two inspectors (may be more in special cases, such as inspection on “super wide body A/C”, short turn-arounds, etc.). Inspections performed by solo inspector should be limited to exceptional cases where only one inspector is available. The inspection team should have access to an un-disturbed place to plan, prepare, report and debrief confidentially after an inspection.

The involved ramp inspectors should distribute the tasks between them, especially in the case of limited inspection time and/or depending on the size of the aircraft, different type of operation (PAX/Freight/Combi) or other complexity of the aircraft.

Ramp inspections should be performed by appropriately qualified ramp inspectors. The visual inspection of the aircraft exterior, the inspection in the flight deck and the inspection of the passenger cabin and/or cargo compartments may be divided among the inspectors, according to their privileges. A team leader may be appointed who is also responsible for the debriefing with the crew and any decisions following the inspection.

6.1.2 Planning the actual inspection

The inspection team should make use of the annual ramp inspection programme, EASA regular reports and the inspection preparation module of the ramp inspection tool when selecting an operator to inspect prior to the mission. The following should be taken into account when selecting an operator or aircraft as inspection target (below list is non-exhaustive):

- check the annual ramp inspection programme to identify operators that are due for inspections, including or not alcohol test;
- look at previous follow-up actions on operators that could possibly be inspected;
- for SWC Participating States: check if the operator is “layer 1” or “layer 2”. If “layer 1”, ensure that the allocated target number allows for an inspection to be performed. If “layer 2”, follow the national planning guidelines;
- check the date of the last own inspection (preferably in the inspection tool by using the preparation module or other inspection queries) to ensure an even distribution as far as possible;
- check if there are operators or aircraft being suspected of non-compliance;
- check if there are operators with no inspections or a low number of inspections as per AMC1 ARO.RAMP.100(c);





- check if there are unique inspection opportunities, such as unusual types of operators, operations or aircraft not previously inspected; and
- check the time available for the ramp inspection.

In general, operators submit operating schedules twice per year, however there might be ‘last-minute changes’ to these schedules. Therefore, inspecting team members should ensure that they have the latest schedule update which could be obtained from various available sources (the operator, airport’s authorities, or ground-handling agents).

Most airports have a website displaying information on arrival and departure times of scheduled flights. Moreover, airports usually have a non-public system that covers all the traffic, it is advisable for inspectors/State to request access to such a system. When not available, information on special flights, such as cargo and unscheduled or private flights, may need to be specifically requested from airports. In addition, specific online applications for flight tracking may be helpful when checking the actual arrival information for most operators.

When using an airport’s flight information system, inspectors should bear in mind that code-share flights may appear which might give misleading information regarding the actual operator of the aircraft on the flight. Furthermore, in the event of a wet-lease, airport information systems and data provided by the slot co-ordinator is unlikely to indicate the actual operator. These data sources should be read in conjunction with flight plan data at the time of the inspection to ascertain the actual operator. This might help to avoid any unintentional over inspections of certain “layer 1” operators.

Furthermore, States may elect to choose who is making the decisions on which operators to inspect. For example, the NC and/or another office-based support staff may be more likely:

- to have access to the latest, and most complete, operational data; and
- to have more expertise and operator’s knowledge, than an inspector who is more likely to specialise in a technical discipline.

Liaison with various competent authority teams such as traffic rights/foreign carrier permits/ wet-leasing in by national operators may be of benefit while planning inspections, and Eurocontrol alert messages may also be useful as a short-term source of planning information.

Further guidance on alcohol test planning can be found in Chapter 10.3.

6.1.3 Preparation of the inspection

After having planned the inspection, ramp inspectors should check the operator in the ‘Inspection preparation’ module of the ramp inspection tool for previous ramp inspection(s) results and safety report(s). The inspection should be pre-planned with focus on safety relevant areas and specific areas where previous inspections results have revealed a weakness. In addition, in cases where previous inspections were incomplete, the remainder of the checklist items could be verified.

The following information sources are recommended to be considered during the inspection preparation phase, depending on the situation and time available (list is non-exhaustive):

- ramp Inspection tool (inspection preparation module);
- national annual ramp inspection programme;
- for EASA PS: TCO web interface;
- Eurocontrol information;
- manufacturer data and MMEL status;
- NOTAMS;
- weather information; and
- AIP, including revision status list of navigation charts.





Depending on the items to be inspected (as many as possible based on the time available), inspections may be performed on landing or on departure of the aircraft. The remaining fuel and cargo area (overloading, restraining, segregation, etc.) are examples of items that could be checked on landing, while flight preparation and storage of baggage in the cabin could be checked on departure.

In case of inspection on a delayed (late incoming) aircraft, the inspection team should be mindful not to jeopardise crew duty times.

As a good practice, the proof of inspection¹ form could be filled in with basic data (such as the registration of the aircraft, flight number or the verified name of the operator, etc.) prior to the inspection to save valuable inspection time for the inspectors and to minimise document and equipment checks during the inspection thus enabling more efficient use of inspection time.

If deemed appropriate, ramp inspectors may contact the operator's representative shortly before the planned inspection so that he or she is informed. Experience shows that the operator's representative may be helpful in providing support, especially in facilitating communication with the crew or the operator's home base.

Inspection teams have to be able to perform their inspection task on the ramp, therefore cooperation with security, ground handling, and all other officials involved in airport activities is paramount. When officials from different organisations (i.e. customs, security, Dangerous Goods inspectorate) have to work in cooperation during the inspection, a procedure on co-operation might need to be developed at a national level. States should provide inspectors with the respective credentials in order to ensure an unrestricted and unimpeded access in line with the applicable airport procedures.

The ramp inspection tool could and should, whenever possible, be used for the planning/preparation phase for "layer 1" and "layer 2" operators. Below is a list of items that might be checked in the TCO web-interface (if accessible) instead of during the inspection:

- approvals, such as AOC, TCO authorisation and ETOPS;
- certificates, such as Certificate of Airworthiness, registration and radio licence;
- aircraft data and equipment installed (versions), such as TCAS, GPWS, PBN, EDTO; and
- information on leasing arrangements.

6.2 Conduct of ramp inspections

6.2.1 Standards

For aircraft used by third-country operators, applicable requirements are the ICAO international standards. In case a finding is to be raised, the letter "I" should be indicated in the column "STD" of the POI.

The relevant EU requirements apply to aircraft used by operators under the regulatory oversight of another Member State. Also for non-EU operators, some E standards may be applicable. In case a finding is to be raised, the letter "E" should be indicated in the column "STD" of the POI.

Manufacturers' standards "M" could be used for evaluating damages. Evaluation should not be done by the inspectors themselves but by the operator's authorised staff.

Note: For fasteners and bonding wires findings, the letter "M" should be indicated in the column "STD". For Category 1 and 2 findings on fasteners or bonding wires, no reference to any manufacturer data is required in the field "custom standard reference" in the ramp inspection tool, whereas category 3 findings require such a reference in this field.

Published national standards (e.g. Aeronautical Information Publications - AIPs) that are declared applicable to all operators flying to that State should be checked. Deviations from national standards should be reported as findings only if they have an influence

¹ POI instructions and form to be found in Appendix 9.3





on safety. For such findings, the report should indicate the letter “N” in the column “STD”. Any other deviation from national standards, which does not have an influence on safety (e.g. insurance certificate in USD instead of local currency), should be recorded as a general remark. States should develop guidance for the use of their inspectors on the enforcement of national standards.

The Chicago convention warrants a level playing field for all operators which are ICAO compliant, as it allows for international flights for such compliant operators. If an operator is sub-ICAO standards, it should not participate in International Aviation “except with the permission of the State or States whose territory is entered”. In cases where there is an implicit mutual acceptance between two Contracting States on a certain sub-ICAO Standard, one could consider that the operation is meeting the requirements of Article 40 of the Convention and therefore is ICAO compliant. In addition to the mutual acceptance by the two States, the sub-ICAO Standard might also require the acceptance of any overflown State (depending on the concerned Standard, like e.g. in the case of the ACAS II standard). Where such acceptance is in place involving one of the States participating in the EU Ramp Inspection Programme, such State is not required to raise a finding on the accepted non-compliance, provided that a general remark is entered into the ramp inspection report specifying the details.

6.2.2 Code of conduct

Reference: AMC1 ARO.RAMP.125(b)

Inspectors should identify themselves to the pilot-in-command/commander of the aircraft or, in his/her absence, to a member of the flight crew, or to the most senior representative of the operator prior to commencing the on-board part of their ramp inspection. When it is not possible to inform any representative of the operator, or when there is no such representative presents in or near the aircraft, the general principle should be not to start a ramp inspection until such representative is available. However, in such cases the exterior inspection of the aircraft may be performed prior to the representative arriving at the aircraft. In special circumstances, where there is a severe suspicion of not being compliant with the applicable requirements, it may be decided to perform a ramp inspection, but this should be limited to a visual check of the aircraft exterior. Inspection data may be obtained through the A/C tail number and flight information from the airport traffic department.

Inspectors should show tact and diplomacy when performing a ramp inspection. A certain amount of inconvenience to flight and cabin crews, handling agents and other personnel involved in ground handling activities may arise but inspectors should try to reduce it to the minimum, for example:

- try to be as precise as possible when asking for A/C documents from flight crew. This should result in a minimum of discussion time allowing the flight crew to deal with their primary task of flight preparation;
- debrief the commander of the aircraft, or in his/her absence the operator’s representative, after the inspection task is completed;
- inform (where applicable) cargo loading staff of possible hindrance due to inspection task in cargo compartment;
- ask the senior cabin crew member to assign a crew member to assist the inspection team with their inspection tasks;
- when carrying out inspections on the flight deck, the flight crew should be allowed to give priority to staff directly involved in the flight preparation (e.g. fuel master, technician, load-planning agent, handling agent passenger information, etc.);
- where possible, A/C documentation and other relevant documents should be reviewed in the cabin to enable the flight crew to perform their normal duties with minimal disturbance;
- in cases where a document is only available on the EFB (e.g. operations manual, MEL, technical logbook, operational flight plan, mass and balance calculation etc.) the operator should be asked to assist ramp inspectors to prevent any unforeseen delay; and
- when alcohol tests are planned to be performed chapter 10.3 should be considered for guidance.





In particular when alcohol tests are performed, ramp inspectors should:

- keep the tested crew member informed using an appropriate briefing;
- maintain the privacy of the alcohol test results that will only be communicated to the tested crew member and to relevant competent authorities via an appropriate means; and
- ensure an alcohol testing environment as discreet as possible with no visibility on the procedure for outsiders.

Any unnecessary contact with passengers should be avoided and the inspection should not interfere with the normal boarding/dis-embarking procedures. However, inspecting certain elements in the cabin may be justified, such as:

- excessive overweight in overhead luggage bins;
- baggage in front of emergency exit;
- baggage stowed in lavatory;
- cabin luggage under the seat;
- infants/children over the minimum age determined by the State of Operator should have their own seat;
- distribution of infant life vests where applicable;
- allocation of passengers in the cabin, compared to the load sheet data;
- sufficient number of seats;
- observing the boarding process during normal operations and/or during refuelling in progress; or
- attempt to establish the commercial nature of a flight, which is suspected to be performed illegally (e.g. transport of passengers on cargo only flight) to collect evidence for illegal commercial operations (e.g. ask for ticket / booking modalities).

A delay of the flight might be justified for safety reasons, such as whenever non-compliances are detected and either need a corrective action before departure, or need proper identification/assessment by the operator, for example, if:

- tyres appear to be worn beyond the limits;
- oil leakage is to be checked against the applicable AMM to determine the actual limit;
- a flight crew member cannot produce a valid licence. Clarification is to be sought from the operator and/or NAA to confirm that the flight crew member has a valid licence by requesting, for instance, a copy of the licence to be sent to the inspectors for verification;
- relevant flight operational data are missing (e.g. missing or incorrect performance calculation, incorrect operational flight plan, incorrect weight and balance calculation); or
- damages, being assessed as having a Major influence on flight safety, are identified.

6.2.3 Difficulties in performing an inspection

In cases of uncooperative crew or refusal to be inspected without a valid reason, the competent authority should consider preventing the A/C from departing (provided that the national legislative framework allows for this). This should be regarded as a refusal to grant access as per ORO.GEN.140 for EU operator and in accordance with TCO.115 of Commission Regulation (EU) n°452/2014 in the case of a third-country operator. In any such case, the competent authority must as soon as possible inform the operator's competent authority. A safety report could be raised to inform the Participating States.

Valid reasons to allow the departure of the operator without performing an inspection might be as follows, unless the inspection team has clear safety concern:

- A/C is close to departure (passengers on board); or
- emergency medical flight (outbound).





6.2.4 Difficulties in performing an alcohol test

If the reasons for refusal are considered as unacceptable and the crew member is not cooperative then the refusal should be considered as a positive test; it should be regarded as a refusal to grant access in accordance with ORO.GEN.140 for EU operator and in accordance with TCO.115 of Commission Regulation (EU) n°452/2014 in the case of a third-country operator. A grounding as defined in paragraph 6.4.6 might be appropriate in case of suspicion of alcohol consumption by flight crew or cabin crew members while having the intention to perform duties.

Further guidance can be found in chapter 10.3

6.2.5 Inspection methodology

Ramp inspections should start as soon as practicable, e.g.: at the moment the aircraft is safely on blocks, engines are shut-down and anti-collision light turned off. Inspections may also take place after a prolonged stop (day or night) with access to the outbound flight crew, or in case the flight will stay for a long stop with access to the inbound flight crew. One inspector should start the walk-around, while the other one awaits the earliest opportunity to start the inspection at the aircraft's entrance. The team should notify the operator's representative or identify itself to the commander as soon as possible. However, an inspection may not be commenced inside without any crew member available unless receiving specific approval from the operator (any authorised operator's staff member).

The inspectors should pay attention to time management and be always aware of the time available they have for the conduct of the inspection to avoid any delay. Best practice is to maintain direct communication with the crew. The inspection of a late incoming aircraft with a short turnaround time should focus on the obvious safety concerns and safety critical elements instead of covering all items. The inspection should be ended within the planned turnaround time if no deficiencies are detected to avoid undue disturbances.

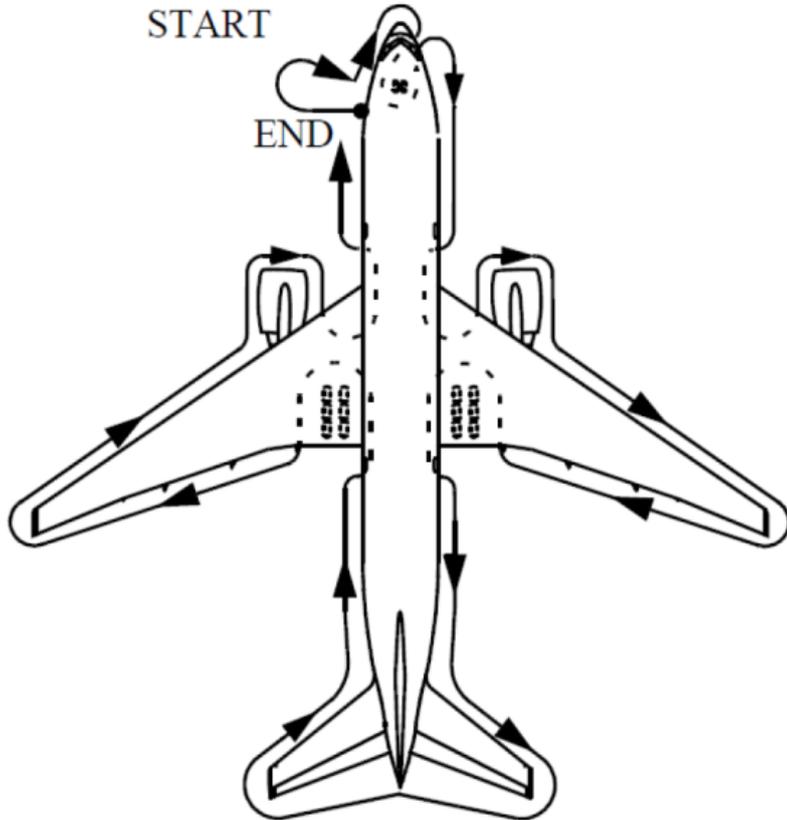
Any aircraft inspection should not exceed the normally prescribed depth for a walk-a-round inspection. Inspection tools like cameras are only for collecting evidence. Opening of access panels and wheel well bay doors are not allowed, unless it becomes necessary for the use of tracing the source of a leakage, but only after consulting and with the assistance of the crew.

If no defects are detected, a normal walk-around inspection is depicted below and should typically, for narrow body aircraft, take no more than 10-15 minutes and, for larger wide bodies, between 20-25 minutes max, excluding the inspection of the cargo compartments/area.





Inspection Route



Ramp inspectors should try to inspect as many ramp checklist items as possible without endangering the departure time of the operator enabling debriefing and addressing of possible findings within the turnaround time.

The ramp inspection checklist contains 53 items. Of these, 24 relate to operational requirements (A-items) to be checked on the flight crew compartment, 14 items address safety and cabin items (B-items), 11 items are concerning the aircraft condition (C-items) and 3 items (D-items) are related to the inspection of cargo (including dangerous goods) and the cargo compartment. In case of any general inspection items not addressed by the other items of the checklist, they may be administered by the E-item (General) of the checklist.

When circumstances (time, manpower, etc.) prevent inspection of all checklist items, inspectors should try to inspect those elements which, according to the inspectors' preparation and experience, are likely to be more safety critical depending on the particularities of the inspected flight. For this purpose, the following should be taken into account:

- certain elements are less safety critical, and should, therefore, be given lower priority (e.g., a noise certificate has far less influence on safety than incorrectly completed mass and balance documentation, or incorrect calculation);
- differences in aircraft configuration. Furthermore, for a cargo configuration the securing of the cargo and the segregation of dangerous goods is considered safety critical;
- previous ramp inspection results: if serious and/or recurrent findings were raised during previous inspections such as on the Minimum Equipment List (MEL), such items might deserve higher attention compared to items on which no non-compliances were reported during the previous inspections; and





- type and age of the aircraft: some aircraft types are known to have issues with e.g. leakages or missing screws, therefore, the age of the aircraft should also be taken into consideration.

In any case, the inspected elements need to be inspected sufficiently in-depth. e.g. just looking if an MEL is on the flight deck is not sufficient, look for proper customisation before ticking the A07 box; when O₂ masks are checked, ask also for a test of the boom/mask microphone; while looking at the checklists for revision date/nbr, compare this with the version marked in the operations manual; etc.

Attachment 10.2 gives an example of a detailed “dirty finger print” (DFP) checklist to allow for a convenient recording of findings and remarks. The DFP checklist is available as downloadable PDF from the SINAPSE website in the SAFA library of documents.

The following principles should be considered during an inspection:

- inspections of aircraft arriving late, with a significant reduction of the turnaround time which endangers the planned departure time and/or slots. As a general principle, the focus should be to inspect the safety critical elements, unless inspectors or States have safety related information that needs further verification on this particular flight;
- one of the inspectors should try to gain entrance to the flight deck and introduce himself/herself to the team, briefly explaining the purpose of the inspection. Depending on the situation, the team might need to wait for the passengers to disembark or, if needed, board the aircraft before disembarkation. In all situations, the ramp inspectors should remain professional, diplomatic and friendly;
- the team should have previously defined how the information exchange between the outside and inside inspection will take place;
- after the introduction to the commander, ramp inspectors should always ask for the scheduled departure time / slot time / EOBT (estimated off block time);
- the ramp inspection team members should be made aware of the available time in order to not hinder any crew duties (or at least to avoid reducing the time left for the crew to perform their tasks);
- unless there is a suspicion, ramp inspectors do not necessarily have to inspect each checklist item to the fullest (e.g. all life jackets), a sampling may be sufficient;
- inspectors should not open panels, remove items for inspection, but always request the crew for assistance. Furthermore, no special tools should be used other than mirrors or flashlights;
- when inspection items are checked, they should be done to the greatest possible depth taking into consideration that many checklist items have sub-items, just inspecting e.g. the A03 Equipment item, the sub-items like TAWS / E-GPWS, TCAS / ACASII, PBN, etc. try to be as comprehensive as possible;
- some spare time should be kept to allow an internal debriefing on each inspector’s observations;
- any non-compliance with the applicable requirements detected during the inspection should be reported on the POI as a finding. The findings should be clearly and unambiguously written down;
- sufficient time should be kept at the end of the inspection for a debriefing on the POI. In particular, the operator should be reminded of its obligation to assess and take corrective action on any findings with a potential to become an aviation safety hazard; and
- the team should leave the aircraft as soon as their presence is no longer needed for the inspection, in order not to disturb the crew since the crew needs dedicated time (~8-10 minutes) for the start of the next flight.

Ramp inspectors should be aware of the main differences between SAFA and SACA inspections. For example, ramp inspectors should know that ICAO SARPs do not require to have NOTAM on board but require the flight crew to be aware of the particulars of those relevant for the flight while EASA regulation requires the NOTAM to be carried on board (electronic versions are allowed).

6.2.6 Alcohol testing methodology

Alcohol tests should be carried out only on flight crew and cabin crew assigned with safety duty and in adequate locations to ensure a private environment. Ramp inspectors should not prevent crew members being tested to ask a witness to assist the test.

Alcohol test should be preferably carried out at the beginning of the ramp inspection.

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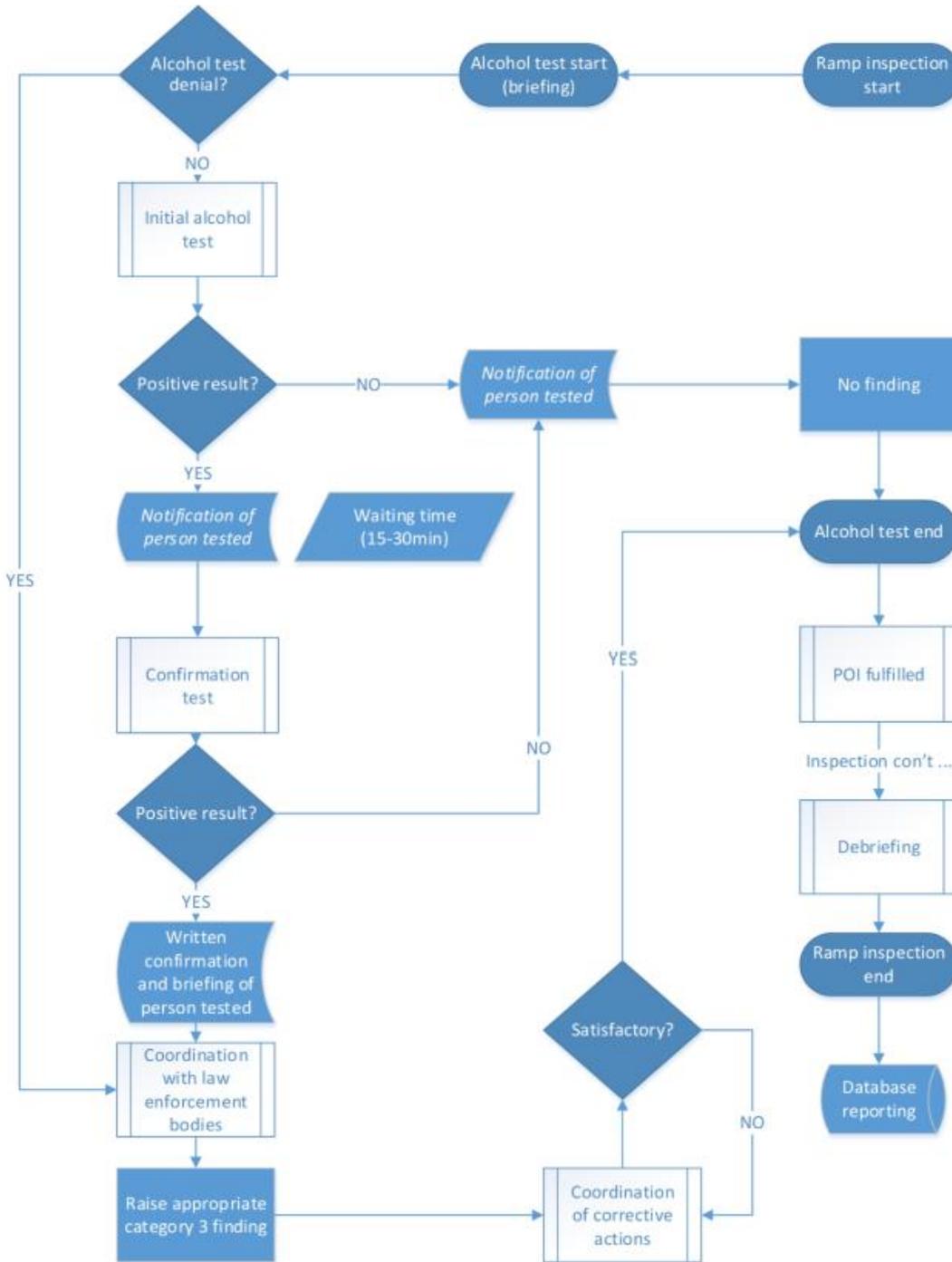
A test result is considered negative when the breath alcohol concentration (BrAC), measured by a breath alcohol tester is lower or equal to the equivalent level of 0.2 grams of blood alcohol concentration (BAC) per liter of blood or the national statutory limit, whichever is the lower.

A test result is considered positive when the breath alcohol concentration (BrAC), measured by a breath alcohol tester is higher than the equivalent the equivalent level of 0.2 grams of blood alcohol concentration (BAC) per liter of blood or the national statutory limit, whichever is the lower.

The alcohol test consists of an initial test followed by a confirmation test whenever the initial test result was positive. A CAT 3 finding should be raised when the initial and confirmation test results are both positive. A waiting time of minimum 15 min should be observed between the initial and the confirmation test; during this time the crew is still on duty but ramp inspectors should observe that the crew member does not eat or drink or ingest something into her/his mouth, in order to prevent residual alcohol in the mouth affecting the result of the confirmation test. A lack of cooperation during the waiting time preventing the performance of the confirmation test should be regarded as a positive result.

Alcohol test procedures are summarised in a flowchart hereunder.





Further guidance on the alcohol testing methodology can be found in chapter 10.3





6.3 Findings

6.3.1 General

Before findings can be categorised, a pre-assessment of the encountered situation should be made, based on the knowledge and experience of the inspector. Ramp inspectors may only allocate a proper category to the finding if the extent of the non-compliance is clear. Ramp inspectors should not raise any category 3 finding with the only intent to perform a further investigation/assessment.

Ramp inspectors should not raise finding with the only intent to have a follow-up of the finding or remark. Findings or remarks made should not be raised to a higher category just for the reason of creating an easier follow-up process.

As a general principle, a double penalty should be avoided. Only one finding should be raised to address multiple non-compliances if these non-compliances have the same probable root cause and relate to the same system or the same procedure. E.g.: In case a re-fuelling with passenger on board is started without 2-way communication, and there is no personal staffing at the exits, the result should be one finding only (but in the details of the finding, the actual situation should be described).

When a non-compliance with the applicable requirements is identified, ramp inspectors should be certain that the finding is applicable to the specific circumstances of the inbound and/or outbound flight e.g.; for third-country operators, no independent portable lights on board is a finding, but only during night-flight operations; similarly, an insufficient number of life-vests on-board, but only if the flight is overwater on a distance greater than 50 NM from the shore or when taking off or landing at an aerodrome where the take-off or approach path is so disposed over water that there would be a likelihood of a ditching. Also, there are differences between CAT and GA operations).

The applicable operational requirements are the ones appropriate for the type of operation. In particular, the operation of an aircraft listed on an operator's AOC should not be inspected against commercial air transport requirements if the purpose of the flight is not the transport of passengers, cargo or mail for remuneration. However, the inspectors should check if the conducted operation is reflected in the operations manual. Where the operations manual establishes more restrictive requirements compared to the applicable ones, a non-compliance with an operator's requirements should be reported pending the applicable requirements.

Non-compliance regarding missing fasteners or bonding wires should be assessed and categorised in accordance with the established Matrix in INSPECTION INSTRUCTIONS AND PRE-DESCRIBED FINDINGS (appendix 9.1). Findings which are assessed as being Major (category 3) should be debriefed soonest to the operator. This "early" pre-debriefing should include an instruction to proceed in accordance with their approved procedures and report in technical logbook system or equivalent immediately. The flowchart in 6.3.3 "technical defects" gives further guidance to procedures in use for missing fasteners and bonding wires. Findings assessed as category 1 or 2 should be included in the normal debriefing without additional requirements for the operator at the time of inspection.

A specific remark should be made for helicopter operation: the influence on safety for missing fasteners is not the same for aeroplane or helicopter. There are higher vibrations on helicopters than on aeroplanes. Therefore, the impact on the panel, not correctly fixed by all its fasteners is different on helicopters compared to aeroplanes. Similarly, the impact of a loose object on helicopters is not the same as on aeroplanes since the damage of a loose object on the rotor blades could be dramatic whereas for aeroplanes the risk is more limited to injuries of the overflown population. As the matrix was developed for the inspection of aeroplanes it is advised not to make use of it for helicopters.

Similar to the missing fasteners above, numerous findings raised on markings and placards were often categorised differently. In order to harmonise and standardise these findings, a dedicated reference table on markings and placards has been introduced. In this table a clear description of type of placards and markings is given by location and designation, thereby assisting the ramp inspectors to correctly categorise their findings. This table is placed in appendix 9.1 directly behind the matrix on fasteners and bonding wires.





All findings should be substantiated by evidence; these should be uploaded into the ramp inspection tool under the tab of the respective finding. Elements of supporting evidence could be any of the following:

- picture(s) of the deficiency itself (detailed and clear);
- pictures of the manufacturer references used to assess the technical defects, if available to the inspector;
- documents received via email;
- pictures or copy of the technical logbook entries performed; or
- pictures from operator's manuals (MEL, OMs., licences, AOCs, etc.).

Such documents or records could be very useful in the follow-up phases of the ramp inspection either to explain in detail and illustrate detected findings or to be able to exchange appropriate documented evidence when findings are challenged. Please take care that pieces of evidence are uploaded in the ramp inspection tool under the correct **finding and as a finding attachment and not as a "report attachment"**. The option to upload the document as **report** attachment should be avoided except to provide attachment not related to a finding e.g.: a copy of the actual Pol, or a picture of the inspected aircraft, or any other inspection general item/issue.

Whenever a licence or a certificate is not carried on board (including AOC and OPS Specs), it may become clear that the influence on safety is less than initially foreseen after receiving a copy of a missing licence or certificate before departure. In this case, a category 1 finding should be raised and the relevant pre-described findings (PDFs) should be used regarding certificates and licenses not carried on board at the time of the inspection. If evidence is not provided before departure, a higher category of finding should be raised (for a missing certificate of registration or radio station license, the appropriate category 2 PDF should be used; for all other cases, the relevant category 3 PDF should be used). Under no circumstances should a flight crew member be permitted to perform flying duties without receiving confirmation that he/she has been issued an appropriate and valid licence.

Although not classified as a non-compliance, any relevant safety issues identified during ramp inspections should be reported as a general remark (category G) under each inspection item. For example:

- insufficient number of life jackets/flotation devices, however the flight was/will be over land;
- during a SAFA inspection: some flashlights not working, but only daytime flight; and
- minor defects without safety influence, but considered as relevant information.

Note: General remarks do not require any follow-up action, either from the inspection authority or for the operator/relevant competent authority.

Note: Any State may file a difference with ICAO as per ICAO Article 38 "NOTIFICATION OF DIFFERENCES". However, whether such filed differences are accepted or not is down to the individual Contracting State and should be taken into account during the follow-up process.

6.3.2 General instructions on findings

The INSPECTION INSTRUCTIONS AND PRE-DESCRIBED FINDINGS list located in Appendix 9.1 include the description, categorisation and reference to the applicable requirement.

- Findings on arrival flights being identical to the findings raised for departure flights should lead to the same categorisation, although the corrective action might not be possible when the flight has been completed. For example, an incorrect mass and balance sheet (outside operational limits) found on arrival should be categorised as a category 3. Obviously, this cannot be corrected; however, the appropriate class 3 action could be to confirm that the mass and balance calculations are within operational limits for the outbound flight.





- No finding should be raised if relevant flight preparation documents (e.g. mass and balance calculation, operational flight plan) are stored in an approved electronically system (EFB), sent by ACARS and therefore no longer accessible / reproduced by the crew at the time of inspection. In any case, ramp inspectors could inspect the outbound flight preparation in detail (including the procedure of the electronic storage).
- In exceptional cases, where multiple findings are inter-related and the influence on safety is higher, the category of such findings may be increased to reflect the influence on safety. The increase in category should be explained in the detailed description of the finding.
- By design, the finding category has been established for each PDF. Whenever for a very specific reason a PDF needs to be down- or upgraded, a UDF finding should be created copying the text of the PDF but with the alternative categorisation. In these cases, always add the specifics of the situation justifying the different category in the detailed description of the finding, and/or in the additional information of the report itself. Whenever this particular situation becomes more frequent requiring an amendment of existing PDFs or the creation of new PDFs, inform EASA accordingly.
- UDFs should be used only whenever there is no clear descriptive PDF available, the situation needs to be decided on a case by case basis.

6.3.2.1 Special cases / examples

- **Power cable metal hook;** in several cases, the power cable has a strap and hook to relief the weight of the cable to the A/C power recess panel. Usually, there is an attachment point in or near the A/C power inlet where the hook should be connected. However, such connection is not always there and ground handlers may just simply hook the cable in the recessed area of the power inlet, possibly causing scratches and damaging the structure particularly when a metal hook is used. Ramp inspectors should be careful to raise findings only when clear evidence of damage is visible and raise the finding in accordance with the flowchart for the assessment of technical defects. No finding should be raised if the cable is hooked to the structure without damaging it, a general remark may be raised instead.
- **High-speed tape;** in many cases, high-speed tape may be applied on the aircraft without detailed information recorded in the technical logbook; in such case, a CAT 2 finding is appropriate. When the high-speed tape is applied in such a way that it may have a detrimental effect on the safe conduct of the flight or the aircraft airworthiness, ramp inspectors should request the operator to assess the situation before categorising the finding. Speed tape applied without being detailed in the technical logbook may be:
 - grouped under one finding, if they can be linked to the same issue and have no major influence on the flight safety (e.g.: speed tape covering corrosion applied on several panels);
 - discarded if the operator provides proof during the follow-up that the relevant defect was managed and didn't affect in any way the conduct of the flight or the airworthiness of the A/C; or
 - upgraded to category 3 if they are related to a maintenance action not performed according to the manual (e.g.: missing screw hidden, ...).

Note: If the speed tape repair is recorded in the tech log then it is not a finding. Notwithstanding, when ramp inspectors have valid reasons to assume it is an improper repair, further assessments may be requested through the crew.

- **Paint damages including exposed composites;** in almost all cases this type of damages (e.g.: Loss of colours coating/ paint ...) will be tackled by the approved maintenance programme (AMP) during normal maintenance checks. Clear and large exposed composite area without damage should be brought to the attention of the crew for their (operator/maintenance) assessment, this assessment may be received during the follow-up process, and it should be reported as a CAT 2 finding under A23 item. A damage to the underlying composite structure should be raised as a CAT 3 finding when outside limits (e.g.: Loss of resin and physical exposure of individual fibres ...) Note: Fairly large exposed composites on secondary structure are usually allowable.
- **Static pressure port;** where some kind of visual damage or contamination is noticed, inspectors should differentiate between damage or blockage of the port and contamination of the static port area like dirt or glue residue. In the latter cases, no relation could be found between contaminated static pressure port and aircraft incidents/accidents. To address





contaminated static pressure port, ramp inspectors should make use of a UDF and take into account the before mentioned limited impact. In the case of a damaged or blocked static pressure port a category 3 finding is justified.

- **cargo door open/locked indicator (green) light;** often this light is found to be u/s, as the light itself poses no safety hazard to the flight, a category 1 for raising the issue to the operator should be sufficient.
- **Cargo height limit exceedance;** in many cases during the opening of the cargo compartment, findings category 3 are raised for height exceedance by just 1 or 2 suitcases sticking out just slightly above the limit. Ramp inspectors should only raise findings if those pieces of luggage are blocking firefighting equipment or sensors or have caused damage to the ceiling panels. If the height limit is exceeded by one or several items in the cargo compartment without damaging the cargo ceiling panels, blow-out panels or hindering the proper function of smoke detectors and/or fire extinguishing equipment ramp inspectors can raise the proper CAT 1 finding.
- **Passenger hand luggage relocated in cargo compartment with DG inside (Lithium batteries);** The TI of ICAO doc 9284 requires that baggage intended to be carried in the cabin that is relocated to the cargo compartment must only contain dangerous goods permitted in checked baggage. When baggage intended as carry-on is taken by the operator and placed into the cargo compartment for carriage, the operator must confirm with the passenger that dangerous goods which are only permitted in carry-on baggage have been removed. During a ramp inspection where there is suspicion of cabin luggage being diverted to the cargo hold with DG (lithium battery) inside, ramp inspectors should check which procedure or risk assessment was done to mitigate potential fire hazards. This procedure should be found in the operations manual or should be explained by the crew.
- **For inspections where the aircraft shows sign of corrosion;** an analysis on the ever increasing numbers of findings on corrosion has a negative impact on the safety rating of operators and does not constitute any contribution to the actual safety relevance on the flight. Over the years many aircraft parts where corrosion has been observed (e.g.: screws, fasteners, panels, landing gear, etc.) and subsequently mentioned as finding in a RI report, are not having any significant influence on the safe operation of the flight and will be dealt with by the regular maintenance programme of the operator. Even significant corrosion is not considered to have a short-term influence on safety and should be mentioned as CAT 1 finding (e.g.: landing gear struts indicating clear signs of corrosion, gear door(s) showing large exposed areas of bare metal with corrosion, etc.). Whenever ramp inspectors observe major corrosion (e.g.: flaking delamination of stringers, extreme pit corrosion on major structural parts, clear signs of inter-crystalline corrosion cracks, etc.) this needs proper assessment and should be raised as a CAT 3 finding when found to be outside dispatch limits/conditions; however, such situations would be found only exceptionally.
- **Portable oxygen bottles;** portable oxygen bottles may have more than one outlet, in such case the mask(s) belonging should have the same adaptor(s). Note that masks for passenger/crew/medical could have different connectors.
- **On item A04 (Manuals), A05 (checklist) and A07 (MEL)** a special note for the attention of the inspectors:
Note: If a MEL/operations manual/checklist problem was already identified during a previous ramp inspection and if the following 4 conditions are fulfilled, only a CAT G remark should be raised:
 - *The finding was identified less than 3 months ago;*
 - *A corrective action plan has been proposed by the operator in the follow-up process of the finding;*
 - *The problem is still the same; and*
 - *The problem doesn't have a major influence on safety (i.e. the finding was not a CAT 3 finding).*
- **On item B06 Underseat baggage restraining bar**
When a baggage restraining bar is found broken under a seat, ramp inspector should assess it as any other technical defect (i.e.: make use of the flowcharts for technical defect assessment) and raise the CAT 3 PDF details "Below seat restraint bar unserviceable" only when there is a clear impact on safety such as a risk to impede the emergency exit





path or a high number of damaged restraint bar. In many situations a single damaged or broken restraint bar may be regarded as having minor or no impact on the safety and a CAT 1 PDF or a CAT G remark may be raised.

- **On item B13 for carriage of live animals in the passenger compartment:**

If the inspector has the evidence that a live animal is transported in the passenger cabin, the inspector should verify the operator's methods and procedures how the animal is adequately secured to ensure that the flight safety would not be affected by the animal, this applies to pets and guide dogs in the same manner.

- EASA has defined for European CAT airplane operation, that according AMC2 CAT.OP.MPA.160 a mix of passengers and live animals should only be allowed for pets weighing not more than 8 kg except for guide dogs.
- For European CAT operators an AltMoc might be appropriate to deviate from the described limitations.
- For any other type of operation nor ICAO or EASA has set limiting requirements for this matter so far, that means life animal transportation in the passenger cabin is allowed for animals also weighing more than 8 kg.

During the inspection: If a live animal is transported in the passenger cabin, the inspector should consult the corresponding operations manuals/procedures for the adequate, secured stowage and capable restrain methods. If no procedure is described in the operator's manuals, A finding should be raised under item A04 to indicate the missing procedure in respect of safe transportation of a live animal in passenger cabin.

Additionally, the inspector should verify that adequate provisions are available to ensure safe transportation of the animal in the passenger cabin.

In the evident case of an unsecured live animal in the passenger cabin, a CAT 3 PDF may be considered appropriate to describe the situation accurately.

6.3.3 Technical defects

An aircraft begins to 'age' after its first flight, and various effects of ageing begin to occur almost immediately, which is considered as normal "wear and tear". This "ageing" phase is considered a part of the normal lifecycle and the applicable approved maintenance programme will cover the normal deterioration of an aircraft. Ramp inspectors should not raise findings relating to the normal wear and tear, as long as such technical defects are properly managed by the operator, at most a general remark for the attention of the crew. Without jeopardising the overall safety of the aircraft, it is the special care dedicated during the development of the MPD and subsequent AMP that allows for the identification of such "failures" within acceptable time frames (maintenance schedules). This is very much true by considering the increasing deepness of the different inspection types (minimum level for the pre-flight, maximum level for the D check). Pre-flight inspection is intended to provide a very general assessment of the airworthiness status of the aircraft (are wings, tail and control surfaces in place and free from evident damages – also when checked at night while raining or snowing -, are air intakes unobstructed, are engines and landing gear in apparently good shape, etc.) and is not expected to identify deficiencies which would require a much more accurate inspection also supported by dedicated documentation (AMM, CMM, SRM, etc.). Therefore, the use of those maintenance data should be limited to very specific cases and not be the normal practice during ramp inspections. It is also interesting to consider that during the pre-flight inspection only a portion of the entire aircraft is clearly visible, many areas should remain uninspected.

The flowchart in figure 1 gives an overview on the assessment of technical deficiencies.

With regards to non-compliances on missing fasteners and bonding wires, findings should be raised in accordance with the assessment matrix found in INSPECTION INSTRUCTIONS AND PRE-DESCRIBED FINDINGS in appendix 9.1 of this manual. The flowchart in figure 2 gives a detailed overview of the process and procedures to follow when non-compliances regarding missing fasteners and bonding wires are detected.





Definition of an airworthiness finding:

A technical defect is considered to be any material fault pertaining to the aircraft, its systems or components:

- Minor defects are typically with minor influence on safety and should therefore be brought to the attention of the operator using a category 1 finding.
- Significant defects are those defects, which are potentially out of limits and a further assessment may be needed to determine if the significant defect is within or outside the applicable limits. These defects should be recorded as category 2 findings.
- Major defects are those defects which are out of limits. A category 3 finding against manufacturer standards should always be demonstrated in relation to the operator’s aircraft technical documentation such as: Aircraft Maintenance Manual (AMM), Structural Repair Manual (SRM), Configuration Deviation List (CDL), Wiring Diagram Manual (WDM), Standard Wiring Practices Manual (SWPM), etc., and MEL references. In the absence of clear manufacturer standards, inspectors should only raise findings if their expert judgement (possibly supported by licensed maintenance personnel) is such that similar circumstances on comparable aircraft would be considered to be out of limits.

In exceptional cases, a single fault may give rise to more than one finding under different inspection items, for example: a tyre worn beyond limits whilst the pilot-in-command refuses to enter the defect in the Technical Log (or equivalent) would trigger raising findings under both C04 and A23 (more details under the inspection procedure).

Any defect needs to be recorded and documented in the operator’s log system, however such a system does not need to be carried on board of the aircraft, but it should be available if required.

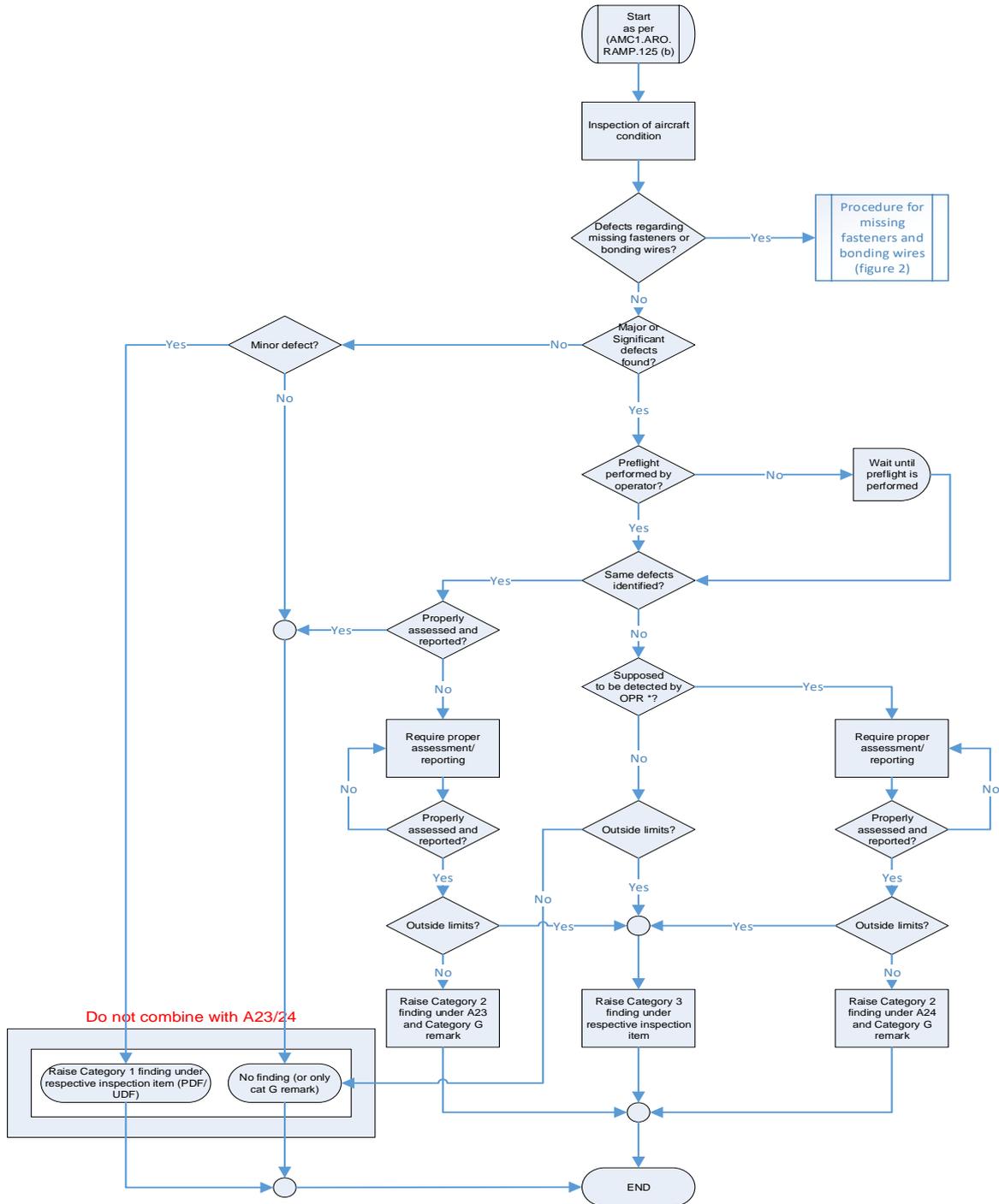
Significant defects might have appeared during the inbound flight. In such cases, ramp inspectors should not raise a finding before the operator has performed its pre-flight inspection for the outbound flight.

Manufacturer’s data often contains limits on certain defects. This data is normally to be used during line and scheduled maintenance. It is generally accepted that, in between scheduled maintenance, defects that are beyond those manufacturer’s limit might appear. Ramp inspectors should only request the operator to assess damages, that are deemed to have a significant or major influence on flight safety, towards manufacturer’s standard limits, and appropriately report them in the technical log system or equivalent. However, where the manufacturer has specified dispatch limits, and the defect is beyond the dispatch limits, a category 3 finding should be raised except for the case of loose/missing fasteners and bonding wires.

A “defect within limits but not detected or not recorded” should not be considered as a technical non-compliance. If the technical non-compliance appears to be within limits, the safety focus changes from the defect itself to the non-compliance not being detected/assessed/recorded by the operator and should be recorded under item A23 or A24.

Figure 1, Flowchart of assessment of technical defects



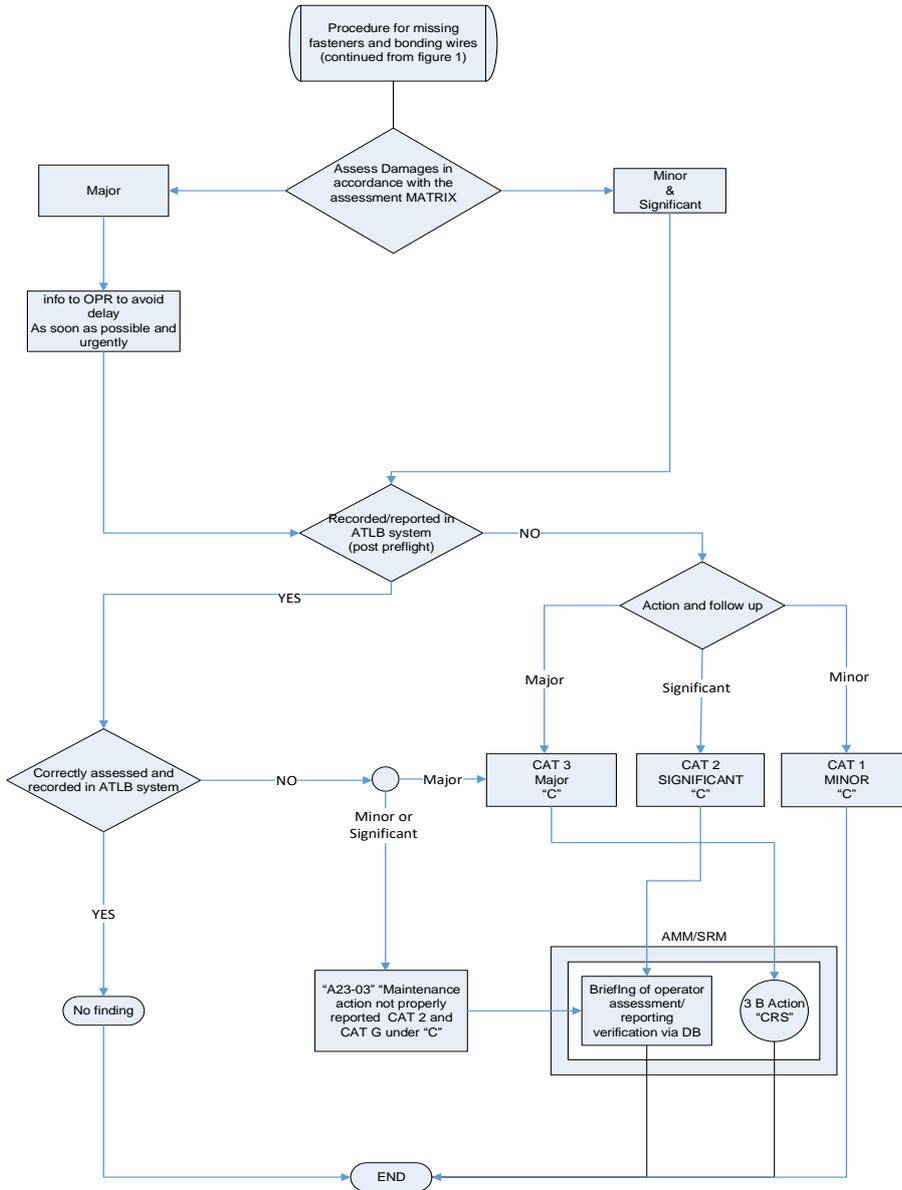


NOTE: Some technical defects are not supposed to be detected by the operator during a “normal” pre-flight inspection and should therefore not constitute a finding. Examples of such defects could be:

- defects only visible when performing an in-depth examination.
- defects only visible using special equipment, platforms or unorthodox working positions.

Figure 2, flowchart of assessment of findings relative to missing fasteners and bonding wires:





6.3.4 Alcohol testing findings

In case of a positive confirmation test result, a CAT 3 finding should be raised under item E01. The pre-described findings to use in case of positive confirmation test may be found in Appendix 9.1. The crew member should be informed about the result and that she/he will not be permitted to resume her/his duties.

Inspectors should indicate on the proof of inspection that alcohol test has been carried out, the number of positive results and the number of flight crew and cabin crew tested. Inspectors should use the corresponding pre-described finding (PDF).

After a positive confirmation test, ramp inspectors or the person in charge of the confirmation test should provide the tested crew member with a written confirmation of the actual BrAC measured, the national statutory limit as well as the device serial number and test sequence number.





This information should neither be on the proof of inspection nor uploaded in the ramp inspection tool. The national rules on data protection (for the EU Member States, the General Data Protection Regulation (GDPR) should be respected, including an explanation to the concerned crew member about the means and the duration of storage of his/her personal information.

Inspectors should coordinate with the pilot in command and/or the representative of the operator the required immediate corrective actions before departure. In case the pilot in command is tested positive, inspectors should inform the representative of the operator or in his absence the operator directly.

Inspectors should take a photo of the flight crew license and medical certificate or the cabin crew attestation for follow-up reasons, when not available a photo of the ID should be collected.

An ad-hoc process out of the ramp inspection tool to notify and transmit needed personal information on the positively tested crew member should be defined by the inspection authority, this ad-hoc procedure should ensure notification of:

- The State of Operator;
- If different from the State of Operator, the authority in charge of the issuance of the CC attestation whenever it can be identified by ramp inspectors (only for CC);
- The licensing authority (only for FC).

This ad-hoc notification should include the following information:

- The State of licence issue; (only for FC)
- Pilot license number; (only for FC)
- Medical certificate number; (only for FC)
- Name of the license holder or name of CC;
- Result of the breath alcohol concentration (BrAC) testing (the references of the device used for the measure) and the time and date of the test.

The inspection authority should inform the above mentioned competent authorities that the operator was not provided with any personal data concerning positively tested crew members and that they may coordinate follow-up action with the operator.

Further guidance can be found in **chapter 10.3**





6.4 Follow-up actions

Reference: AMC1 ARO.AMP.135(a)

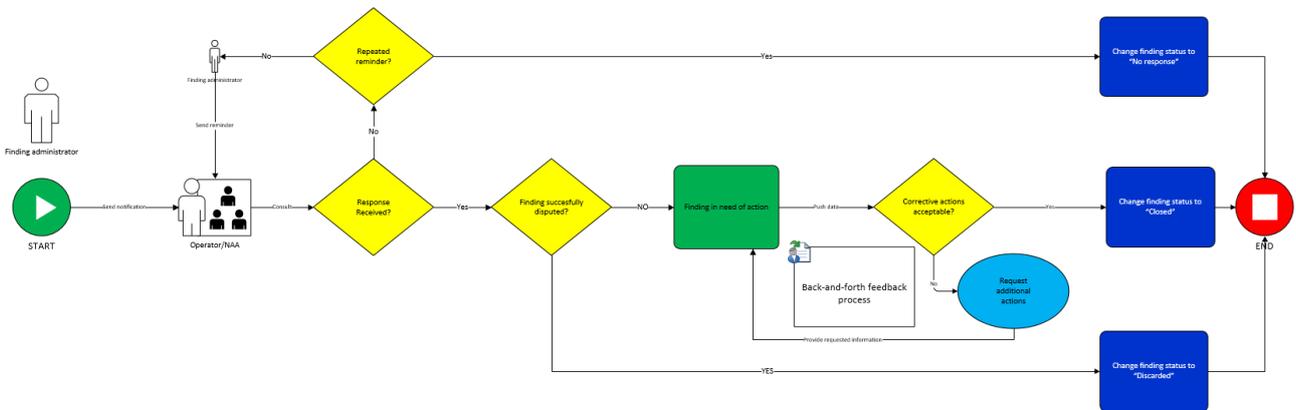
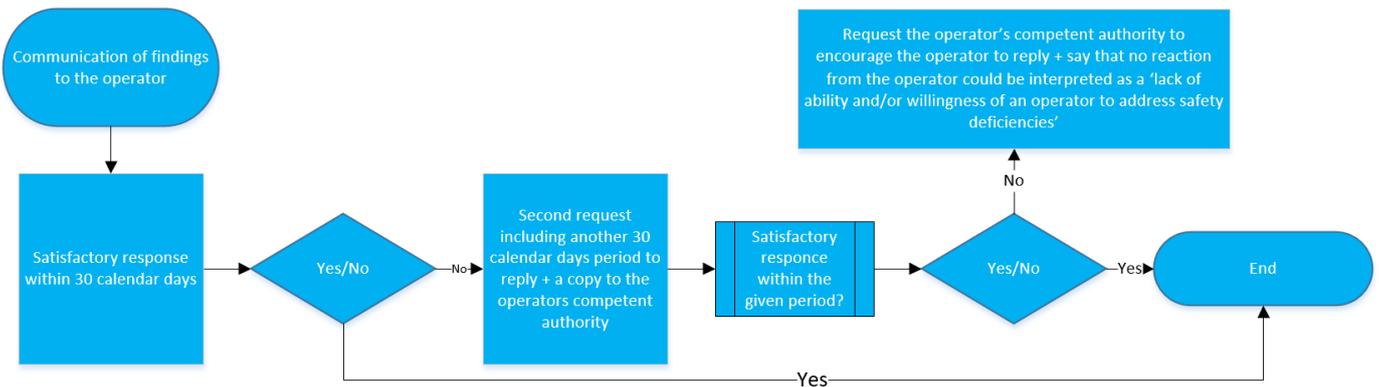
Based on the results of the inspection and on how the findings have been categorised, common follow-up actions have been defined. The relations between the category of findings and the resulting class of actions to take are given in the following table:

ACTIONS TO BE TAKEN AFTER INSPECTIONS		Class of actions		
		Class 1 Information to Captain (POI)	Class 2 Information to the operator and the responsible NAA	Class 3 Immediate action
Category of findings	General remark Any observation from the inspector not classified as safety relevant	Yes	Not applicable	Not applicable
	CAT 1 - Minor: any detected non-compliance with the applicable requirements or the terms a certificate that has a minor influence on safety	Yes	Possible Debriefing and notification through the ramp inspection tool without further communication	Not applicable
	CAT 2 - Significant: any detected non-compliance with the applicable requirements or the terms of a certificate that has a significant influence on safety	Yes	Yes Normal communication through the ramp inspection tool for follow-up actions Note: Written communication to the operator and to the NAA (findings of several inspections may be summarised in one communication). This should only be used if the inspection NAA have a national requirement for this	Not applicable
	CAT 3 - Major: any detected significant non-compliance with the applicable requirements or the terms of a certificate that has a major influence on safety	Yes	Yes All communication are normally to be uploaded in the inspection tool for follow-up transparency. In case of aircraft damage affecting airworthiness and not possible to be rectified before flight, the operator should establish a direct communication with the responsible NAA regarding return to flight status (e.g. "permit to fly").	Yes Note: the specific actions consisting of operational restrictions, corrective actions before flight or at maintenance-base, grounding and/or entry permit repercussions have to be reported.





6.4.1 General communication and follow-up flowchart



6.4.2 Class 1 action (to operators)

A class 1 action is to be taken after each inspection and consists of providing information about the results of the ramp inspection, regardless of whether findings have been identified or not. The Proof of Inspection should always be provided to the pilot in command or to the representative of the operator after the completion of the inspection.

6.4.3 Class 2 action

In case category 2 and/or category 3 findings are raised, communication to the operator and to the operator's competent authority is necessary. All communication should, as a rule of thumb, be done via the ramp inspection tool.

A category 2 finding always needs further follow-up, since it contains a request for corrective actions taken or planned. The Inspecting State should monitor if a reply was received and if sufficient feedback/evidence to close the finding(s) was given, or if





there is a need to request further information. In order to close the finding, the reply of the operator does not necessarily need to contain evidence that the deficiency has been corrected. The “corrective action taken” by the operator might also be included in the implementation of a corrective action plan. It is up to the inspecting NAA to decide, based on the related risk and impact, whether or not a finding may be closed based on future corrective actions taking into account the severity and recurrence of the detected findings. Depending on the severity and recurrence of the findings detected, the Inspecting NAA may consider the actual closure of the associated report(s) only after having received satisfactory documented evidence of appropriate implementation of preventive actions.

Regarding the operator’s competent authority, no reply is expected. Only where appropriate or when the follow-up process has revealed operations outside limitations, the operator’s competent authority should be asked for “confirmation that they are satisfied with the corrective actions taken” by the operator. In this case, the competent authority who performed the inspection should monitor if such a reply is received and if the content is satisfactory.

6.4.4 Class 3a action (Restrictions on the aircraft operation)

When a class 3a restriction has been agreed/imposed, the verification of the adherence to the restrictions should be considered whenever possible.

Examples of Class 3a actions, and related verification, are, but not limited to:

- Restrictions on flight altitudes if oxygen system deficiencies have been found. This might be verified by checking the ATC flight plans and/or the actual altitude flown as reported by the Air Traffic Control system;
- A non-commercial flight to the home base, if allowed by applicable requirements and the MEL (provided that the validity of the CofA is not affected);
- Seats that may not be used by passengers might be verified just before departure to confirm these seats are not occupied;
- A cargo area which may not be used;
- Operational restrictions mandating the use of specific runways;
- Restrictions to specific environmental conditions (such as departure under visual meteorological conditions (VMC) only).

In certain cases it might not be necessary to verify if the restrictions resulting from a category 3 finding are followed or if corrective actions have been taken (e.g. if the inspector has indications that appropriate actions will be taken), or if they are operating outside the EUROCONTROL area. The inspecting authority should determine on a case by case basis if it is necessary or feasible to verify that restrictions are respected or if corrective actions have been taken.

6.4.5 Class 3b action (Corrective actions before flight)

When a class 3b corrective action is required from the operator, the verification of the corrective actions taken should be envisaged whenever possible.

Examples of immediate corrective actions to be taken before departure are:

- Assess, report and record damages in technical log-book or equivalent;
- (temporary) repairs to defects according to the manufactures definitions (e.g. AMM and/or SRM);
- recalculation of mass and balance, performance calculations and/or fuel figures;
- a copy of a missing license/document to be sent by email or other electronic means, (downgrade to CAT 1 finding if obtained by other means);
- proper restraining of cargo;
- deferral of technical defects as per manufacturer/operator’s data.





If the inspectors have imposed corrective actions, they should review the actions done by the operator and mention them in the 'Class of actions' field on the final ramp inspection report. If the operator took voluntarily corrective actions to address a category 1 or a category 2 finding before the flight, it should be reported in the 'Additional information' field only.

Evidence related to findings on licences and certificates should be provided by the competent authority that issued the licence or certificate. However, if this authority is not able to provide such evidence in time, the inspecting authority may accept evidence from other sources, if it seeks confirmation of the validity of such evidence at the earliest opportunity with the competent authority that issued the licence or certificate. The ramp inspection report should mention which evidence was provided and by whom, including when necessary subsequent confirmation from the authority that issued the licence or certificate.

6.4.6 Class 3c action (Aircraft grounded by the inspecting authority)

The aircraft should be grounded only if the crew/operator/operator's representative:

- refuses the inspection;
- significantly hinders the inspection;
- refuses to take the necessary corrective actions;
- does not respect imposed restrictions on the aircraft flight operation.

The grounding should only be lifted by the inspecting authority when the following applicable conditions are met in whole or partly (depending the circumstances of the situation):

- compliance with the applicable requirements has been re-established;
- the EASA operator has obtained a permit-to-fly in accordance with Commission Regulation (EU) No 748/2012, for aircraft registered in a Member State; or
- the non-EASA operator has obtained a permit-to-fly in accordance with their national legislation; and the operator has obtained permissions from countries (EASA + non-EASA) which will be overflown.

Firstly, the Inspecting State has to make sure that the aircraft will not depart as long as the reasons for the grounding remain. Secondly, the grounding needs to be communicated to the State of the Operator/State of Registry and the operator's home base as soon as possible. Any records of communication and other evidence should be gathered as evidence. Contact information is normally to be found on the operator's AOC.

6.4.7 Class 3d action (Immediate operating ban)

When a class 3d action is imposed, it is usually in addition to a Class 3a, 3b or 3c action. Therefore, the further follow-up for the EU Ramp Inspection Programme is considered to be covered by the follow-up of those actions. However, when class 3d action is taken, Member States should be mindful of their obligations and always keep the Agency in copy as the actions might result in a follow-up through hearing in the air safety committee at the European Commission.

6.4.8 General follow-up issues

In general, no reply is expected when informing the operator's competent authority. However, findings which indicate possible shortcomings at the State's level should be highlighted, e.g. when the medical certificate does not indicate the medical class or type/instrument rating validation/expiration date is not mentioned. For such findings, which are out of the control of the operator, the operator's competent authority should be asked for corrective actions. When assessing the operator's corrective action (plan), it should be accepted that, for such non-compliances, the issue should be escalated to the operator's competent authority.

The following are examples requiring a confirmation of the inspecting authority regarding the acceptance of the corrective actions taken by the operator:

- identification of a high number of non-compliances;
- repetition of same findings;
- lack of an adequate response from the operator;





- evidence of consistent non-compliance with a particular standard also detected during ramp inspections of other operators from that State;
- action by the competent authority may be required given the severity of the findings.

The inspecting authority should monitor if the operator's competent authority has replied to any requests for confirmation made and if the response is satisfactory. Should the response be unsatisfactory, the communication should be re-launched.

Any follow-up communication from the operator and its competent authority should be acknowledged, and they should be informed about the closure of findings. Requests for clarification should be responded to by the inspecting authority. Acknowledgement or clarifications from the inspecting authority should be given within 30 calendar days after receipt of communication or requests.

Operators who have received findings which in their opinion are incorrectly made may request to discard that finding while providing the reasoning. The inspecting authority has to carefully verify if a mistake has been made and when accepted, to **discard** and not **close** the finding as a closed finding will continue to have a negative effect on the operator's ratio.

When communicating a finding to the operator, and in any further correspondence from the inspecting authority, the operator's competent authority should, as much as possible, be copied in, as it might contain relevant information for its oversight activities. This is particularly the case for information on the closure of ramp inspection finding(s) sent by the inspecting authority (where the operator has no connection to the ramp inspection tool sent either by e-mail or by official letter).

If the inspecting authority receives evidence from a relevant competent authority showing that the operator does not exist anymore, all related findings should be closed and the reason for closure explained in the justification.

When there is no or no satisfactory feedback from the operator within a reasonable time period, the State of Inspection may decide to change the status of a finding to "NO RESPONSE". In this case, the finding is administratively closed while indicating that no satisfactory action was taken by the operator. The inspecting authority should ensure that the operator was given enough time to respond, also considering the type of finding and the number of reminders sent to the operator. Generally, 1 year since the inspection or last response (whichever is later) from the operator should be considered as reasonable.

6.4.9 Specific case of the follow-up of "fasteners and bonding wires" findings (the assessment matrix)

In case of category 2 findings related to loose/missing fasteners and/or broken/missing bonding wires, the operator should assess and report such findings which potentially lower safety in accordance with its approved procedures under its own responsibility and accountability; no further assessment by the ramp inspectors is needed at the time of the inspection.

The inspecting authority should request that the operator uploads AMM/SRM dispatch limits in the follow up process via the ramp inspection tool. Such findings should not be closed prior to the upload of dispatch limits or equivalent. In cases where the operator has flown outside the manufacturers limitations, the inspecting authority may also request a comment from the operator's competent authority.

When the post inspection follow-up reveals breaches or violations for technical defects, the following statement could be entered into the ramp inspection tool (follow-up tab) "The inspecting authority would like to point out that the outbound flight was operated outside the limits of AMM/SRM without appropriate rectification or deferral and that repetitive breaches will be reported to your competent authority".

In case of category 3 findings related to loose/missing fasteners and/or broken/missing bonding wires, the operator should be debriefed as soon as possible to avoid any delays and with clear instructions to record defect(s) in aircraft's technical logbook or equivalent and perform an assessment. The operator should perform the assessment in accordance with the manufacturer



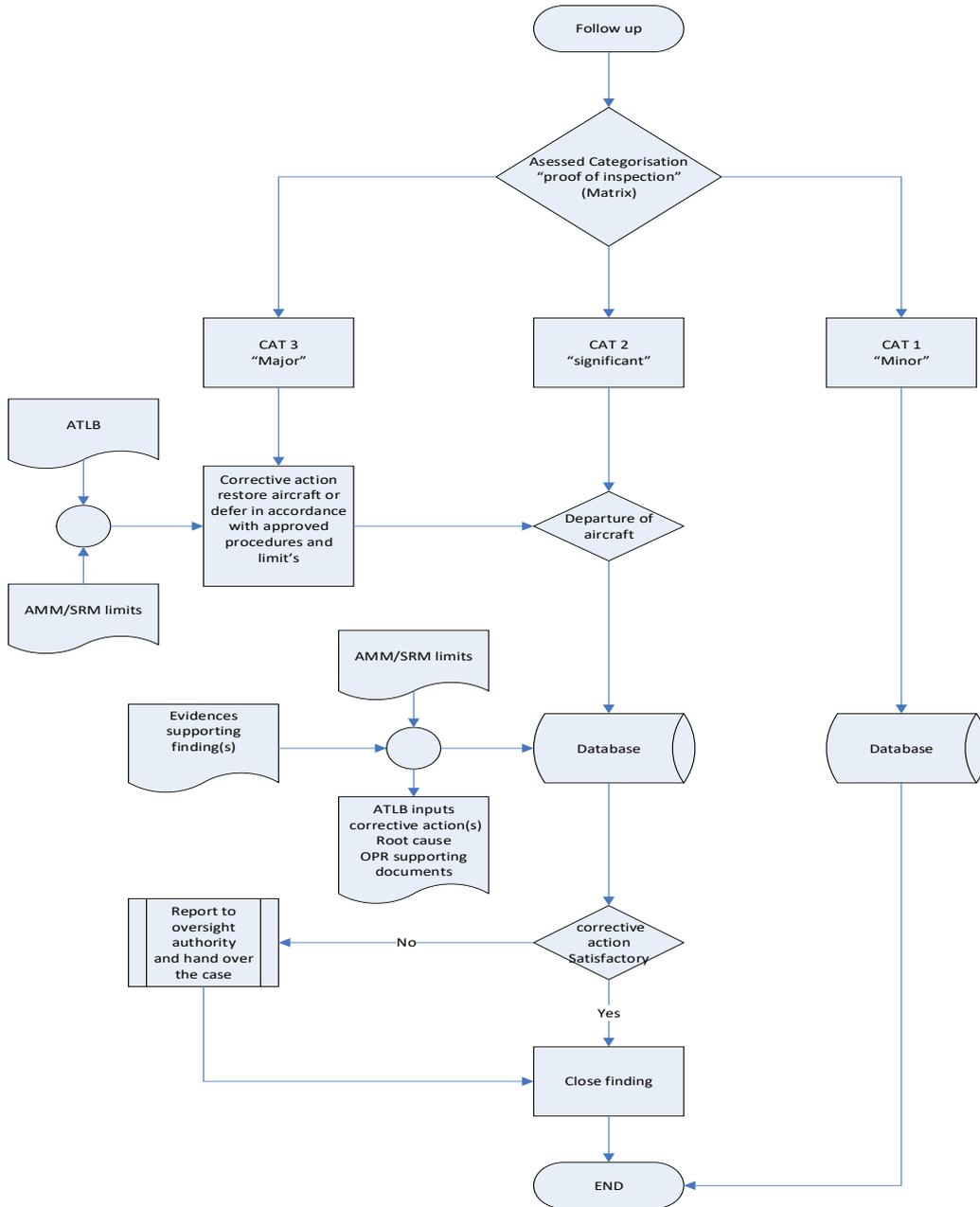


dispatch limits prior to departure as per the operator’s approved procedures with a certificate of release (CRS). Any non-compliances that significantly hazard flight safety should be resolved by the operator prior to departure.

Manufacturer limits as described in AMM/SRM should only be used where the assessment indicates major influence on flight safety and the operator should provide the ramp inspectors with evidence for corrective action (3b).

If the assessment results in defect being within dispatch limits, then it should be categorised as significant category 2 finding.

The flow chart below illustrates the follow-up process of missing fasteners and bonding wires:



Note: Standard Class 1 action process applies for category 1 findings related to fasteners and bonding wires.





6.4.10 Specific case of the follow-up of crew member tested positive to an alcohol test

Follow-up of findings raised after a positive alcohol test should not focus on a specific crew member but should focus on the crew fitness control management of the operator. A finding on a flight crew member could be closed after receiving confirmation that the competent authority will assess the case.

Should any individual follow-up be deemed necessary, the inspecting authority should coordinate with the licensing authority or the competent authority of the operator to obtain satisfactory follow-up actions. For these exceptional follow-up actions it is suggested to involve the medical section of the inspecting authority. In case of disagreement between inspecting authority and licensing authority, the ICAO and EASA advisory bodies in charge of medical matters could be consulted.

7 Ramp inspection tool

The ramp inspection tool containing all the EASA ramp inspection reports may be found via the following page on the internet <https://safa.easa.europa.eu/site/login>. The instructions on how to register may be found through a link in the login-page accessible before the user logon.

7.1 General instructions

The User Guide downloadable from the ramp inspection tool contains detailed instructions for registering, logging in and navigating through the tool making use of the various functions available.

There are two types of ramp inspection tool users: NAA's User and Operator's User. The operator's users only have access to the reports on their own operator. For NAA's users, there are different types of access rights depending on the setup privileges, including drafter, moderator, oversight inspector and read-only.

The below instructions for logging in are applicable to all registered users:

- open an internet browser;
- navigate to <https://safa.easa.europa.eu/site/login>;
- enter your username;
- enter your password; and
- click 'Login'.

7.1.1 Drafter's role

- Draft the inspection report as soon as possible after the inspection completion.
- Avoid the use of capital letters other than starting sentences unless the technical term requires it.
- Ensure that the details of the inspected operator are correctly entered.
- Ensure that the inspected items are correctly entered.
- Verify that all findings are entered correctly with applicable references and their detailed description.
- Select an appropriate class of action (it should have at least the class 1 ticked for informing the pilot in command).
- Upload evidence under the individual finding(s) (e.g. pictures, PDF documents, emails, videos etc.).
- Perform a quality check before submitting the report for approval.
- Review the operator's response(s) as and when required.

7.1.2 Moderator's role

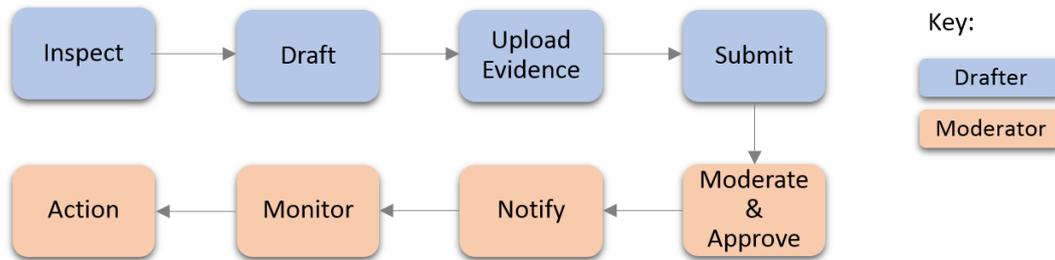
- Access the 'Approve Ramp Inspections' function under the 'Reporting' tab.
- Moderate the individual reports, making any amendments as necessary.
- Perform a final quality check on data entered.
- Approve the report and notify the operator and its competent authority.
- Monitor and review the responses from the inspected operator in order to act timely on any feedback provided.
- Act on the operator's response (e.g. request additional information, close/discard finding(s) etc.)

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The flowchart below illustrates the basic steps that should be followed by the drafter and the moderator.



7.2 User administration

It is the NAA’s responsibility to administrate the access to the ramp inspection tool for its operators and the users within the NAA. The NAA administrator creates, approves or deletes users’ access.

Once a user has registered for access to the ramp inspection tool, it is the NAA administrator’s role to validate their details. The validation process should cover at least the following: requested type of user (NAA or operator), company and user’s role within it, email address etc. The NAA administrator may approve or reject the user registration. Rejection does not preclude the user to re-register their details at any time in the future. If approved, the user will receive automated email detailing further instructions. The operators should notify their NAA in case of any required user change with regards to staff leaving the company or no longer needing access to the ramp inspection tool.

In cases where a State does not have access to the ramp inspection tool, the Agency should be approached via safa@easa.europa.eu.

More detailed information on user administration may be found in the User Guide. It is recommended that the NAA has a national guideline in place to cover the ramp inspection tool user administration.

8 Ramp Inspector qualification process

Reference: AMC1 ARO.RAMP.115(a)(b)

8.1 Ramp inspector’s privileges

When determining the inspector’s privileges, the competent authority could take into account the interrelation of the intended inspection privileges with other disciplines (e.g.: a former cabin crew member may require additional training on MEL issues before being considered eligible for inspection of safety items in the cabin).

The following examples show the typical privileges of a ramp inspector based on his/her background as being previously a commercial pilot licence/airline transport pilot licence (CPL/ATPL) holder, an aircraft maintenance engineer (AML) holder or a cabin attendant:

CPL/ATPL holder:

- A items
- B items
- C items
- D1/D3 items

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AML holder:

- A items except for A13, A14
- B items
- C items
- D1, D3 items

Cabin attendant:

- A15-A19
- B items

8.2 Initial Training

8.2.1 Eligibility criteria

The competent Authority should ensure that the candidate has sufficient knowledge of English language. This may be attested by a certificate such as ICAO English Proficiency Level 4, Common European Framework of Reference for Languages: Level B2, or another equivalent certificate. English language proficiency may also be demonstrated by means of a diploma of secondary or higher education where English was used as the medium of instruction.

8.2.2 Theoretical

The scope of the initial theoretical training is to familiarise the inspectors with the EU Ramp Inspection Programme, and with the common inspection procedures, finding categorisation, reporting and follow-up procedures. The primary scope of the theoretical training is not the transfer of technical (operational, airworthiness, etc.) knowledge, as the candidates should already possess such knowledge, either from previous work experience or through specialised training, prior to attending the theoretical course.

The initial theoretical training programme should be developed in accordance with the syllabus developed by the Agency (see Appendix 9.2.1).

8.2.3 Practical

The scope of practical training is to instruct on inspection techniques and specific areas of attention without any interference with the flight crew. Preferably, this should be done in a non-operational environment (e.g. on an aircraft in a maintenance hangar). Alternatively, aircraft with an adequate turnaround time may be used. In the latter case, the flight and/or ground crew should be informed about the training character of the inspection.

The initial practical training may be split into several sessions if an adequate tracking system is put in place.

The practical training programme should be developed in accordance with the syllabus developed by the Agency (see Appendix 9.2.2).

8.2.4 On-the-job training

The objective of the on-the-job training (OJT) is to familiarise the candidates with the particularities of performing a ramp inspection in a real, operational environment. The competent authority should ensure that the area of expertise of the candidate is compatible with the one of the senior ramp inspector(s) delivering OJT.

When selecting the operators to be inspected during the on-the-job training programme, senior ramp inspectors should ensure that:

- before starting the OJT, the candidate is briefed about general objectives and working methods of the training;

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- the training can be performed sufficiently in depth but without undue hindrance or delay of the inspected operator;
- the ramp inspections are conducted as much as possible on different operators (i.e. EU operators, third-country operators), different aircraft types and aircraft configurations (i.e. jet and propeller aircraft, single aisle and wide-body aeroplanes, passenger operations and cargo operations), different types of operations (i.e. commercial and non-commercial operations, long-haul and short-haul operations);
- before every inspection, the candidate is briefed regarding the objectives and lessons to be learned during that particular inspection; and
- after every inspection day, the candidate is debriefed regarding his/her performance and progress and areas where improvement is needed.

OJT Training may also be performed by foreign senior ramp inspectors.

While the observation phase may be conducted with more than one candidate per senior ramp inspector, the under-supervision phase should be conducted with no more than one candidate per senior ramp inspector. In an operational environment, the duplication of A and most of the B-items during normal turn-around time is not considered feasible, therefore the competent authority should ensure proper identification of the inspection items performed by each candidate during the under-supervision phase within the OJT forms.

In addition to the OJT, the competent authority should provide the candidate with necessary information on administrative issues related to the conduct of ramp inspections, and on the process relating to the cooperation with the airport and air navigation service providers.

The OJT should cover at least the elements described in Appendix 9.2.3.

The senior ramp inspector should do the assessment of the candidate while the candidate is performing the ramp inspections under supervision. The candidate should be considered to have successfully completed the OJT only after demonstrating to the senior ramp inspector that he/she possesses the professional capacity, knowledge, judgment and ability to perform ramp inspections in accordance with the requirements.

Some ramp inspection OJT items may be replaced by a classroom training (*AMC4 ARO.RAMP.115(a)(b) paragraph (h) "using representative examples when no operational environment is required, e.g. documents, dangerous goods"*).

To fully establish the confidence in the candidate's competence, additional ramp inspections may be needed after the initial observation phase.

8.2.5 Final Assessment

The final assessment should be carried out by Senior Inspector(s) and/or the National Coordinator or any other nominated person to verify the inspector's competency. At this assessment the results of the theoretical, practical and OJT training should be taken into consideration.

If the candidate is found to be fully qualified, the competent Authority should issue a Formal Qualification Statement. In case the candidate does not pass the assessment, the competent Authority could request an additional theoretical, practical or on-the-job-training.

8.3 Periodical Assessment

When performing the periodical assessment of a qualified ramp inspector's competence and performance as mentioned in AMC2 ARO.GEN.200 (a)(2), the competent authority may use any of the following assessment methods or a combination thereof:

- A theoretical examination;
- A number of ramp inspections under the supervision of a senior ramp inspector covering all inspector's privileges;
- A sample analysis of ramp inspections, during which the inspector has raised findings in his domain of competence.

Such assessment should take place every 3 years as a minimum.





8.4 Extension of inspector's privileges

The competent authority may extend the privileges of a ramp or senior ramp inspector, provided that the following conditions are met:

- (1) the relevant knowledge of the inspector has been satisfactorily complemented by additional theoretical and/or practical training relevant to the scope of the extension; and
- (2) the inspector has received a OJT on the new inspection items that will be added to his/her privileges.

The competent authority should determine the necessary number of ramp inspections of the OJT on a case-by-case basis, taking into account both the complexity and the criticality of the new items to be covered during this training, as well as the inspector's aeronautical education and practical knowledge. Furthermore, for senior ramp inspectors, additional criteria may be required before delivering training.

8.5 Alcohol Testing (AT) privilege

A candidate ramp inspector can be granted with an AT privilege following initial theoretical and practical training developed on the basis of the syllabus covered in appendix 9.2.4. The related on-the-job training can be replaced by alternative training.

A ramp inspector can be granted with an AT privilege after successful completion additional theoretical training developed on the basis of the syllabus covered in appendix 9.2.4. The related on-the-job training can be replaced by alternative training.

Previous training on AT can be grandfathered by the national coordinator if it is proved that it meets the minimum standards of required training in this manual.

8.6 Senior ramp inspectors

When appointing a senior ramp inspector, the competent authority may take into consideration certain "soft skills" such as: knowledge of training techniques, professionalism, maturity, judgment, integrity, safety awareness, communication skills, personal standards of performance and a commitment to quality, etc.

8.6.1 Use of foreign senior ramp inspectors

The competent authority of a State on which territory an OJT is delivered may authorise foreign senior ramp inspectors to perform ramp inspections on its behalf. These privileges may contain limitations (e.g.: A/C grounding) and could be fully or partially done based on relevant evidence provided by the competent authority of the senior ramp inspector.

When the OJT is delivered by a foreign senior ramp inspector, the competent authority of the candidate should request the competent authority of the senior ramp inspector to confirm the validity of his/her seniority.

If a foreign senior ramp inspector is delivering the recurrent training, the competent authority of the candidate should verify if the training material is developed in accordance with the content communicated by the Agency and if it is updated with the information provided by the EASA Training Bulletins.

8.7 Loss of qualification

8.7.1 Missed recurrent training

When the qualification is lost because of failure to undergo the recurrent training, it may be regained provided that the ramp inspector attends the missing recurrent training.

8.7.2 Insufficient number of inspections

A ramp inspector may regain his qualification as inspector by performing half the missing inspections from last year under supervision of a senior inspector, up to half of these may be performed on national operators, if performed in accordance with ARO.RAMP.





A senior ramp inspector may regain his qualification as inspector by performing 2 inspections under supervision of a senior inspector.

Note: An OJT Checklist should be completed for each ramp inspector by the responsible senior inspector .

Reference: [Approval of a ramp inspection training organisation by the competent authority](#) may be found in Attachment 10.1.1.

8.8 Organisational structure

The competent authority should verify that the training organisation has appointed a head of training with corporate authority to ensure that the training organisation:

- has a sufficient number of properly qualified instructors to develop, update and deliver the training courses referred to in ARO.RAMP.115(b)(2)(i);
- makes use of adequate training facilities and properly equipped office accommodation;
- has established appropriate training procedures;
- delivers training developed in accordance with the syllabi developed by the Agency;
- periodically evaluates the effectiveness of the training provided; and
- makes available to the competent authority an annual review summarising the results of the feedback system together with the training organisation's corrective actions (if any).

8.9 Training course and facilities

The competent authority should verify that:

- the content of the training courses to be delivered complies with the syllabi developed by the Agency, also by attending at least one initial theoretical and practical training course;
- the training course material is accurate and up to date and has been developed for the type of training to be delivered (including course slides, reference documents, etc.);
- the training organisation provides a copy of the complete training course material and the relevant EU aviation legislation, as well as any relevant examples of technical information to all course participants;
- classrooms have appropriate presentation equipment ensuring that students can easily read presentation(s) text/drawings/diagrams and figures from any position in the classroom. Where necessary, audio amplification should be available to assist instructors in verbal communication. Internet access should also be available to enable instructors to use the online applications used in the EU Ramp Inspection programme;
- a suitable aircraft is available for practical training for an adequate period.

8.10 Instructors

Instructors delivering training on the regulatory framework for ramp inspections should have at least 3 years of experience either as national coordinators or as aviation safety legislative experts involved in the EU ramp inspections programme.

All instructors should attend or familiarise themselves with the content of available recurrent training, organised by the Agency to update their knowledge of the EU Ramp Inspection Programme and to promote standardisation.

Attachment 10.1.2 contains a checklist, which may be used for the evaluation of ramp inspections training instructors.

8.11 Verification of compliance by the Agency

Reference: AMC2 ARO.RAMP.120(a)

When the competent authority requests the Agency to verify a training organisation's compliance or continuous compliance with the applicable requirements, the following should be taken into account:

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- the request should be submitted to the Agency at least 90 days prior to the intended date of issuing the approval or to the intended date of ending the continuous compliance verification; and
- the training organisation should be notified that the verification of compliance will be performed by the Agency, and, therefore, full cooperation and unimpeded access to the organisation staff, documentation, records and facilities should be ensured.

Verification may also include an on-site audit and/or unannounced inspection of the training organisation.

The Agency should provide the requesting competent authority with a report containing the results of the compliance verification as soon as the process is finalised, but no later than 10 days prior to the anticipated date of approval.

When the Agency identifies a non-compliance with the applicable requirements, it should:

- immediately inform the concerned competent authority of the non-compliance and indicate the level of finding(s), providing all the supporting evidence available;
- provide the concerned training organisation with all the necessary information on the identified non-compliance indicating that the certifying competent authority has been informed in order to take action.

The competent authority may approve that organisation, if the results of the Agency's report indicate that the training organisation meets the applicable requirements.

When verifying continuous compliance with the applicable requirements, the Agency may:

- request the training organisation to provide updated versions of information, evidence and documents related to the training;
- sample the training course material delivered during any training session to candidates or qualified ramp inspectors;
- use the results of the standardisation inspections.





9 Appendixes

9.1 Inspection instructions and pre-described findings

Refer to the separate document

“INSPECTION INSTRUCTIONS AND PRE-DESCRIBED FINDINGS”.

Notes:

- *The inspection instructions and pre-described findings contain ICAO and EU regulatory references.*
- *For EU regulatory material, EASA has developed eRules (Easy Access Rules) to make the aviation safety rules accessible in an efficient and reliable way to stakeholders and can be found under the following link: <https://www.easa.europa.eu/document-library/easy-access-rules>*
- *ICAO regulatory material can be found in the ICAO store: <https://store.icao.int/en/annexes> , or by making use of a subscription through your organization.*
- *Notwithstanding the above, all references in the inspection instructions contain the specific detailed descriptions from both EU and ICAO regulatory material.*
- *The inspection instructions are public and can be found in the ramp inspection tool library accessible through the [information tab of the login page](#) or , after login, under the “Main tab - SAFA library menu.*





9.2 Training syllabi

9.2.1 Syllabus of theoretical training for ramp inspectors

INITIAL (THEORETICAL) TRAINING COURSE

- Module (GEN): General overview of the EU Ramp Inspection Programme
- Module (A): Flight deck inspection items
- Module (B): Cabin inspection items
- Module (C): Aircraft condition inspection items
- Module (D): Cargo inspection items and general item

MODULE (GEN) – GENERAL OVERVIEW OF THE EU RAMP INSPECTION PROGRAMME		
a. Overview of the safety inspection of aircraft		
<p>i. Introduction</p> <ul style="list-style-type: none"> • The EU Ramp Inspection Programme Overview • Role and responsibilities of the Agency — Overview <p>ii. ICAO basic references</p> <ul style="list-style-type: none"> • ICAO convention overview • Article 11 – Applicability of air regulations • Article 12 – Rules of the air • Article 16 – Search of aircraft • Article 29 – Documents carried on aircraft • Article 30 – Aircraft radio equipment • Article 31 – Certificate of airworthiness • Article 32 – Licences of personnel • Article 33 – Recognition of certificates and licences • Article 37 – Adoption of international standards and recommended practices • Article 38 – Departures from international standards and procedures • Article 83 bis – Transfer of certain functions and duties <p>iii. Principles of the Ramp Inspection Programme</p> <ul style="list-style-type: none"> • EU Member State’s Role and legal obligation to inspect aircraft • States on working arrangements with the Agency • Common procedures and common reporting format • Ramp inspections SAFA, SACA, SANA • Annual ramp inspection programme • The ramp inspection tool – Introduction • Safety reports <p>iv. The European Commission</p> <ul style="list-style-type: none"> • Role and responsibility • Legislative power 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Candidates should know the background of the EU Ramp Inspection Programme 2. Candidates should be able to identify the main elements of the Programme 3. Candidates should understand the role of ramp inspections in the general safety oversight context 4. Candidates should be able to identify the stakeholders and their responsibilities 5. Candidates should be able to outline ICAO’s role and responsibilities within the international civil aviation context. 6. Candidates should understand the obligations of the signatory States. 	





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<p>v. The European Union Aviation Safety Agency</p> <ul style="list-style-type: none"> • Role and responsibilities • The executive tasks • Collection of inspection reports • Maintenance of the ramp inspection tool • Analysis of relevant information • Reporting to European Commission and Member States • Advising the European Commission and Member States on follow-up actions • Developing training programmes and fostering the organisation and implementation of training courses and workshops <p>vi. Eurocontrol</p> <ul style="list-style-type: none"> • Role and responsibilities <p>viii. The Air Safety Committee – (ASC)</p> <ul style="list-style-type: none"> • Role and responsibilities • Representation of EU Member States • Legislative advisory role <p>ix. The Ramp Inspection Coordination and Standardisation group – (RICS)</p> <ul style="list-style-type: none"> • Role and responsibilities • Representation of EU Member States and non-EU Member States • Technical advisory role 	
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MODULE (GEN) – GENERAL OVERVIEW OF THE EU RAMP INSPECTION PROGRAMME		
b. The EU legal framework		
<p>i. Regulation (EU) No 2018/1139 (“Basic regulation”)</p> <ul style="list-style-type: none"> • General overview <p>ii. Regulation (EU) No 965/2012 (“AIR-OPS regulation”)</p> <ul style="list-style-type: none"> • General overview of Part-ARO, Part-CAT, Part-NCC, Part-NCO and Part-SPO • For non-EASA inspectors, a limited awareness only on Part-CAT, Part-NCC, Part-NCO and Part-SPO • Focus on Part ARO.RAMP <p>iii. Regulation (EU) No 452/2014 (“Third-country operators”)</p> <ul style="list-style-type: none"> • General overview <p>iv. Regulation (EC) No 2111/2005 and regulation (EC) No 474/2006</p> <ul style="list-style-type: none"> • General overview 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Candidates should fully understand the legal instruments of the Programme 2. Candidates should be capable to define the relationship between the EU Ramp Inspection Programme and the EU List of Banned air carriers 3. Candidates should understand the TCO regulation and what this means in terms of oversight 	





MODULE (GEN) – GENERAL OVERVIEW OF THE EU RAMP INSPECTION PROGRAMME

c. The ICAO framework

<p>i. Ramp inspection (RI) and ICAO — Annex 1 (Personnel Licensing)</p> <ul style="list-style-type: none"> • General rules concerning licenses <p>ii. RI and ICAO — Annex 6 (Operation of Aircraft) — Overview</p> <ul style="list-style-type: none"> • Part I, International commercial air transport aeroplanes • Part II, International general aviation aeroplanes • Part III, International operations helicopter <p>iii. RI and ICAO — Annex 7 (Aircraft Nationality and Registration Marks)</p> <ul style="list-style-type: none"> • Certificate of Registration • Example of Certificate of Registration • Identification plate 	<p>Objectives:</p> <p>1. Candidates should understand the direct relationship between ICAO standards and ramp inspection.</p>
<p>iv. RI and ICAO — Annex 8 (Airworthiness of Aircraft)</p> <ul style="list-style-type: none"> • Validity of the Certificate of Airworthiness • Standard form of Certificate of Airworthiness • Emergency exits, markings and lights • Safety and survival equipment <p>v. RI and ICAO — Annex 16 (Environmental Protection)</p> <ul style="list-style-type: none"> • Noise Certificate (applicability to SAFA programme) <p>vi. RI and ICAO — Annex 18 (The Safe Transport of Dangerous Goods by Air) and associated ICAO Documents: Technical Instructions for the safe transport of dangerous goods by air (Doc. 9284) and Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods (Doc. 9481)</p> <p>vii. RI and ICAO — Doc 7030 (Regional Supplementary procedures)</p> <ul style="list-style-type: none"> • Overview • Applicability 	





MODULE (GEN) – GENERAL OVERVIEW OF THE EU RAMP INSPECTION PROGRAMME

d. Safety assessment technical aspects overview

<p>i. Annual ramp inspection programme</p> <ul style="list-style-type: none"> • Annual ramp inspection programme for the SWC Participating States • Annual ramp inspection programme for the other States • Unforeseen inspections • Monitoring of the annual ramp inspection programme <p>ii. Preparation of the inspection</p> <ul style="list-style-type: none"> • Use of ramp inspection tool • Information regarding flight preparation (e.g. NOTAM, weather, ...) • Latest manufacturer data (e.g. MMEL, AMM, SRM, AFM, ...) 	<p>Objectives:</p> <ol style="list-style-type: none"> 1. Candidates should understand how an annual ramp inspection programme is to be defined. 2. Candidates should understand what is to be checked during a ramp inspection preparation. 3. Candidates should understand the ramp inspection methodology.
<p>iii. Subjects of the inspection:</p> <ul style="list-style-type: none"> • Aircraft used by third-country operators or used by operators under the regulatory oversight of another Member State. • Differences between type of operation (CAT/GA) • Technical considerations (e.g. unfamiliar type of aircraft, systems) • Experience/feedback from previous inspections • 'Intelligence' (ramp inspection tool, ATC, passenger complaints, etc.) • Prioritisation 	
<p>iv. Elements to be inspected:</p> <ul style="list-style-type: none"> • Presentation of the checklist items • Time available (stop duration, slot, no unreasonable delay) • Items to be selected (e.g. for time limited inspections) • Inspector's privileges • Areas of concern (based upon previous inspections from the ramp inspection tool) • Context (recent/old aircraft, new airline, new type of aircraft) • Intelligence information 	
<p>v. Planning the inspection:</p> <ul style="list-style-type: none"> • Efficient use of the time available • Considerations for inspections on arrival or departure • Any day in a week, any time in a day 	
<p>vi. Short transit times:</p> <ul style="list-style-type: none"> • Walk around check during off boarding • Segmented inspections 	
<p>vii. Toolkit for the RI inspector:</p> <ul style="list-style-type: none"> • Inspector's documentation (RI procedures, regulations, updated reference material, etc.) • Inspector's tools (vest, Independent Portable light, camera, telephone, protective personal equipment, etc.) • Inspector's identification (authority ID, airport badge, formal qualification statement) 	





<p>viii. • Airline documentation available</p> <p>Teamwork:</p> <ul style="list-style-type: none">• Preferably two inspectors covering all fields of expertise• Briefing on task allocation <p>ix. The ramp inspection checklist:</p> <ul style="list-style-type: none">• Aspects to be covered by the ramp inspection• Format/structure and overview of contents <p>x. Starting the Inspection:</p> <ul style="list-style-type: none">• Introduction to the crew (flight crew/technical staff/airline representative/translator)• Determination of available inspection time• Explain that any operator is subject to inspections (ramp inspection principle) <p>xi. Code of conduct:</p> <ul style="list-style-type: none">• Human factor principle (inspection = intrusion)• Cooperation with the crew• Time efficiency• Collection of evidence <p>xii. Categorisation of findings and general remarks:</p> <ul style="list-style-type: none">• Definition of finding: Deviation from the standards• Category 3 finding with major influence on safety• Category 2 finding with significant influence on safety• Category 1 finding with minor influence on safety• General remarks <p>xiii. Actions taken:</p> <ul style="list-style-type: none">• Relationship between finding and action• Class 1 action• Class 2 action• Class 3 actions <p>xiv. Concluding the inspection:</p> <ul style="list-style-type: none">• Debriefing of inspection results• Delivery of proof of inspection to the pilot-in-command/commander/airline representative/sub-contractors <p>xv. Follow-up process</p> <ul style="list-style-type: none">• Corrective actions• Preventive actions• Reminders to operators• Closure of findings	
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MODULE (GEN) – GENERAL OVERVIEW OF THE EU RAMP INSPECTION PROGRAMME

e. Ramp inspection tool – Hands-on training

- Purpose of the ramp inspection tool
- The ramp inspection tool as inspectors’ tool
- Ramp inspection tool – input
- Ramp inspection tool – output
- Ramp inspection tool – search
- Focused inspection module
- Follow-up actions: operator’s logging
- Ramp inspection tool analytical tools and reports

Objectives:

1. Candidates should have the relevant knowledge to input and retrieve data from the ramp inspection tool.
2. Candidates should know the analysis process and its deliverables.
3. Candidates should understand the analysis dependability on the accuracy of the inspection reports.

MODULE (A) – FLIGHT DECK INSPECTION ITEMS

A01 General condition

- Circuit breakers (C/B) (inappropriately pulled/popped)
- Secure stowage of interior equipment (incl. baggage)
- Crew seats (manual or electrical)
- Security/reinforced flight crew compartment door
- General condition of flight crew compartment
- Means to monitor the door area (e.g. CCTV)

A02 Emergency exit

- Access (easy/no blockings)
- Escape ropes (secured)
- Emergency exits (flight crew compartment)

A03 Equipment

- Awareness of different design philosophies of A/C systems (BITE, message displays/status)
- Proper functioning (system test)

GPWS – TAWS

- General (basic principles)
- Forward looking terrain avoidance function (7-channel SRPBZ ICAO compliant)
- Presence of the equipment
- Validity of GPWS terrain database
- System test – passed
- CIS built A/C systems (SSOS, SPPZ and SRPBZ)

ACAS/TCAS II

- General (applicability and principles)
- Mode S transponder and ACAS II (general)
- System test

Objectives:

Candidates should possess the relevant knowledge enabling them to inspect each item.





8.33 kHz radio channel spacing

- Selection of an 8.33 kHz channel
- Presence of 6 or 5 digits (132.055 or 32.055)
- Letter Y in field 10 of the flight plan

PBN

- General (applicability and principles)
- Specific approval
- Required equipment
- Flight planning and completion of the flight

RVSM

- General (applicability and principles)
- Specific approval
- Required equipment
- Flight planning and completion of the flight

NAT HLA

- General (applicability and principles)
- Specific approval
- Required equipment
- Flight planning and completion of the flight

EFB

- Electronic flight bag (EFB portable, installed)

A04 Manuals

- Structure of operations manual (European and others)
- Aircraft flight manual (structure)
- Competent Authority approval
- Update status
- Content in relation to flight preparation

A05 Checklists

- Availability: within reach and update status
- Compliance with operator's procedures (normal, abnormal and emergency)
- Appropriateness of checklist used (aircraft checklists)
- A/C system integrated checklists
- Electronic Checklists

A06 Radio navigation / instrument charts

- Required charts (departure, en-route, destination and alternate) within reach and updated
- Validity of FMS navigation database
- Electronic maps and charts
- The AIRAC Cycle

A07 Minimum Equipment List

- Availability: approval and update status





- Content: MEL reflects installed equipment
- Relationship between the MEL and the MMEL
- CDL (configuration deviation list)

A08 Certificate of registration

- Availability and accuracy
- Original documents and copies acceptability
- Presence of mandatory information on the certificate

A09 Noise certificate (where applicable)

- Availability (if applicable)
- Multiple noise certification
- Approval status

A10 AOC or equivalent

- Availability (original or copy) and accuracy
- Content in compliance with requirements/format
- Content of operations specifications
- For General Aviation: list of specific approvals, declaration

A11 Radio licence

- Availability and accuracy
- Original documents and copies acceptability

A12 Certificate of airworthiness

- Format of certificate of airworthiness
- Original documents and copies acceptability
- Presence, accuracy and validity

A13 Flight preparation

- Presence and accuracy of operational flight plan
- Performance calculations
- Proper fuel calculation and monitoring
- Special considerations for ETOPS operations
- AIP local relevant information
- Availability and update of meteorological information
- Availability and update of NOTAMS

A14 Mass and balance calculation

- Availability and accuracy
- Data available for a verification by crew

A15 Hand fire extinguishers

- Validity, access and locations
- Mounting
- Types

A16 Life jackets / flotation devices

- Validity, access and locations
- Applicability





A17 Harness

- Presence (and usage)
- Availability for all flight crew members
- Requirements for different crew positions
- Conditions (wearing)

A18 Oxygen equipment

- Presence, access and condition
- Oxygen cylinder pressure
- Minimum required according to the operations manual (in case of low pressure)
- Operational functional check of the combined oxygen and communication system (crew)

A19 Independent portable light

- Number of required independent portable light(s) (day/night)
- Condition, serviceability and access

A20 Flight crew licence / composition

- Validity of crew licences and appropriate ratings
- Validation of foreign licences
- Validity of medical certificate
- Special medical conditions (spare glasses, etc.)
- Age limitations
- Minimum crew requirements

A21 Journey log book, or equivalent

- Content of journey log book (recommendation/roman numerals)
- Examples of journey log books

A22 Maintenance release

- Applicable requirements and duties of the PIC/ commander

A23 Defect notification and rectification

- Defects notification
- Cross check with MEL
- History of defects/notification (incl. hold item list)

A24 Pre-flight inspection

- Applicable requirements and duties of the PIC





MODULE (B) – CABIN INSPECTION ITEMS

B01 General internal condition

- General condition
- Safety and survival equipment
- Design and construction

B02 Cabin crew’s station and crew rest area

- Cabin crew seats (number, material/fire resistant and condition, upright position/safety hazard)
- Equipment

B03 First-aid kit / emergency medical kit

- Recommendation on contents (validity)
- Locations of kits
- Adequacy
- Readily/access
- Identifications/markings/seals

B04 Hand fire extinguishers

- Validity, access and locations
- Mounting
- Types

B05 Life-jackets / flotation devices

- Validity, access and locations
- Applicability
- Different models of jackets and/or flotation devices on-board
- Instructions for passengers (written and demonstration)
- Infant life-jackets

B06 Seat belt and seat condition

- Seats and belts (material/condition/installation)
- Infant restraining devices: extensions, berths,...
- Portable light (cabin crew)
- Instructions for passengers (written and demonstration)
- Opening assistance systems

B07 Emergency exit, lighting / marking, independent portable light

- Evacuation signs
- Lighting and marking (passenger compartment)
- Independent portable light

B08 Slides / life-rafts (as required) / ELTs

- Slides/rafts general (locations, types)
- Serviceability — pressure gauge/green band
- Instructions for passengers (written and demonstration)
- Emergency locator transmitter (ELT) (general/types/location)

Objectives:

Candidates should possess the relevant knowledge enabling them to inspect each item.





<p>B09 Oxygen supply (cabin crew and passengers)</p> <ul style="list-style-type: none"> • Oxygen supply: cylinders and generators • Serviceability — pressure gauge/green band • Models/A/C types • Drop-out panels/storage of masks <p>B10 Safety instructions</p> <ul style="list-style-type: none"> • Availability and accuracy <p>B11 Cabin crew members</p> <ul style="list-style-type: none"> • Appropriate number of cabin crew (A/C type) • Refuelling with passengers on-board (crew positions) <p>B12 Access to emergency exits</p> <ul style="list-style-type: none"> • Number and location of exits • Different models and sizes (A/C type) • Obstructions • Instructions for passengers (written and demonstration) <p>B13 Stowage of passenger’s baggage</p> <ul style="list-style-type: none"> • Proper storage (size, weight and number) • Safety risks <p>B14 Seat capacity</p> <ul style="list-style-type: none"> • Numbers of seats (A/C type) • Max number of passengers (A/C type) 	
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MODULE (C) – AIRCRAFT CONDITION INSPECTION ITEMS	
<p>C01 General external condition</p> <ul style="list-style-type: none"> • Corrosion (different corrosion types) • Cleanliness and contamination (fuselage and wings) • Windows and windshields (delamination) • Exterior lights (landing lights, NAV-lights, strobes, beacon, etc.) • Markings • De-icing systems <p>C02 Doors and hatches</p> <ul style="list-style-type: none"> • Door types (normal — emergency — cargo doors) • Markings and placards of doors • Operating instructions of doors • Condition and possible damages <p>C03 Flight controls</p> <ul style="list-style-type: none"> • Condition and possible damages, corrosion and loose parts • Rotor head condition • Leakage <p>C04 Wheels, tyres and brakes</p>	<p>Objectives:</p> <p>Candidates should possess the relevant knowledge enabling them to inspect each item.</p>





<ul style="list-style-type: none"> • Tyre pressure (cockpit indications/wheel integrated gauge) • Brake condition • Condition and possible damages, leaking and loose parts <p>C05 Undercarriage skids / floats</p> <ul style="list-style-type: none"> • Condition and possible damages, corrosion and loose parts • Strut (and tilt cylinder) pressure <p>C06 Wheel well</p> <ul style="list-style-type: none"> • Condition and possible damages, corrosion, leaks and loose parts <p>C07 Power plant and pylon</p> <ul style="list-style-type: none"> • Cowlings, cowling doors and blow-out doors • Condition and possible damages, corrosion, leaks and loose parts • Pylon, pylon doors, blow-out panels and missing rivets • Reversers' condition <p>C08 Fan blades, propellers, rotors (main & tail)</p> <ul style="list-style-type: none"> • Types of fan blades/propellers/rotors • Foreign object damage (FOD) • Dents, nicks, blade bending • De-icing (boots and heating elements) <p>C09 Obvious repairs</p> <ul style="list-style-type: none"> • Obvious repairs • Maintenance release/technical log <p>C10 Obvious un-repaired damage</p> <ul style="list-style-type: none"> • Missing maintenance release/technical log • Assessment of damage <p>C11 Leakage</p> <ul style="list-style-type: none"> • Obvious leakage, technical log • Types and assessment of leakage • Toilet leaks/blue ice, etc. 	
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MODULE (D) – CARGO INSPECTION ITEMS AND GENERAL ITEM	
<p>D01 General condition of cargo compartment</p> <ul style="list-style-type: none"> • Structures, wall panels, wall and ceiling cargo (tape) sealing • Fire detection & extinguishing systems • Blow-out panels 	<p>Objectives:</p> <p>Candidates should possess the relevant knowledge enabling them to inspect each item.</p>





- 9G-net
- Door instructions
- Loading instructions (placards, wall markings)
- Damage

D02 Dangerous goods

- Notification to the pilot-in-command/commander
- Segregation and accessibility
- Packaging and labelling
- Limitations/restrictions (cargo aircraft / dangerous goods)

D03 Secure stowage of cargo on board

- Flight kit (secured)
- Pallets, nets, straps, containers (secured)
- Condition of pallets, nets, straps, containers
- Loading limitations (weight, size and height)

E01 General

- All the general items that may have a direct relation with the safety of the aircraft or its occupants





9.2.2 Syllabus of practical training for ramp inspectors

INITIAL (PRACTICAL) TRAINING COURSE

- Module (A): Flight deck inspection items
- Module (B): Cabin inspection items
- Module (C): Aircraft condition inspection items
- Module (D): Cargo inspection items and general item

MODULE (A) – FLIGHT DECK INSPECTION ITEMS

A01 General condition

- C/Bs/circuit breakers (recognise pulled/popped)
- Examples of storage of flight cases and crew luggage (possible safety hazards)
- Crew seats/serviceability (functions of seats/manual — electrical)
- Security/reinforced door (how to recognise, door installations, locking functions)
- General condition (check cleanness of flight crew compartment)
- If applicable, means to monitor the door area (e.g. CCTV cameras and screens)

Objectives:

Candidates should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training

A02 Emergency exit

- Recognise easy access (no blockings)
- Escape ropes (check if secured)
- Emergency exits (flight crew compartment)

A03 Equipment

GPWS-TAWS

- GPWS, locate instruments in cockpit
- Aural warning test demonstrating: Sounds/display patterns
- Version of GPWS terrain database

ACAS/TCAS II

- Locate instruments in cockpit
- Mode S transponder and ACAS II (locate and check the model)
- System warning test/indications

8.33 kHz radio channel spacing

- How to check real channel spacing during the inspection

RVSM

- Flight planning and completion of the flight

EFB

- Electronic flight bag (EFB portable, installed)

A04 Manuals

- Operations manual: (content/handling exercise)
- Aircraft flight manual (examples)





- Electronic manuals/integrated systems
- Update status
- Content in relation to flight preparation

A05 Checklists

- Check validity normal-, abnormal-, emergency checklists and 'quick reference handbook'
- Meaning of 'available'/within reach (case study/examples)
- A/C system integrated checklists (demonstration of system)
- Electronic Checklists

A06 Radio navigation / instrument charts

- Check the covering of charts
- En-route and instruments approach charts (view examples)
- Locations in the flight crew compartment
- Electronic maps and charts (examples)
- Check updating markings of the charts and folders.
- FMS navigation database (check the 'INIT' page for validity)

A07 Minimum Equipment List

- Check if deferred defects are in accordance with the MEL instructions (if applicable)
- Inspect MEL according to the current MMEL
- Approval (check)
- Check customisation of MEL
- CDL (configuration deviation list)

A08 Certificate of registration

- Content and accuracy of the Certificate of Registration (various examples/check)
- Show location (A/C documents or door)

A09 Noise certificate (where applicable)

- Format of the noise certificate
- Content of noise certificate/approval
- Show location (A/C documents or door)

A10 AOC or equivalent

- Format of the air operator certificate
- Content and accuracy of AOC/approval (check compliance with the requirement)
- Show location (A/C documents or door)

A11 Radio licence

- Format of the radio station licence (examples)
- Show location (A/C documents or door)

A12 Certificate of airworthiness

- Check certificate and content (recognise standard form)
- Accuracy and validity (check)
- Show location (A/C documents or door)

A13 Flight preparation

- Check operational flight plan, proper filling and relevant documents





- Proper fuel/performance calculation and monitoring (demonstration of various examples)
- Special considerations for ETOPS operations (if applicable)
- Weather information/available and within reach (demonstrate updated reports/examples)
- NOTAMs/check validity (examples)

A14 Mass and balance calculation

- Check examples of different type weight and balance sheets/A/C types (manual and computerised)
- Data available (on board or on demand) for a verification by crew

A15 Hand fire extinguishers

- Locations/access
- Condition and pressure gauge
- Familiarise with different date markings (inspection date or expiry date, if any)
- Mountings (review examples)
- Types (review examples)

A16 Life-jackets / flotation devices

- Locations/access
- Condition
- Familiarise with different date markings (inspection date or expiry date, if any)

A17 Harness

- Availability for all flight crew members
- Condition of fabrics and locks
- Passenger seat materials/fire resistant (recognise right materials)

A18 Oxygen equipment

- Storage of masks (Quick Donning)
- Pressure gauge (comparison with minimum required according to the operations manual)
- Operational functional check of the combined oxygen and communication system (radio boom)

A19 Independent portable light

- Number and adequate location (day/night)
- Operational check

A20 Flight crew licence / composition

- Licenses of personnel:
 - endorsement of certificates and licenses
 - validity of endorsed certificates and licenses
 - language proficiency
 - medical certificate (limitations, spare glasses, etc.)
 - validity of licences (validation from State of Registry, if applicable)
- Aeroplane flight crew:





<ul style="list-style-type: none"> — composition of the flight crew — age limitations <p>A21 Journey log book, or equivalent</p> <ul style="list-style-type: none"> • Content of journey log book • Responsibility of signing log book (example) <p>A22 Maintenance release</p> <ul style="list-style-type: none"> • Aeroplane maintenance (maintenance record) • Maintenance release, general (checkmark or sign) • Relevant release to service (examples) <p>A23 Defect notification and rectification</p> <ul style="list-style-type: none"> • Open defects • Cross check with MEL • History of defects (including hold item list) <p>A24 Pre-flight inspection</p> <ul style="list-style-type: none"> • Pre-flight inspection sheet and journey log book (presence and acknowledgement) 	
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MODULE (B) – CABIN INSPECTION ITEMS	
<p>B01 General internal condition</p> <ul style="list-style-type: none"> • Safety and survival equipment • Design and construction (familiarise with different type cabins) • Recognise loose carpet and damaged floor panel • System design features: <ul style="list-style-type: none"> — recognise right materials — lavatory smoke detection system — built-in fire extinguisher system for each receptacle intended for disposal of towels, paper or waste (how to check extinguishers) • Check that normal and abnormal duties by cabin crew may be performed without hindrance (guided tour in cabin for demonstration of duties) <p>B02 Cabin crew’s station & crew rest area</p> <ul style="list-style-type: none"> • Cabin crew seats (number, material and condition) • Cabin crew seats upright position (case study/recognise safety hazard/automatic retraction) • Familiarise with problems with belt wearing and fast locks • Familiarise with seat attachment to the floor or wall • Easy access to emergency equipment (locations and condition) <p>B03 First-aid kit / emergency medical kit</p> <ul style="list-style-type: none"> • Number and locations (readily/access) • Adequacy (content, need for medical kit) 	<p>Objectives:</p> <p>Candidates should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>





- Confirmation that contents match the relevant checklist
- Identifications/markings/seals (examples)

B04 Hand fire extinguishers

- Locations/access
- Condition and pressure gauge
- Familiarise with different date markings (inspection date or expiry date, if any)
- Mountings (review examples)
- Types (review examples)

B05 Life-jackets / flotation devices

- Locations/access
- Condition
- Familiarise with different date markings (inspection date or expiry date, if any)
- Different models of life-jackets and flotation devices
- Infant life-jackets (accessibility, number, procedure used for distribution)
- Instructions for passengers

B06 Seat belt and seat condition

- Availability for all passengers
- Condition of seatbelts: fabrics and locks
- Condition of seats: restraining bars, seat blocked in upright position, attachment to the cabin floor, etc. (how to check)
- Installation of seat belts (, hazard to block evacuation)
- Extra/extension belts, berths (locations)
- Passenger seat materials/fire resistant (recognise right materials)

B07 Emergency exit, lighting / marking, independent portable light

- Lighting, signs and marking (locations and condition)
- Condition and serviceability of exits
- Instructions for passengers
- Availability, serviceability and easy access of independent portable light

B08 Slides / life-rafts (as required) / ELTs

- Slides/rafts general (locations and condition)
- Check pressure gauge and recognise green band
- Recognise condition of slides and rafts and familiarise with expiry date markings
- Emergency locator transmitter (ELT) (locations and condition)
- Automatic fixed ELT (examples/how to recognise)
- Automatic portable ELT (examples/how to recognise)
- Automatic deployable ELT (examples/how to recognise)

B09 Oxygen supply (cabin crew and passengers)

- Locations and condition
- Cylinder pressure gauge
- Drop-out panels (locations and condition)
- Storage of masks/serviceability

B10 Safety instructions

- Available and reachable
- Accuracy of the information shown





<ul style="list-style-type: none"> • Content of instructions <p>B11 Cabin crew members</p> <ul style="list-style-type: none"> • Appropriate number of cabin crew (how to check) • Cabin crew positions in case of refuelling with passengers on board <p>B12 Access to emergency exits</p> <ul style="list-style-type: none"> • Number and location of exits • Different models and sizes (A/C type) • Obstructions (requirement on the projected opening) • Instructions for passengers (written and demonstration) <p>B13 Stowage of passenger’s baggage</p> <ul style="list-style-type: none"> • Recognise proper storage (size, weight and number) • Familiarise and recognise safety risks (case study) <p>B14 Seat capacity</p> <ul style="list-style-type: none"> • Compare the numbers of passenger and the number of serviceable seats • Max number of passengers according to the cabin configuration • Interrelation with other inspection items: maximum number of passengers influenced by: B6 (inoperative seat) and/or B7 (inoperative exit) 	
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MODULE (C) – AIRCRAFT CONDITION INSPECTION ITEMS	
<p>C01 General external condition</p> <ul style="list-style-type: none"> • Corrosion (familiarise and recognise different corrosion types) • Cleanliness and contamination of fuselage and wings (familiarise and recognise) • Recognise presence of ice, snow and frost • Windshields (recognise delaminating) • Windows (recognise damages and problems) • Exterior lights (landing lights, NAV-lights, strobes, beacon, etc.) (check the condition) • Recognise legibility of aircraft’s markings (registration) • Condition of paint (familiarise when loose of painting is problem) • Recognise marks of lightning strike • Wing de-icing system condition <p>C02 Doors and hatches</p> <ul style="list-style-type: none"> • Familiarise with different door types/structures • Familiarise with markings and placards of doors • Operating instructions of doors (recognise hazards if lack of markings) • Recognise normal condition and possible damages/loosing parts <p>C03 Flight controls</p>	<p>Objectives:</p> <p>Candidates should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>





- Condition and possible damages, corrosion, leaks and loose parts
- Recognise marks of lightning strike
- Familiarise with static dischargers (recognise when missing)
- Recognise possible defects and damages

C04 Wheels, tyres and brakes

- Familiarise with different tyre models
- Familiarise with different brake assemblies
- Familiarise with maintenance manual limits
- Recognise brake wearing indicator 'pin' (examples/locations)
- Recognise normal condition and possible damages, leaking and loose parts
- Tyre wear/tyre pressure (check)

C05 Undercarriage skids / floats

- Condition and possible damages, corrosion and loose parts
- Proper strut (and tilt cylinder pressure)
- Lubrication (recognise signs of lubrication)
- Familiarise with marking placards
- Recognise bonding wires
- Possible defects and damages

C06 Wheel well

- Condition and possible damages, corrosion and loose parts
- Lubrication (recognise signs of lubrication)
- Familiarise with marking placards
- Recognise bonding wires
- Possible defects and damages

C07 Power plant and pylon

- Power plant (types of engines)
- Cowlings, cowling doors and blow-out doors
- Condition and possible damages, corrosion, leaking and loose parts
- Recognise engine sensors (condition)
- Possible defects and damages
- Pylon (types of pylons): Recognise pylon doors, panels and blow-out panels and loose rivets/bolts
- Reverser's condition (broken hinges and proper closure)

C08 Fan blades, propellers, rotors (main & tail)

- Typical foreign object damages (FOD)
- Examples of dents, nicks and blade bending
- Recognise looseness of blades in hub
- Possible defects and damages (familiarise with procedures related to compliance with engine maintenance manual)
- Check de-icing system

C09 Obvious repairs

- Recognise obvious repairs (examples)
- Maintenance release/technical log

C10 Obvious un-repaired damage





<ul style="list-style-type: none"> • Recognise obvious damages (examples) • Damages/maintenance release/technical log • Recognise assessment of damage (examples) <p>C11 Leakage</p> <ul style="list-style-type: none"> • Fluid leaks outside of limits (examples fuel, hydraulic, oil) • Obvious leak: check the maintenance release, technical log • Recognise toilet leaks (blue ice examples) • Recognise de-icing fluids on the A/C 	
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<p>MODULE (D) – CARGO INSPECTION ITEMS AND GENERAL ITEM</p>	
<p>D01 General condition of cargo compartment</p> <ul style="list-style-type: none"> • Structures, wall panels, wall and ceiling cargo (tape) sealing • Familiarise with A/C systems in cargo compartment: <ul style="list-style-type: none"> — fire containment, detection and extinguishing systems — ventilation — heating — loading systems (rollers) — lighting • Recognise blow-out panels • Familiarise with 9G-net • Cargo restraining devices • Loading instructions/door instructions (placards, wall markings/tidiness) • Damages in cargo compartment • Recognise obvious repairs in cargo compartment <p>D02 Dangerous goods</p> <ul style="list-style-type: none"> • How to recognise the special authorisation to transport dangerous goods • Assessing the scope of the authorisation (different classes) • Notification to Captain (NOTOC) format and content • Segregation and accessibility • Packaging, labelling and markings of dangerous goods • Identifying limitations and restrictions for certain (sub)classes of dangerous goods • Identification and removal of contamination with dangerous goods <p>D03 Secure stowage of cargo on board</p> <ul style="list-style-type: none"> • Familiarise with flight kit/spare wheel (secured) • Familiarise with pallets, nets, straps, containers (secured) • Damages on pallets, nets, straps, containers • Recognising loading limitations (weight, size and height) <p>E01 General</p> <ul style="list-style-type: none"> • All the general items that may have a direct relation with the safety of the aircraft or its occupants 	<p>Objectives:</p> <p>Candidates should be able to use their technical knowledge and ramp inspection techniques in a satisfactory manner during the subsequent on-the-job training</p>





9.2.3 Elements and checklist for the OJT training for ramp inspectors

Elements to be covered during the initial OJT

- Preparation of an inspection:
 - selection of operator(s) to be inspected (use of the annual ramp inspection programme and of prioritisation lists);
 - use of the ramp inspection tool to prepare an inspection, including:
 - follow-up of previous inspections;
 - safety reports; and
 - areas of concern, repetitive and/or open findings.
 - other sources of information (such as passenger complaints, whistle-blowers, maintenance organisation reports, air traffic control (ATC) reports);
 - retrieval of updated reference materials: Notices to Airmen (NOTAMs), navigation and weather charts; and
 - task allocation between team members.
- Administrative issues:
 - ramp inspector's credentials, rights and obligations;
 - special urgency procedures (if any);
 - national (local) aerodrome access procedures;
 - safety and security airside procedures; and
 - ramp inspector's kit (independent portable light, fluorescent vest, ear plugs, camera, mirror, checklists, etc.).
- Cooperation with airport and air navigation services to obtain actual flight information, parking position, time of departure, etc.
- Ramp inspection methodology:
 - introduction to the pilot-in-command/commander, flight crew, cabin crew, ground crew;
 - selection of inspection items, according to the area of expertise of the candidate;
 - findings (identification, categorisation, reporting, evidencing);
 - corrective actions — class 3:
 - Class 3a) "enforcement of restriction(s) on aircraft flight operations": cooperation with other services/authorities to enforce a restriction;
 - Class 3b) "request of an immediate corrective action(s)": satisfactory completion of an immediate corrective action; and
 - Class 3c) "grounding of an aircraft": notification of the grounding decision to the aircraft commander, national procedures to prevent the departure of a grounded aircraft; communication with the State of Operator/Registry.
 - proof of inspection:
 - completion and delivery of the proof of (ramp) inspection;
 - request of acknowledgement of receipt (document or a refusal to sign).
 - debriefing to the flight crew or operator's representative.
- Human factors elements:
 - cultural aspects;
 - resolution of disagreements and/or conflicts; and
 - avoidance of crew stress.





Checklist on-the-job training of ramp inspectors

The content of the following checklist should be used for ramp inspections performed with the candidate during the “observation” and “under supervision” phases of the OJT training. The information gathered by the senior ramp inspectors involved in the OJT phase should be then considered by the competent authority whilst performing the final assessment of the candidate.

The senior ramp inspectors involved during the OJT training phase should use the inspection instructions referred to in AMC1 ARO.RAMP.125 when assessing the knowledge of the candidate concerning each inspection item.

OJT checklist

CHECKLIST ON-THE-JOB TRAINING OF INSPECTORS			
Competent Authority		Senior ramp inspector:	
Name of trainee:		Place:	
Date:		Ramp Inspection Number:	
Operator:	A/C Registration:	A/C Type:	

		Check: (Description/ notes)	Obs.	U/S
A	Flight deck			
	General			
1	General condition	<ul style="list-style-type: none"> inappropriately pulled circuit breakers reinforced flight crew compartment door, if required crew baggage flight crew seats Note/remark:		
2	Emergency exit	<ul style="list-style-type: none"> Are exits serviceable (if not, check MEL limitations) Possible obstacles emergency exits (serviceability) Note/remark:		
3	Equipment	ACAS II/TCAS: <ul style="list-style-type: none"> Presence System test/passed 8.33 kHz: (if required) <ul style="list-style-type: none"> Radio channel spacing RNAV: <ul style="list-style-type: none"> Authorisation to perform operations in RNAV airspace. TAWS/E-GPWS: <ul style="list-style-type: none"> Presence TAWS/SRPBZ for forward looking terrain avoidance function 		





		<ul style="list-style-type: none"> Data Base of system (content and update) System test (if possible) <p>MNPS</p> <ul style="list-style-type: none"> Special authorisation Cockpit Voice Recorder System test (if possible) <p>RVSM: (if required)</p> <ul style="list-style-type: none"> Presence Serviceability <p>Note/remark:</p>		
Documentation				
4	Manuals	<ul style="list-style-type: none"> Presence of the applicable parts of the operations manual Up-to-date Competent authority approval where applicable content (complies with the requirements) Presence of aircraft flight manual / performance data Differences regarding manuals of aircraft of ex-Soviet design (e.g. Rukowodstwo on former Commonwealth of Independent States (CIS) built aircraft. <p>Note/remark:</p>		
5	Checklists	<ul style="list-style-type: none"> Available/within reach Tidiness/cleanness Normal Abnormal Emergency Up-to-date/not for training, etc. Content (compliance with the operator procedures) Appropriate for aircraft configuration being used <p>Note/remark:</p>		
6	Radio navigation/ instrument charts	<ul style="list-style-type: none"> Presence of instrument approach charts (available/within reach/ up-to-date) Presence of en-route charts (available/within reach/up-to-date) Route covering FMS/GPS database validity <p>Note/remark:</p>		
7	Minimum equipment list	<ul style="list-style-type: none"> Presence of instrument approach charts (available/w within reach/ up-to-date) Presence of en-route charts (available/within reach/up-to-date) Route covering FMS/GPS database validity <p>Note/remark:</p>		
8	Certificate of registration	<ul style="list-style-type: none"> On-board Accuracy (Reg. mark, A/C type and S/N) Format English translation when needed 		





		<ul style="list-style-type: none"> • Identification plate (S/N) <p>Note/remark:</p>		
9	Noise certificate	<ul style="list-style-type: none"> • On-board • Approval (state of registry) <p>Note/remark:</p>		
10	AOC or equivalent	<ul style="list-style-type: none"> • Accuracy • Content (operator identification, validity, date of issue, A/C type, OPS SPECS) • EASA TCO authorisation (if applicable) <p>Note/remark:</p>		
11	Radio licence	<ul style="list-style-type: none"> • On-board • Accuracy with installed equipment <p>Note:</p>		
12	Certificate of airworthiness (C of A)	<ul style="list-style-type: none"> • On-board (original or certified true copy) • Accuracy • Validity <p>Note/remark:</p>		
Flight data				
13	Flight preparation	<ul style="list-style-type: none"> • Operational flight plan on board • Proper filling • Signed by pilot-in-command/commander (and where applicable, Dispatch) • Fuel calculation • Fuel monitoring/management • NOTAMs • Updated meteorological information • Letter Y in flight plan <p>Note/remark:</p>		
14	Mass and balance calculation	<ul style="list-style-type: none"> • On-board • Accuracy (calculations/ limits) • Pilots acceptance • Load and trim sheet/ actual load distribution <p>Note/remark:</p>		
Safety Equipment				
15	Hand fire extinguishers	<ul style="list-style-type: none"> • On-board • Condition/pressure indicator • Mounting (secured) • Expiry date (if any) • Access • Sufficient number <p>Note/remark:</p>		
16	Life jackets/flotation devices	<ul style="list-style-type: none"> • On-board • Access/within reach • Condition • Expiry date (where applicable) • Sufficient number 		





		Note/remark:		
17	Harness	<ul style="list-style-type: none"> On-board (no seatbelt) Condition Sufficient number (one for each crew member) 		
		Note/remark:		
18	Oxygen equipment	<ul style="list-style-type: none"> On-board Condition Cylinder pressure (minimum acc. to operations manual) Ask crew to perform the operational function check of combined oxygen and communication system Follow practice of the flight crew 		
		Note/remark:		
19	Independent Portable light	<ul style="list-style-type: none"> On-board Appropriate quantities Condition Serviceability Access/within reach The need for an independent portable light (departure or arrival at night time) 		
		Note/remark:		
20	Flight crew licence/composition	<ul style="list-style-type: none"> On-board Form/content/English translation when needed Validity Ratings (appropriate type) (pilot-in-command (PIC)/ATPL) Pilots' age Possible difference with ICAO Annex 1 (concerning the age of pilots) In case of validation (all documents needed) Medical assessment/ check interval Spare eye glasses if applicable Minimum flight crew requirements 		
		Note/remark:		
Journey Logbook / Tech log or equivalent				
21	Journey log book or equivalent	<ul style="list-style-type: none"> On-board Content Filling (carefully and properly) 		
		Note/remark:		
22	Maintenance release	<ul style="list-style-type: none"> Validity When need of maintenance, technical log has been complied with When ETOPS, requirement are met Signed off Verify that maintenance release has not expired Ex-Soviet built A/C 		
		Note/remark:		
23	Defect notification and rectification	<ul style="list-style-type: none"> Number of deferred defects All defects been notified 		





		<ul style="list-style-type: none"> Defect deferments include time limits and comply with the stated time limits All the defects are notified Technical log markings (should be understandable by captain) Ex-Soviet built A/C <p>Note/remark:</p>		
24	Pre-flight inspection	<ul style="list-style-type: none"> Performed (inbound/ outbound flight) Signed off <p>Note/remark:</p>		
B	Cabin (Safety)			
1	General internal condition	<ul style="list-style-type: none"> General condition Possible loose carpets Possible loose or damaged floor panels Possible loose or damaged wall panels Seats Markings of unserviceable seats Lavatories Lavatory smoke detectors Safety and survival equipment (shall be reliable, readily accessible and easily identified. Instructions for operation shall be clearly marked) Possible obstacles to perform normal and abnormal duties <p>Note/remark:</p>		
2	Cabin crew stations and crew rest area	<ul style="list-style-type: none"> Presence of cabin crew seats and compliance with the requirement Sufficient number Condition (seatbelt, harness) Emergency equipment (independent portable light, fire extinguishers, portable breathing equipment ...) Cabin preparation list <p>Note/remark:</p>		
3	First-aid kit/ emergency medical kit	<ul style="list-style-type: none"> On-board Condition Expiry date Location (as indicated) Identification Adequacy Access Operating instructions (clear) <p>Note/remark:</p>		
4	Hand fire extinguishers	<ul style="list-style-type: none"> On-board Condition (pressure indicator) Expiry date (if available) Mounting and access Number <p>Note/remark:</p>		
5	Life jackets/ flotation devices	<ul style="list-style-type: none"> On-board 		





		<ul style="list-style-type: none"> • Easy access • Condition • Expiry dates as applicable • Sufficient number • Infant vest <p>Note/remark:</p>		
6	Seat belt and seat condition	<ul style="list-style-type: none"> • On-board • Sufficient number • Condition • Availability of extension belts • Cabin seats (verify the condition) • If unserviceable check U/S-tag. • Restraint bars <p>Note/remark:</p>		
7	Emergency exit, lightning and marking, independent portable light	<ul style="list-style-type: none"> • Emergency exits (condition) • Emergency exit signs/ presence (condition) • Operation instructions (markings and passenger emergency briefing cards) • Floor path markings (ask to switch on). Possible malfunction/MEL • Lighting • Independent Portable light and batteries (condition) • Sufficient number of Independent Portable light (night operations) • Availability on each cabin attendant's station. <p>Note/remark:</p>		
8	Slides/life-rafts (as required), ELT	<ul style="list-style-type: none"> • Slides on-board • Condition • Expiry date • Sufficient number • Location and mounting • Bottle pressure gauge • ELT on board • ELT (condition and date) <p>Note/remark:</p>		
9	Oxygen supply (cabin crew and passengers)	<ul style="list-style-type: none"> • Presence • Sufficient quantity of masks (cabin crew and passengers) • Drop-out panels are free to fall • Passenger instructions (passenger emergency briefing cards) • Portable cylinder supply and medical oxygen, check pressure and mounting <p>Note/remark:</p>		
10	Safety instructions	<ul style="list-style-type: none"> • On-board • Tidiness • Accuracy/content (A/C type) • Sufficient numbers (passenger emergency briefing card for each passenger) 		





		<ul style="list-style-type: none"> Cards for flight crew (check emergency equipment locations) <p>Note/remark:</p>		
11	Cabin crew members	<ul style="list-style-type: none"> General overview of cabin crew (conditions) Sufficient number of cabin crew (appropriate) How the duty stations are manned Follow practice of the cabin crew When refuelling with passengers on-board check procedures <p>Note/remark:</p>		
12	Access to emergency exits	<ul style="list-style-type: none"> Access areas Possible obstacles for evacuation (foldable jump seat or seat backrest table) <p>Note/remark:</p>		
13	Stowage of passenger baggage	<ul style="list-style-type: none"> Hand baggage storages in cabin Size of hand baggage Quantity of hand baggage Weight of hand baggage Placed under seat (restraint bar) <p>Note/remark:</p>		
14	Seat capacity	<ul style="list-style-type: none"> Hand baggage storages in cabin Size of hand baggage Quantity of hand baggage Weight of hand baggage Placed under seat (restraint bar) <p>Note/remark:</p>		
C	Aircraft condition			
1	General external condition	<ul style="list-style-type: none"> Radom (latches/painting) Windshields Wipers Static ports/areas AoA probes Pitot tubes TAT probe Crew oxygen discharge indicator (if exist) Ground power connection (condition) Wings (general condition, ice/snow contamination) Fairings Leading edge (dents) Winglets Trailing edge/static dischargers Look for hydraulic leaks Look for fuel leak Fuselage Tail section/static dischargers APU cooling air inlet APU exhaust air/surge Look at APU area for leaks Tail bumper (contact markings) 		





		<ul style="list-style-type: none"> Maintenance and service panels (water / waste / hydraulic maintenance panels / refuel panels / cargo door control panel / RAT door) Cabin windows Exterior lights Painting (condition) Cleanliness Markings/operational instructions and registration Obvious repairs Obvious damage <p>Note/remark:</p>		
2	Doors and hatches	<ul style="list-style-type: none"> Passenger doors (condition) Emergency exits (condition) Cargo doors (condition) Avionics compartment doors (condition) Accessory compartment doors (condition) Operation instructions of all doors Lubrications of all doors Door seals Handles <p>Note/remark:</p>		
3	Flight controls	<ul style="list-style-type: none"> Ailerons (condition) Slats/Krueger flaps/Notch flap (condition) Spoiler panels (condition) Flaps/track fairings (condition) Rudder (condition) Elevators (condition) Stabiliser (condition) <p><i>Note! Check for leaks, flap drooping, wearing, corrosion, disbonding, dents, loose fittings and obvious damages.</i></p> <p>Note/remark:</p>		
4	Wheels, tyres and brakes	<ul style="list-style-type: none"> Wheels (assembly condition, bolts and paint markings) Tires (condition and pressure). Check for cuts, groove cracks, worn out shoulders, blister, bulges, flat spots) Worn tire areas (measure the tread depth) If cuts measure depth Brakes (condition, wearing pins) Measure and familiarise length of the pin/check for the limits. <p>Note/remark:</p>		
5	Undercarriage	<ul style="list-style-type: none"> Landing gear/hinges (general condition/leaks) Struts Locking mechanisms Hydraulic (or pneumatic) lines (condition) Strut pressure (visual check/piston length) Lubrication Electric lines and plugs. Bonding 		





		<ul style="list-style-type: none"> • Cleanliness • FOD (foreign object damage) • Surface (plasma) and paintings • Check for corrosion • Placards and markings (nitrogen pressure table) • Dampers and bogie cylinders (check for leaks) • Landing gear strut doors • Use independent portable light and mirror <p>Note/remark:</p>		
6	Wheel well	<ul style="list-style-type: none"> • General condition (structures) • Possible corrosion • Cleanliness • Installations (wiring, piping, hoses, hydraulic containers and devices) • Check for leaks • Wheel well doors (hinges) • Check for maintenance safety pins <p>Note/remark:</p>		
7	Powerplant and pylon	<ul style="list-style-type: none"> • Air intake ring (general condition/inner skin and acoustic panels) • Engine cowlings (panels aligned, handles aligned, vortex generators/access doors) • Intake area fasteners • Sensors • Thrust reverses (ring and inner doors or thrust reverser doors) • Reverser duct inner skin and acoustic panels • Outlet guide vanes (from behind/reverser duct) • Exhaust barrel (inner and outer skin) • Drain mast/leaks • Pylons (sealants, panels, doors and blow-out-doors, possible leaks) <p>Note/remark:</p>		
8	Fan blades, propellers, rotors (main/tail)	<ul style="list-style-type: none"> • Fan blades: general condition (check for foreign object damage, cracks, nicks, cuts, corrosion and erosion) • Fan blade: <ul style="list-style-type: none"> ▪ Leading edge ▪ Mid-span shroud (no stacked) ▪ Tip ▪ Contour surface ▪ Root area ▪ platform <p><i>Note! Wait until rotation stop! Use independent portable light and mirror for the backside of the blades.</i></p> <ul style="list-style-type: none"> • Spinner (damages/bolts) • Fan outlet vanes (thorough the fan) • FOD (foreign object damage) • Split fairing 		





		<ul style="list-style-type: none"> Blades (general condition) Tip and mid area (75 % from root) Check for nicks, dents, cracks, leakages etc. Hub/spinner Looseness of blades in hub <p>Note/remark:</p>		
9	Obvious repairs	<ul style="list-style-type: none"> During the inspection of C-items notify unusual design and repairs obviously not carried out in accordance with the applicable AMM/SRM <p>Note/remark:</p>		
10	Obvious unrepaired damages	<ul style="list-style-type: none"> During the inspection of C-items notify unassessed and unrecorded damages and corrosion (lightning strike, bird strikes, FODs, etc.) Check damage charts <p>Note/remark:</p>		
11	Leakage	<ul style="list-style-type: none"> During the inspection of C-items notify all the leaks: Fuel leaks Hydraulic leaks Toilet liquid leaks When leak: measure the leak rate and check the leak rates from AMM etc. if it is allowable and within normal operation limits or not. <p><i>Note: Wear proper eye protection for this kind of inspection</i></p> <p>Note/remark:</p>		
D	Cargo compartment			
1	General condition of cargo compartment	<ul style="list-style-type: none"> Cleanliness Lightning Fire protection/detection/ extinguishing systems and smoke detectors Floor panels Wall panels/markings Blow-out-panels Ceilings Wall and ceiling panel sealants Cargo nets/door nets Fire extinguishers Cargo roller and driving system and control panel <p>Note/remark:</p>		
2	Dangerous goods	<ul style="list-style-type: none"> Operations manual/ information required by ICAO Annex 18 Technical Instructions (ICAO Doc. 9284-AN/905) are applied <p>If dangerous goods on-board:</p> <ul style="list-style-type: none"> Pilots' notification Stowing of dangerous goods cargo Packaging (condition, leaks, damage) Labelling <p>If leak or damage of dangerous goods cargo:</p> <ul style="list-style-type: none"> Condition of other cargo 		





		<ul style="list-style-type: none"> Follow removal Follow cleaning of contamination <p>Note/remark:</p>		
3	Secure stowage of cargo	<ul style="list-style-type: none"> Load distribution (floor limits, pallets and containers/maximum gross weight) Flight kit/spare wheel/ ladders (secured) Cargo (secured) Condition and presence of: <ul style="list-style-type: none"> Lockers Restraints Pallets Nets Straps Containers Container locks on the floor Heavy items securing inside containers <p>Note/remark:</p>		
E	General			
1	General	<ul style="list-style-type: none"> Particulars of the situation <p>Note/remark:</p>		

Additional elements (O) observed/performed (P) during the On the Job Training	
<i>(Please List)</i>	
Assessment, was the inspection carried out in a satisfactory manner regarding:	
<ul style="list-style-type: none"> - preparation of the inspection - ramp inspection - proof of inspection - human factors elements 	<input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*) <input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*) <input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*) <input type="checkbox"/> Yes <input type="checkbox"/> No (provide further details below*)
Additional Remarks:*	
Further training needed: yes/no	
Signature of the trainee:	Signature of the senior ramp inspector:





9.2.4 Syllabus of alcohol testing training

ALCOHOL TESTING	
<p>Cover a typical alcohol test from start to finish</p> <ul style="list-style-type: none">• Preparation• Initial test and confirmation• Positive or refusal• Proof of inspection• Notification of positive• Ramp inspection tool• National requirements for legal actions• National requirements for data protection <p>Correct use of breathalyser</p> <ul style="list-style-type: none">• Start up• Operation• Calibration• Hygienic principles <p>Conflict management</p> <ul style="list-style-type: none">• Handling confrontations tactfully and constructively	<p>Objectives:</p> <p>Candidates should be able to use their technical knowledge and ramp inspection techniques satisfactorily during the subsequent on-the-job training</p>





7	Power plant and pylon		
8	Fan blades, propellers, rotors (main & tail)		
9	Obvious repairs		
10	Obvious un-repaired damage		
11	Leakage		
D Cargo			
1	General condition of cargo compartment		
2	Dangerous goods		
3	Secure stowage of cargo on board		
E General			
1	General		

¹Inspection Standards: E = EASA, I = ICAO, M = Manufacturer, N = National ² Finding Category: G = General remark, 1 = Minor, 2 = Significant, 3 = Major

Additional Information (where applicable)

Class of Action			
<input type="checkbox"/>	3d	Immediate operating ban	
<input type="checkbox"/>	3c	Aircraft grounded by (name of CA)	
<input type="checkbox"/>	3b	Corrective actions before flight required	
<input type="checkbox"/>	3a	Restriction on aircraft operation	
<input type="checkbox"/>	2	Information to Authority and operator	
<input type="checkbox"/>	1	Information to PIC / operator's representative	
<input type="checkbox"/>	0	No findings	

PIC / operator's representative (comments / feedback)	Name & Signature (*)
--	----------------------

inspector(s) name(s) or number(s):

(*) Signature by any member of the crew or another representative of the inspected operator does in no way imply acceptance of the listed findings but simply a confirmation that the aircraft has been inspected on the date and at the place indicated on this document.
 This report represents an indication of what was found on this occasion and must not be construed as a determination that the aircraft is fit for the intended flight.
 Data submitted in this report can be subject to change upon entering into the ramp inspection tool.

CA Document Number xxx

NOTE: The EU Member States have to provide a GDPR statement. Where the statement of the GDPR could not be added to the front page of the Pol for lack of space, it has to be added on another place or to be considered as a separate document handed over together with the Pol. Furthermore, all states may consider the addition of the following (EU) statement (in full or abbreviated) on data protection on their Pol form, or any related non-EU national statement on data protection.

EU GDPR statement: All your personal data is processed in compliance with the provisions and requirements of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)





10 Attachments (*Guidance*)

10.1 RITO check-lists

10.1.1 Check-list for the evaluation of a ramp inspection training organisation

CHECKLIST FOR THE EVALUATION OF A RAMP INSPECTION TRAINING ORGANISATION (RITO)

1. ORGANISATIONAL STRUCTURE				
No.	Description	Yes	No	Remarks
1	Has a manager with corporate authority been appointed?			
2	Has the training provider contracted enough staff to develop and deliver the envisaged training?			
3	Is the development and delivery of training in accordance with the technical criteria required by the Agency?			
2. FACILITIES AND OFFICE ACCOMMODATION				
No.	Description	Yes	No	Remarks
1	Does the size and structure of the available training facilities ensure adequate protection against weather elements?			
2	Does the size and structure of the available training facilities provide proper training activities?			
3	As alternate means of compliance has the training organisation a procedure containing the applicable criteria when selecting the training facilities to be used, and are these criteria in compliance with the technical requirements provided by the Agency?			
3. INSTRUCTIONAL EQUIPMENT				
No.	Description	Yes	No	Remarks
1	Is the presentation equipment appropriate for the training to be delivered?			
2	Can the candidates easily read the presented material from any position in the classroom?			
3	As alternate means of compliance has the training organisation a procedure containing the applicable criteria when selecting the training facilities to be used,			





	and are these criteria in compliance with the technical requirements provided by the Agency?			
4	Does the training organisation ensure that a suitable aircraft is available for practical training for an adequate period?			

4. TRAINING PROCEDURE

No.	Description	Yes	No	Remarks
1	Has the training provider established appropriate procedures to ensure proper training standards?			
2	Has the training provider established a system to control the training preparation and delivery process?			
3	Is the course material written in the English language and will the course be given in the English language?			
4	Has the training provider demonstrated how compliance with Agency's technical criteria is maintained current and kept in line with the training syllabi?			
5	Has the training provider developed a system to evaluate the effectiveness of training provided?			
6	Has the training provider developed a system to evaluate the effectiveness of the training based upon the feedback received?			

5. INSTRUCTORS – QUALIFICATION CRITERIA

No.	Description	Yes	No	Remarks
1	Does the training organisation have an instructors' recruitment procedure?			
2	Does the recruitment procedure contain applicable selection criteria which are in compliance with the technical requirements provided by the Agency?			
3	Do the instructors possess knowledge of the EU Ramp Inspection Programme?			
4	Do the instructors have the knowledge on training methods and techniques?			
5	Do the instructors delivering training on inspection items/practical training meet the eligibility and inspection experience requirements?			





	6	Do the other instructors meet the working experience criteria?			
6. INSTRUCTORS – QUALIFICATION RECORDS					
No.	Description		Yes	No	Remarks
	1	Has the training organisation created and maintained an adequate instructors' qualification tracking system that ensures their continuous competence at all times?			
	2	Are the criteria used for the maintenance of the instructors' continuous competence in compliance with the technical requirements provided by the Agency?			
7. INSTRUCTORS – RECENT EXPERIENCE AND RECURRENT TRAINING					
No.	Description		Yes	No	Remarks
	1	Do the instructors meet, if applicable, the requirements on recent experience?			
	2	Do the instructors meet the requirements on recurrent training?			
8. RECORDS KEEPING SYSTEM					
No.	Description		Yes	No	Remarks
	1	Has the training organisation put in place a record keeping system that ensures the appropriate collection, storage, protection, confidentiality of data related to training materials developed, associated updates, examinations of the candidates, etc.?			
9. COMPLIANCE MONITORING SYSTEM					
No.	Description		Yes	No	Remarks
	1	Has the training organisation put in place a compliance monitoring system that ensures adequate control of the training development, preparation, delivery process and records keeping?			
10. TRAINING MATERIAL					
No.	Description		Yes	No	Remarks
	1	Are the overview items covered during the theoretical training?			
	2	Is the legal framework covered during the theoretical training?			





3	Is the ICAO framework covered during the theoretical training?			
4	Is the EU framework covered during the theoretical training?			
5	Are the technical aspects covered during the theoretical training?			
6	Is the 'Hands-on' training of the ramp inspection tool covered during the theoretical training?			
7	Are all A inspection items covered during the theoretical training?			
8	Are all A inspection items covered during the practical training?			
9	Are all B inspection items covered during the theoretical training?			
10	Are all B inspection items covered during the practical training?			
11	Are all C inspection items covered during the theoretical training?			
12	Are all C inspection items covered during the practical training?			
13	Are all D and E inspection items covered during the theoretical training?			
14	Are all D and E inspection items covered during the practical training?			
15	Does the training organisation provide to all course participants a copy of the complete training course material and the relevant EU aviation legislation, as well as relevant examples of technical information?			

11. ADDITIONAL REMARKS

Empty box for additional remarks.





10.1.2 Check-list for the evaluation of ramp inspection training instructors

1 Qualification Criteria				
No.	DESCRIPTION	YES	NO	REMARKS
1	Do the instructors possess knowledge of the EU Ramp Inspection Programme?			
2	Do the instructors have the knowledge on training methods and techniques?			
3	Do the instructors delivering training on inspection items/practical training meet the eligibility and inspection experience requirements?			
4	Do the other instructors meet the working experience criteria?			
2 Qualification records				
No.	DESCRIPTION	YES	NO	REMARKS
1	Has the training organisation created and maintained proper records on their instructors?			
3 Recent experience and recurrent training				
No.	DESCRIPTION	YES	NO	REMARKS
1	Do the instructors meet, if applicable, the requirements on recent experience?			
2	Do the instructors meet the requirements on recurrent training?			
ADDITIONAL REMARKS				





10.3 Alcohol testing procedures

Version issue 1 Date: 20/10/2020





Introduction

All procedures described in the present chapter involving processing of personal data should comply with applicable data protection rules.

In particular, EU Member States shall comply with the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (Text with EEA relevance) and implement the corresponding data protection policies for the processing activities defined in the present manual, such as notification of findings, ramp inspection tool reporting and proof of inspection management.

10.3.1 Risk based approach

The Agency shall communicate a list of Union and third-country operators for the prioritisation of alcohol testing. This list should be updated on the same timeframe as the major updates of the priority list (i.e.: update following the regular analysis) and whenever necessary.

This list will be established taking into account the robustness and effectiveness of existing psychoactive testing programmes. When doing so, the Agency shall consider:

- information on existing national psychoactive testing programme (such as random alcohol tests performed on crew members by national officials not employed by the operator); and
- information on existing operator's psychoactive testing programme (such as random alcohol tests performed on crew members by employees of the operator or subcontractors).

The Agency will send a questionnaire to third-country operators' States to gather relevant data. In case the States do not provide data, operators can provide the Agency with information on their own psychoactive testing programme.

This list will identify operators without a robust and effective psychoactive testing programme at national and operator level. Operators for which no data have been received are considered to have no testing programmes in place.

EASA States' Competent Authorities (CA) should make use of this list when establishing the annual ramp inspection programme.

The Agency will analyse the results of alcohol tests included in the ramp inspection tool after 3 years and amend this risk based approach, should the analysis provide enough indicators.

10.3.2 Including alcohol testing in an annual ramp inspection programme

Guidance on how to set an annual programme for alcohol testing on crew members compliant with ARO.RAMP.105 and ARO.RAMP.106 is provided below.

The Competent Authority (CA) should include alcohol tests as part of the annual ramp inspection programme. CA should ensure a reasonable coverage of operators from the priority list for alcohol testing.

The planned annual number of alcohol tests to be performed on a given operator should be adjusted based on the priority for alcohol testing assigned to the operator by the CA. The priority for alcohol testing assigned to an operator should take into account the priority list for alcohol testing established by the Agency.

The annual target of the number of alcohol tests to be performed on a given operator can be set by either adjusting the number of inspections with alcohol tests and/or adjusting the proportion of crew members to be tested during an inspection with alcohol test.





E.g.:

- for an operator on the priority list for alcohol testing, X % of ramp inspections planned will contain alcohol test of crew members and for an operator not included on the priority list for alcohol testing this proportion will be Y %. With $X > Y$;
or
- X % of inspection included in the annual ramp inspection programme will contain alcohol test of crew members, and for operators included on the priority list for alcohol testing Y % of the crew will be tested, for other operators this proportion will be Z %. With $Y > Z$.

As a Flight Crew (FC) under influence of alcohol represents a greater danger for flight safety than a Cabin Crew (CC) under influence of alcohol, a higher priority should be given to perform alcohol test on FC rather than on CC. This can be achieved within the annual ramp inspection programme or within the daily planning.

CA should avoid to plan ramp inspections consisting only of alcohol tests (hereinafter referred to as stand-alone alcohol tests). However, whenever operational reasons or tight time constraints prevent completion of alcohol test during regular ramp inspections (e.g.: short turn-around), CA can programme ramp inspections with stand-alone alcohol test.

The number of stand-alone alcohol tests should not exceed the System Wide Coordination (SWC) target number of inspections for layer 1 operators not included in the priority list for alcohol testing; for operator included in the priority list for alcohol testing the number of stand-alone alcohol tests may exceed the SWC target.

Examples:

- if the target is two and the operator is not included in the priority list for alcohol testing up to two additional stand-alone alcohol tests may be performed;
- if the target was two and the operator is included in the priority list for alcohol testing CA may plan to perform additional stand-alone alcohol tests; and
- if the target is zero and the operator is included in the priority list for alcohol testing, CA may plan to perform stand-alone alcohol tests.

For operators including in the layer 1 of SWC, stand-alone alcohol tests won't be counted as ramp inspections within the framework of SWC.

CA may define the maximum number of alcohol tests they are able to perform in a year and adjust the annual programme for alcohol testing accordingly. It is suggested to keep a margin in order to allow for alcohol test not including in the annual programme (e.g.: alcohol test following whistle-blower information). A CA may establish its annual maximum capacity in term of number of inspections with alcohol test (or number of alcohol test) by taking into account:

- the number of available devices that comply with all requirements set in this manual; or
- the number of ramp inspectors properly trained and qualified available.

10.3.2.1 National Coordinator (NC) responsibilities

The NC should be responsible to develop, monitor and amend an annual ramp inspection programme including the number of alcohol tests to be performed.

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This can be achieved by monitoring the number of alcohol tests or the number of ramp inspections including alcohol tests performed per operator. These numbers should be consistent with the annual programme.

The NC will keep record of alcohol tests performed. Ramp inspectors will ensure the availability of this information, in particular by reporting on the Proof of Inspection (PoI) the number of tested FC and CC.

The ramp inspection tool should support the implementation of alcohol testing during ramp inspection. Alcohol testing results provided by ramp inspections performed in other EASA Member States may also be taken into account to set and monitor the number of alcohol tests (or the number of ramp inspections including alcohol test) to be performed per operator.

The NC may want to enhance its planning oversight by monitoring:

- number of operators tested for alcohol consumption during ramp inspection;
- number of alcohol tests performed on operators included in the priority list for alcohol; and
- list of airports where ramp inspections including alcohol tests were performed.

This information may be used to track positive cases per airport, adjust the annual ramp inspection programme etc.

10.3.3 Daily planning

10.3.3.1 How to plan an initial alcohol test

A risk based approach should be applied for daily planning.

When selecting the date and/or the time and/or the place to perform an alcohol test, ramp inspectors may consider that:

- short-turnaround lets less opportunity for crew members to consume alcohol than overnight or long stays;
- last minute member crew replacement increases the risk for the replacing crew to be under influence of alcohol; and
- when a crew member is tested positive, other crew members are at higher risk to be under influence of alcohol as well.

Alcohol tests performed following whistle-blower information are more likely to detect crew members under influence of alcohol. Reliability of this information should be taken into account.

The widest possible sampling rate of inspected operators for alcohol consumption will increase the deterrent effect of alcohol testing performed during ramp inspections, as more and more crew members will be aware of it.

Alcohol tests can also be performed on operators not listed in the annual programme or on crew members operating in general aviation. A risk based approach should also be followed for these inspections.

10.3.3.2 Selection of items to be inspected

Ramp inspectors will take into account operating factors when planning to include alcohol test during an inspection. This should be assessed in the same way than for other items of the checklist. Taking into account the risks criteria above, ramp inspectors may decide to include alcohol test during a ramp inspection.

Available time for the inspection remains the key element. Previous experiences in EASA Member States which pioneered alcohol-testing indicate that it can be rather long to test the whole cabin crew whereas only few minutes may be enough to test the FC. Therefore when time dictates ramp inspectors may consider to limit alcohol test to FC.

Ramp inspectors may decide to perform alcohol tests separately during a stand-alone alcohol test whenever operational reasons prevent to perform alcohol tests during regular ramp inspections (e.g.: short turn-around). As mentioned above, stand-alone alcohol tests won't be counted as ramp inspections within the framework of SWC (see paragraph 3).

Ramp inspectors may take into account next inspection opportunities for the operator and aim to avoid to perform alcohol test when not enough time is available (e.g.: inbound flight already delayed, short-turnaround).

In any case, ramp inspectors should pay attention to crew apparent fitness for the flight.





For this purpose, ramp inspectors may have been properly trained about visual elements, possibly not as obvious as alcohol smelling, mumbling or erratic ability to provide consistent answers.

Any consideration about crew duty time remains as usual.

10.3.3.3 *Postponing or cancelling an alcohol test*

When ramp inspectors decide to postpone or cancel an alcohol test for valid reasons, this should not be reported on the Pol or in the ramp inspection tool as it would not indicate a lack of cooperation. However, ramp inspectors should inform the NC for planning reasons.

Hereafter are presented examples of reason that may justify to cancel or postpone an alcohol test (this list is not exhaustive):

- privacy of the test towards third parties cannot be guaranteed;
- availability of further opportunities for alcohol tests, including stand-alone tests;
- operator not included in the list of Union and third-country operators for the prioritisation of alcohol testing;
- crew already tested for alcohol consumption as evidenced by document;
- other items are deemed more critical for flight safety; and
- a situation where, in the opinion of the inspector, the increase in crew member stress due to alcohol testing is deemed unnecessary or might jeopardize the safety of the flight.

10.3.3.4 *Alcohol tests not included in the annual programme*

In some cases ramp inspectors may receive whistle-blower information about crew members' alcohol consumption. National procedures ensuring the follow-up of whistle-blower information can be used.

These situations will not be, in general, covered by annual programme and so, will be taken as extraordinary and exceptional cases where general principles previously exposed can be left aside to ensure the risk mitigation.

10.3.4 *Quality of reports entered on the ramp inspection tool*

The NC should ensure the quality of reports entered on the ramp inspection tool by ramp inspectors or by other officials; in particular, the NC will ensure that reports are anonymous and that pre-described findings are used in an appropriate way.

The NC should ensure that the quality control process is followed.

The CA may use the drafting function available on the ramp inspection tool in order to allow for a quality check by a moderator.

10.3.5 *Initial test*

10.3.5.1 *General principles*

Alcohol tests should be carried out in consultation with the crew in such a way that third parties (e.g.: passengers, ground handling personnel etc.) are not aware / informed about the alcohol test performance. Alcohol tests should be preferably done at the aircraft, but can also be done outside the aircraft (e.g. at crew centre...). When performing alcohol tests outside the aircraft, the CA should establish procedures ensuring the principles described in this manual are complied with (notably confidentiality of the test, only crew members with safety task assigned should be tested...).

Care should be taken on the following when selecting the location.

- Cockpit: area could be visible from outside, pending on the parking position of the aircraft.
- Galley: ground handling personnel might be present.
- Cabin: cleaning might be ongoing or has to be delayed by the operator.
- Lavatory compartment should be, by the nature of this place, considered as inadequate to perform the test.

To test FC and CC, the following locations could be seen as adequate to perform the initial alcohol test to ensure a discrete environment.

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- In the cockpit when the door is closed (sunshades down) (preferable location for cockpit crew testing).
- In a crew rest compartment (if available).
- In passenger cabin if empty, (doors closed, window shades down).
- Galley area curtain(s) closed (preferable location for CC testing).

The crew member might propose a different place for the test; if the place is appropriate, ramp inspectors may consider this alternative.

Inspectors should decide to postpone the test to a later date if privacy cannot be guaranteed.

Inspectors should request a list of all crew members to identify which crew members are on duty in the inspected flight. The selection of which crew member to test has to be non-discriminatory (e.g.: random sampling or no sampling).

In general all FC assigned to safety tasks should be tested in priority when the operator is selected. Depending of the crew size and time available, a sampling of CC can be an option. Only CC assigned to safety tasks (Cabin Crew Members as per R965/2012 Annex I – definition) should be tested. Alcohol test of positioning crew members is to be avoided.

Before the alcohol test, ramp inspectors should make sure that the device is operational and suitable for the test (e.g.: correctly calibrated, within due date for maintenance ...).

For electronic devices, the English operating mode should be preferably used (if available). The displayed test result should not leave any doubt (e.g. the blood alcohol concentration displayed or showing a “pass” or “fail” indication).

Since a second alcohol test will be necessary to confirm a first positive result, the first test should be carried out preferably at the beginning of the ramp inspection. In case of a positive result, the exact time of the initial and confirmation test should be noted down.

Inspectors may first request the licence and or ID of the crew member to be tested in order to clearly identify the crew member. This might be relevant in case of a positive test and for further follow-up.

Prior to starting the test, ramp inspectors should introduce:

- the alcohol testing process, avoiding the use of discriminatory or discreditable words;
- the device / test equipment to be used;
- the consequences of positive results to the crew members; and
- that a lack of cooperation will be regarded in the same way as a positive test.

All parts of the equipment, which come into contact with the mouth of the crew member, should be visibly removed from the original packaging in front of or by the tested crew member, and must not be touched by a third person at the relevant points. Since the measurement requires an active involvement of the crew, this can only be done with their consent.

Where compatible with the testing procedures and if requested by the crew member, the crew member should have the option of asking a witness/work colleague to observe the test.

10.3.5.2 Initial test results

When the result appears on the device display, the inspectors should inform the tested crew member of the result.

An initial test result is considered negative when the breath alcohol concentration (BrAC), measured by a breath alcohol tester is lower or equal to the equivalent level of 0.2 grams of blood alcohol concentration (BAC) per litre of blood or the national statutory limit, whichever is the lower.

An initial test result is considered positive when the breath alcohol concentration (BrAC), measured by a breath alcohol tester is higher than the equivalent level of 0.2 grams of blood alcohol concentration (BAC) per litre of blood or the national statutory limit, whichever is the lower.





10.3.5.3 Negative initial test

In case of negative initial test, no finding or remark should be raised and the tested crew member will be allowed to resume her/his duties normally.

At the end of the inspection, and if all alcohol tests are negative, inspectors should indicate on the PoI that alcohol tests have been carried out and the number of tested FC and CC, using the dedicated field of the PoI header. No remark should be added on the PoI to avoid mis-interpretation by operators.

A class 1 action is to be taken and the PoI should be provided to the pilot in command or operator's representative after completion of the inspection.

No further notification is required as the operator will be informed of the negative results via the PoI and the ramp inspection tool.

10.3.5.4 Positive initial test

In case of a positive result, no finding should be raised and a confirmation test should be performed.

After a positive initial test, crew members may react emotionally due to disbelief, fear of loss of licence/certificate, fear of loss of job, sense of shame, delays, sanctions, etc.

However in case the crew member clearly shows signs of or admits being under the influence of alcohol, law enforcement bodies may be notified by ramp inspectors as soon as possible. Early notification of law enforcement body should be described by national procedures.

During the waiting time, before the confirmation test is conducted, and in order to limit the stress of the tested crew member, ramp inspectors should provide a clear briefing to the concerned crew member and ensure that:

- the crew member receives proper communication, explanation and information on the national procedures after a positive test;
- the crew member is informed about the applicable national statutory limit; and
- no finding will be raised in case the confirmation test happened to be negative.

10.3.6 Confirmation test

10.3.6.1 General principles

Aromatic beverages (e.g. fruit juices), alcoholic mouth sprays, medical juices and drops, and belching and vomiting may corrupt the alcohol test results and trigger false positive. Therefore in the case of a positive initial alcohol test, a confirmation test should always be performed. The confirmation test should be performed at least 15 minutes but not more than 30 minutes after the completion of the initial test. However, when operational procedures of the testing device prescribe more than 15 minutes of waiting time between two tests, ramp inspectors can either observe this higher delay or use another testing device for the confirmation test. Confirmation testing should be conducted as soon as possible after the 15 minute delay.

The 15 minute delay is deemed sufficient to prevent the above mentioned corruption of alcohol test results; the 30 minute limitation guarantees similar results between initial and confirmation tests as the alcohol metabolism in the body in 30 minutes will be of limited impact.

During this time the crew is still on duty, but ramp inspectors should observe that the tested crew member does not eat or drink or ingest something into her/his mouth, for the reason mentioned above. If the crew member disregards this requirements in such a manner that it prevents the conduct of the confirmation test within the 30 minutes, this can be considered as a lack of cooperation to the test, and could be considered as a refusal to the test. It is also possible to delay the confirmation test for another 15 minutes after the ingestion time, but without exceeding the 30 minute maximum timeframe. There is no safety reason to invalidate the result of a confirmation test performed more than 30 minutes after the initial test, but it should not be a standard.





Where compatible with the testing procedures, and if requested by the crew member, the crew member should have the option of asking a witness/work colleague to observe the test.

The general principles previously mentioned for the initial test remain.

- Selection of the location of the test (confidentiality criteria).
- The operational status and suitability of the device.
- The original packaging and opening procedures of the mouthpiece.

Only if possible and suitable the confirmation test could be performed outside the aircraft (e.g. car/bus, police car..., separate room near to the aircraft parking position).

10.3.6.2 Confirmation test results

A confirmation test result is considered negative when the breath alcohol concentration (BrAC), measured by a breath alcohol tester is lower or equal to the equivalent level of 0.2 grams of blood alcohol concentration (BAC) per litre of blood or the national statutory limit, whichever is the lower.

A confirmation test result is considered positive when the breath alcohol concentration (BrAC), measured by a breath alcohol tester is higher than the equivalent level of 0.2 grams of blood alcohol concentration (BAC) per litre of blood or the national statutory limit, whichever is the lower.

10.3.6.3 Negative confirmation test

When an initial positive test is followed by a negative confirmation test, the overall result of the test should be negative. No findings should be raised.

The tested crew member can resume her/his duties.

At the end of the inspection and if all overall results of alcohol tests are negative, inspectors should indicate in the header of the PoI the number of tested FC and the number of tested CC. No remark should be added on the PoI to avoid mis-interpretation by operators.

The actual result of a negative alcohol test should not be mentioned on the PoI.

A class 1 action is to be taken and the PoI should be provided to the pilot in command or the operator's representative after completion of the inspection.

No further notification is required. The operator will be informed of the performed alcohol tests and of the negative results via the PoI and the ramp inspection tool.

It is not necessary to inform law enforcement bodies. In case law enforcement bodies were already informed about the positive initial test, national procedures should require that ramp inspectors inform them that the confirmation test is negative and that no further action is required.

10.3.7 Positive confirmation test

In case of a positive confirmation test, a CAT 3 finding should be raised under item E01.

As soon as the test result is known and positive, the tested crew member should be informed about the result and that she/he should not be permitted to resume her/his FC or CC duties.

Inspectors should indicate on the PoI that an alcohol test has been carried out, the number of positive results and the number of tested FC and CC. In the finding description, inspectors should use the corresponding PDF. The name, the BAC measured or any other personal data should not be mentioned on the PoI.





Ramp inspectors should provide the positively tested crew member with a written confirmation of the alcohol test result of the initial and confirmation test, the national statutory limit as well as the device serial number and test sequence number. Inspectors should take a photo of either the ID, the FC's licence and medical or CC's attestation for follow-up. This information should not be on the Pol. This transmission of the written confirmation should be done in accordance with national requirements.

Inspectors should coordinate the immediate corrective actions before departure. Such coordination should be done with the representative of the operator or, if not available, with the pilot in command. In case the pilot in command is under the influence of alcohol, inspectors should inform the representative of the operator or, in his absence, the operator directly.

Examples of class 3 actions are, but not limited to:

- Class 3b : corrective actions
 - o Crew member removed from duty (the crew composition should be reviewed in order to cover at least the minimum operator's requirements on crew composition with crew members fit to fly and task repartition between remaining crew members should be reviewed; if the minimum requirements are not met, restrictions may apply).
 - o Replacement of crew member (this might lead to flight delays).
 - o Flight cancellation.
- Class 3a : restrictions on the aircraft operations
 - o Restrictions on number of passengers (only in case the positive alcohol test result concerns a CC. In this case, operator's procedures should be checked before acceptance of the class 3 action).
 - o Ferry flight (only in case the positive alcohol test result concerns a CC or if single-pilot operation are possible. In this case operator's procedures should be checked before acceptance of the class 3 action).

In case of a confirmed positive test, subpart ARO.RAMP does not entitle ramp inspectors to act on the privileges of a licence or attestation holder. Any action restricting the privilege of a licence or attestation holder should be supported by national requirements or taken by the competent licensing or medical authority. Indeed, the medical certificate of a crew member is not rendered invalid whenever he/she is under the influence of alcohol; instead, the crew member is to be considered as temporarily unfit to fly. Therefore, ramp inspectors can't prevent a crew member, holding a valid licence and medical certificate, who is fit to fly to resume duty, even if this crew member was previously tested positive, except otherwise specified by national requirements. Therefore, it is of the utmost importance that national requirements ensure a proper follow-up of ramp inspections findings.

In case the tested crew member is replaced by another qualified crew member, the replacing crew member may be tested as well. Following elements should be taken into account: time of arrival of replacing crew member, time available for test after replacing crew arrival, stress on replacing crew ...

If the crew/operator's representative refuses to take the necessary corrective actions or does not respect imposed restrictions on the aircraft flight operation, the aircraft should be grounded and the usual procedure should be applied.

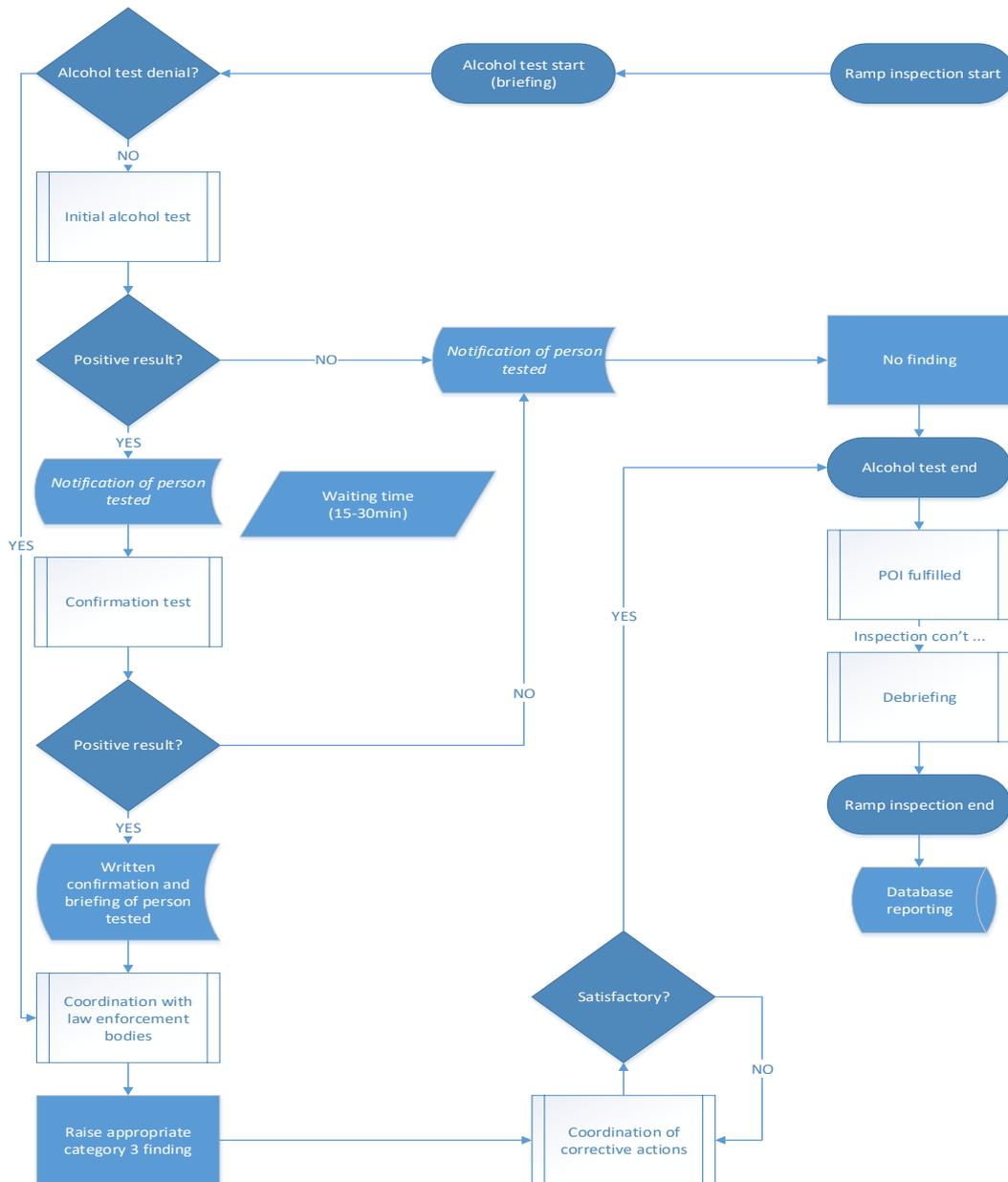
The Pol should be provided to the pilot in command or operator's representative after completion of the inspection.

Personal data (including those which could lead to the identification of the crew member) on alcohol test results should not be communicated via the ramp inspection tool, please refer to chapter 10 of this document for the description of the notification process.





10.3.8 Flow chart





10.3.9 Test refusal

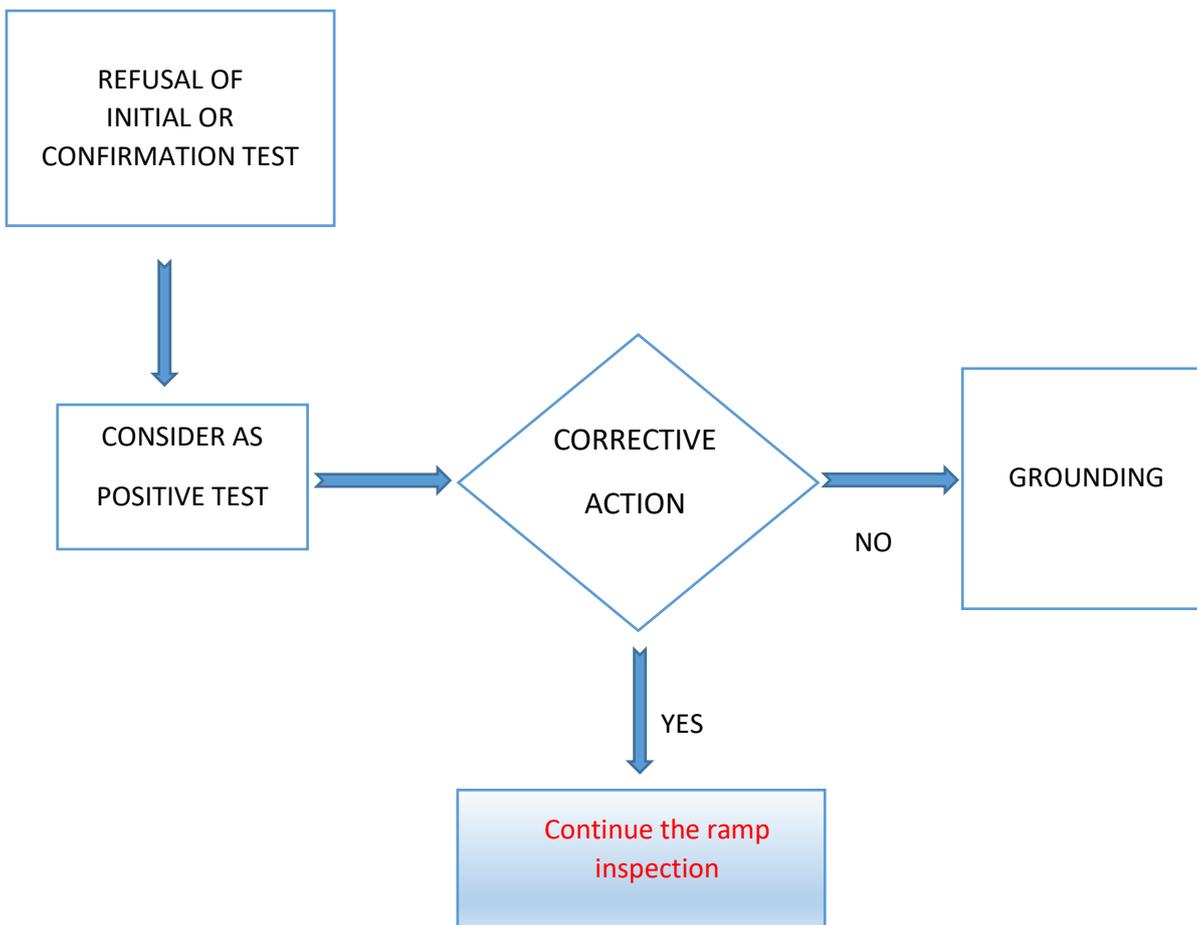
10.3.9.1 Definition of a test refusal

A refusal to cooperate during an alcohol test is:

- when FC or CC don't accept to undergo the initial or confirmation alcohol test; and
- when FC or CC don't cooperate with the testing procedures.

10.3.9.2 Consequences of a test refusal

The refusal should be considered as a positive test and should be regarded as a refusal to grant access in accordance with ORO.GEN.140 for EU operator and in accordance with TCO.115 of Commission Regulation (EU) No 452/2014 in the case of a third-country operator. In any case, the concerned crew member should not be allowed to continue his/her duty.





10.3.9.3 List of follow up actions after a test refusal by crew member

In case of a denial to perform an alcohol test for no valid reason, ramp inspectors should raise the appropriate CAT 3 finding and pursue immediate follow-up actions in accordance with national requirements. These follow-up action should include:

- Information to the crew member on the consequences of refusal;
- Information of the operator's representative;
- Crew member removed from duty; and
- Notification to law enforcement bodies in accordance with national requirements.

When ramp inspectors accept to postpone or cancel an alcohol test (see chapter 4.3), it should not be seen as a lack of cooperation and therefore should not be reported on the POI or in the ramp inspection tool. However, ramp inspectors should coordinate this postponement or cancellation with the NC for planning reasons (chapter 4.3).

10.3.10 Crew member unable to provide a sufficient breath sample to undergo an alcohol test performed with a Breathalyzer

In case a crew member is unable to provide a sufficient breath sample to undergo an alcohol test during a ramp inspection:

1. If the medical certificate of the crew member clearly mentions that the crew member cannot undergo an alcohol test performed with a breathalyser (use of SSL restriction):
 - a. This will be reported as a CAT G remark on the POI (proposal of remark: "medical certificate delivered to a crew member with a breath deficiency")
 - b. The State of Inspection will coordinate with EASA and the Licensing Authority the proper follow-up actions
 - i. EASA doesn't support the delivery of a medical certificate to a crew member with such a medical condition.
 - c. Then ramp inspectors should still perform the initial test and:
 - i. If the crew member refuses to undergo this initial alcohol test this should be considered as a refusal. The appropriate CAT 3 finding is raised, the crew member cannot resume his or her duty.
 - ii. The ramp inspectors witness the inability to perform the test:
 1. The crew member can resume his or her duty, except if it is prevented by national requirements on alcohol testing of individuals (national procedures may be developed to render mandatory the alcohol test with another testing methodology)
 - iii. The initial test result is negative:
 1. The crew member can resume his or her duty.
 - iv. The initial test result is positive:
 1. Then the ramp inspectors should proceed with the confirmation test and follow the regular procedure;
 2. In case the confirmation test cannot be performed due to an insufficient breathe sample the ramp inspectors should consider the result as a positive test and raise the appropriate CAT 3 finding, the crew member cannot resume his or her duty;
 3. In case the confirmation test cannot be performed due to a refusal to perform the confirmation test the ramp inspectors should consider this as a lack of cooperation and raise the appropriate CAT 3 finding, the crew member cannot resume his or her duty.
2. If the medical certificate of the crew member doesn't mentions any restriction and the crew member produces another document and/or justifies that he/she cannot undergo an alcohol test performed with a breathalyser
 - a. The ramp inspectors should disregard the justification and/or the document produced even seemingly delivered by a medical officer,





- b. This will be reported as a CAT G remark on the POI ("Crew member on duty with a known breath deficiency not mentioned on the medical certificate"),
 - c. The State of Inspection will coordinate with EASA and the Licensing Authority the proper follow-up actions
 - i. EASA doesn't support the delivery of a medical certificate to a crew member with such a medical condition.
 - d. The ramp inspectors should perform the initial test and:
 - i. If the crew member refuses to undergo this initial alcohol test this should be considered as a refusal. The appropriate CAT 3 finding is raised, the crew member cannot resume his or her duty.
 - ii. The ramp inspectors witness the inability to perform the test:
 - 1. The crew member should first prove that the medical condition of the crew member is known by the Licensing Authority.
 - 2. After the previous point is proven the crew member can resume his or her duty, except if it is prevented by national requirements on alcohol testing of individuals (national procedures may be developed to render mandatory the alcohol test with another testing methodology)
 - iii. The initial test result is negative:
 - 1. The crew member can resume his or her duty.
 - iv. The initial test result is positive:
 - 1. Then the ramp inspectors should proceed with the confirmation test and follow the regular procedure;
 - 2. In case the confirmation test cannot be performed due to an insufficient breathe sample the ramp inspectors should consider the result as a positive test and raise the appropriate CAT 3 finding, the crew member cannot resume his or her duty;
 - 3. In case the confirmation test cannot be performed due to a refusal to perform the confirmation test the ramp inspectors should consider the result as a refusal test and raise the appropriate CAT 3 finding, the crew member cannot resume his or her duty.
3. If the medical certificate doesn't mention any restriction and the crew member wasn't aware of this medical conditions before the initial test failure (the crew member doesn't refuse the test and doesn't justify a special medical condition to avoid the test)
- a. This will be reported as a CAT G remark ("Crew member unable to provide a sufficient breath sample to undergo an alcohol test performed with a breathalyser")
 - b. The State of Inspection will coordinate with EASA and the Licensing Authority the proper follow-up actions
 - c. The crew member cannot resume his or her duty unless otherwise specified by national requirements on alcohol testing of individuals (national procedures may be developed to render mandatory the alcohol test with another testing methodology)
 - d. In case the crew member disregards his or her inability to provide a sufficient breath sample and continues his or her duty without reporting as unfit, the ramp inspectors should consider this as a lack of cooperation and raise the appropriate CAT 3 finding.

10.3.11 Notification

After a confirmed positive alcohol test, ramp inspectors should provide the crew member with a written confirmation of the measurement of the initial and confirmation test, the national statutory limit as well as the device serial number and test sequence number. Inspectors should take a photo of the FC licence and medical or CC attestation for follow-up. This information should not be on the Pol. This notification should be done in accordance with national requirements.

The operator is notified using the Pol and the ramp inspection tool, this notification doesn't include personal data such as BAC or name of the tested crew member.





An ad-hoc process to notify and transmit needed personal information on the positively tested crew member should be defined by the inspecting authority; this ad-hoc procedure should ensure a notification of:

- the State of Operator;
- if different from the State of Operator, the authority in charge of the issuance of the Cabin Crew Attestation whenever it can be identified by the ramp inspectors (only for CC); and
- the licensing authority (only for FC).

This ad-hoc notification should include the following information:

- the State of Licence issue; (only for FC)
- pilot's licence number; (only for FC)
- medical certificate number; (only for FC)
- name of licence holder or name of CC;
- result of the breath alcohol concentration (BrAC) testing (the references of the device used for the measure) and the time and date of the test; and
- the national statutory limit of alcohol concentration (either BrAC or BAC) not complied with.

The inspecting authority should inform the competent authorities above mentioned that the operator was not provided with the personal data concerning positively tested crew members and that they may coordinate follow-up action with the operator.

A refusal of alcohol test is notified in the same way as a positive case, except for the result of BrAC which is replaced by an indication of the refusal.

10.3.11.1.1 Notification of alcohol test result to concerned crew member

Notification of alcohol test result

In accordance with ARO.RAMP.106, alcohol testing on flight crew and cabin crew members are carried out in [name of the Member State] by ramp inspectors. For these crew members, while on flight duty, the breathalyser test results should not exceed the level equivalent to [0.2 grams/national statutory limit if lower] of Blood Alcohol Concentration per litre of blood, as published here: [link to the national AIP, national laws, EU regulation].

During an alcohol test performed under the conditions described in table 1 below, your test results exceeded the above-mentioned limit, or you refused to cooperate during this test. You, as identified in table 2, were on flight duty on a flight conducted for the operator identified in table 3.

The operator will be informed that one of its crew members assigned with flight duties in the concerned flight was tested positive or refused to undergo an alcohol test but will not be informed of any personal data. The operator may contact the State of Operator or the Licensing Authority to obtain these personal details.

The Licensing Authority and the State of Operator will be notified of this positive case detection and will be provided with every data contained in this form.

The information contained in this form will also be communicated to the national law enforcement body.





Table 1: Test conditions and results

*Testing date:	*Place of test:
Initial testing time:	*Confirmation testing time:
Initial testing device: [brand], [model], [part number]	*Confirmation testing device: [brand], [model], [part number]
Initial test result:	*Confirmation test result:
<i>The alcohol testing procedure includes an initial alcohol test followed by a confirmation test performed at least 15 minutes later. The tested crew member was instructed not to ingest any liquid or solid of any type during the waiting time.</i>	
<input type="checkbox"/> The crew member refused to undergo the alcohol test and therefore was considered positive.	

Table 2: Crew member identification data

*Last name, first name:	*Assigned role:(senior cabin crew member, cabin crew member or Pilot in Command/Commander, Co-pilot)
Identification document number: ID or passport	State of issue:
**Licence number or certificate number:	**Licensing Authority:
Medical certificate number:	Medical certificate issued by:

Table 3: Operator and flight identification

*Operator name:	*Operator reference: (AOC number or other)	*State of Operator:
*Aircraft registration:		
***Flight from:	***Flight to:	
***Flight number:	***Flight number:	

All your personal data is processed in compliance with the provisions and requirements of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

- * Mandatory information
 - ** the licence number and Licensing Authority are mandatory fields when the test concerns a flight crew member
 - *** at least one flight should be identified
- Other fields should be fulfilled when relevant and when the information is available

CA Document Number xxx

10.3.11.1.2 Notification of alcohol test result to Competent Authorities

Notification of alcohol test result

In accordance with ARO.RAMP.106, alcohol testing of flight and cabin crew are carried out in [name of the Member State] by ramp inspectors. For these crew members, while on flight duty, the breathalyser test results should not exceed the level equivalent to [0.2 grams/national statutory limit if lower] of Blood Alcohol Concentration per litre of blood, as published here: [link to the national AIP, national laws, EU regulation].





During an alcohol test performed under the conditions described in table 1 below, the test results for the crew member identified in table 2 exceeded the above-mentioned limit or the crew member refused to cooperate during the test. The crew member was on flight duty on the flight conducted for the operator identified in table 3.

The operator has been informed that a crew member failed the alcohol test but has neither been informed of the actual BAC measured nor of any personal data. The operator may contact you to obtain these personal details.

The associated ramp inspection report or alcohol test report is available in the ramp inspection tool under the reference [Reference to the report].

Table 1: Test conditions and results

*Testing date:	*Place of test:
Initial testing time:	*Confirmation testing time:
Initial testing device: [brand], [model], [part number]	*Confirmation testing device: [brand], [model], [part number]
Initial test result:	*Confirmation test result:
<i>The alcohol testing procedure includes an initial alcohol test followed by a confirmation test performed at least 15 minutes later. The tested crew member was instructed not to ingest any liquid or solid of any type during the waiting time.</i>	
<input type="checkbox"/> The crew member refused to undergo the alcohol test and therefore was considered positive.	

Table 2: Crew member identification data

*Last name, first name:	Assigned role: (senior cabin crew member, cabin crew member, Pilot in Command/Commander, Co-pilot)
Identification document number: ID or passport	State of issue:
*Licence number or certificate number:	Licensing Authority:
Medical certificate number:	Medical certificate issued by:

Table 3: Operator and flight identification

*Operator name:	*Operator reference: (AOC number or other)	*State of Operator:
*Aircraft registration:		
**Flight from:	**Flight to:	
**Flight number:	**Flight number:	

* Mandatory information

** at least one flight should be identified

CA Document Number xxx

10.3.12 Coordination with legal enforcement bodies

CA and law enforcement bodies should agree on follow-up procedures in case of positive confirmation test and refusal of alcohol tests including the appropriate location to handover the process.

The agreement may include the following items:

- when inspectors should inform law enforcement bodies;
- how inspectors should inform law enforcement bodies;

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- follow-up of positive results (enforcement actions, notification to State of Operator and/or Licensing Authority);
- follow-up of refusal of alcohol test; and
- conservation of evidence and process of personal data related to the positive (or refusal) case.

CA may decide to inform law enforcement bodies in advance when alcohol tests are planned to ensure their availability in case of positive results. Besides, in case the FC or CC clearly show signs of or admit being under the influence of alcohol, law enforcement bodies may be notified by inspectors as soon as possible. Early notification may be described by national procedures.

CA may coordinate the necessary exchange of information between ramp inspectors and legal enforcement body (e.g.: reporting of time of inspection, licence numbers, proof to be collected, photography of results, etc.).

10.3.13 Ramp inspection tool

No personal data such as name of the crew member and the BAC shall be entered in the ramp inspection tool.

10.3.13.1 Negative results

Negative results should not be reported under a general remark in order to avoid confusion for operators. There should be no mention of negative test elsewhere than in the Pol header.

10.3.13.2 Positive results

If during a ramp inspection several crew members are tested positive for alcohol consumption, each positive case should be reported by using the appropriate finding (no grouping of these findings).

10.3.13.3 Refusal

Refusal of inspection should be clearly mentioned with the proper PDF.

10.3.14 Equipment requirements (for information only)

Each EASA Member State should define appropriate technical requirements in accordance with national requirements. This technical requirements should be set consistently with the national statutory limit, e.g. a national statutory limit of 0 grams of alcohol per litre of blood should result in the selection of testing devices allowing a proper accuracy.

The use of two different devices, even of different type, is recommended but not necessary for initial and confirmation test.

Hereafter is some guidance on breath alcohol testing devices which measure the concentration of alcohol contained in an exhaled breath sample, intended to be used for screening or preliminary testing.

Further technical specifications can be found in the standard EN 15964. This European standard should have been given the status of a national standard since September 2011, either by publication of an identical text or by endorsement within the following countries:

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

10.3.14.1 Type of equipment

Breathalyzers do not directly measure blood alcohol content or concentration (BAC), which requires the analysis of a blood sample. Instead, they estimate BAC indirectly by measuring the amount of alcohol in one's breath.

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In general, two types of breathalyzer are used:

1. non evidential: usually small hand-held breathalyzers are reliable enough to confirm the non-compliance of an administrative law requirement; and
2. evidential: Larger breathalyzer devices can then be used to produce evidence to be used in criminal law enforcement.

Due to the particular circumstances when alcohol tests will be performed, in the context of a ramp inspection, devices used do not need to be evidential and will be:

- portable;
- handheld;
- appropriate for breath alcohol testing; and
- designed for professional use.

10.3.14.2 Accuracy

The maximum permissible error is +/-0.02 mg/L for alcohol concentrations up to and including 0.20 mg/L expressed in milligrams of ethanol per litre of exhaled volume.

The maximum permissible error is $\pm 10\%$ of nominal concentration for alcohol concentration above 0.20 mg/L expressed in milligrams of ethanol per litre of exhaled volume.

Devices used should be calibrated according to manufacturer's instructions.

10.3.14.3 Technical specifications

The following technical specifications are deemed necessary to ensure a proper behaviour of a breath alcohol testing device during normal circumstances in ramp inspections, taking into account that the interior of an aircraft, and more specifically the flight deck, will be the most common place where this tests will take place.

- Temperature range: -5° to $+45^{\circ}$.
- Display graphic alcohol values shown in numbers and English language available.
- Measuring range: 0‰ - 4‰.

For practical reasons, it could be useful to have a small printer to get information output tickets of the testing device. Bluetooth connected printers are already available and commonly used in other domains like road traffic breath alcohol tests.

States will have the possibility to replace these specifications in case national requirements set some others more restrictive.

Examples of some equipment that fulfil these specifications are:

- Dräger 7510, 6820, 5820;
- Envitec 6020;
- ACE x Police; and
- Alco Real 588.

10.3.14.4 Maintenance

The maintenance of the testing device will be done according to national requirements, the manufacturer manual and in accordance with European Standard on alcohol screening device. The maintenance of the testing device should be documented and the last maintenance document should be available on demand during the ramp inspection or at later stage.

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10.3.15 Alcohol tests performed by other officials (for information only)

Each State is entitled to decide the way alcohol testing will be carried out and so different options can be chosen:

- alcohol testing fully integrated in the EU Ramp Inspection Programme and performed by ramp inspectors;
- alcohol testing fully integrated in the EU Ramp Inspection Programme but performed by other officials being part of the inspection team;
- stand-alone alcohol testing managed and performed by other officials; and
- a combination of the above options.

The NC may need to create appropriate procedures for the coordination with other national bodies, including the notification of alcohol tests results to the licensing authority and the State of Operator.

Results of alcohol tests performed by other officials need to be entered into the ramp inspection tool. Therefore, other officials should be trained to identify the operator of the tested FC and CC. This identification should comply with current practice of ramp inspectors. The verification of the pilot licence or CC attestation is not enough to identify the operator. It is recommended to define a process to correctly identify the operator by other officials. For commercial aviation, a picture of the AOC would be useful, whereas for all type of flight a photography of the certificate of registration may be taken.

Other officials don't have to use the PoI, but it is necessary that the information requested by the PoI header is collected to correctly upload the report. For this reason, national procedures may require that the correct information is collected by other officials. Other officials could be trained on the handling of the PoI form and specifically on how to fulfil the header. Such a training could guarantee the quality of data entered in the ramp inspection tool.

States may familiarise the other officials performing alcohol tests with the proper verification of a FC licence and/or advise to take a photography of the licence to allow for the correct identification and notification of the licensing authority.

Other officials may be trained on the definition of FC and CC and on the inspection techniques to identify FC and CC on duty.





10.3.16 Alcohol testing information leaflet

(leaflet version February 2021)



30 Participating States*

The following EASA Member States carry out alcohol tests on flight crew and cabin crew members:

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Republic of Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden and Switzerland.

Definitions

'cabin crew member': an appropriately qualified crew member, other than a flight crew or technical crew member, who is assigned by an operator to perform duties related to the safety of passengers and flight during operations.

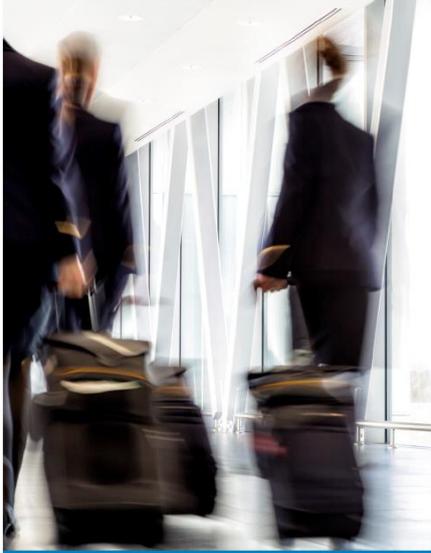
'flight crew member': a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.



Alcohol tests are conducted in accordance with the Ramp Inspection Manual and its appendices available on EASA's website:

<https://www.easa.europa.eu/domains/air-operations/ramp-inspection-programmes-safa-saca>



EU RAMP INSPECTION PROGRAMME

Alcohol testing on flight crew and cabin crew members

Your safety is our mission.

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Your safety is our mission.

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Your safety is our mission.

An agency of the European Union





Alcohol test performed during ramp inspections

When flying to airports in the EASA Member States, flight crews and cabin crews may be subjected to alcohol tests. Those tests will be performed by ramp inspectors within the scope of the EU ramp inspection programme, or alternatively by the so-called "other officials" like police officers.

The information provided in this leaflet refers only to alcohol tests performed within the scope of the EU ramp inspection programme.

When alcohol tests are carried out by ramp inspectors, the non-invasive breath analysis methodology will be used. The breath alcohol concentration (BrAC), measured during the alcohol test, should not exceed the lowest of:

- a level equivalent to **0.2 grams of blood alcohol concentration (BAC) per litre of blood**, or
- **the national statutory limit applicable in the State of Inspection.**

Whenever the exceedance of the applicable limit is confirmed during a second test, the crew member will be:

- removed from duty, and
- reported to competent aviation authorities (Licensing Authority and State of Operator).

In addition, the national procedures may require the involvement of the law enforcement body.

The alcohol test may be integrated into a ramp inspection or performed as a "stand-alone" test if there is no time or need to perform a full ramp inspection; in both cases, the

A refusal to be tested, or the lack of cooperation during an alcohol test, will be considered as a positive case.

Who is tested ?

Only **flight crew** and **cabin crew** members with assigned operational duty may be subject to an alcohol test during ramp inspection.

The crew size may justify a **sampling of the crew in order to avoid unreasonable delay.**

The sampling method will be **non-discriminatory** but may focus on flight crew members as their assigned duties are usually more critical for the conduct of the flight.

A robust procedure

Every alcohol test performed during ramp inspections will consist of an **initial alcohol test** followed by a **confirmation test** in case of the preceding initial test's result is positive.

The confirmation test will be carried out as soon as possible after a waiting time of **at least 15 minutes**. This waiting time should normally be shorter than 30 minutes to ensure a similarity of results between initial and confirmation test.

During this waiting time, the tested flight crew or cabin crew member will not be allowed to ingest any liquid or solid. She/he will be able to continue her/his duty only if it doesn't affect the correct application of the testing procedure.

All alcohol tests will be performed with an approved breath alcohol analyser compliant with **recognised quality standard** (e.g.: EN 15964).

The positively tested crew member will receive a **written confirmation** containing information on the time and date of the alcohol test, the equipment used, as well as the actual result of the alcohol test. The last relevant maintenance document of the testing device used during the ramp inspection will be available on request to the Inspecting Authority.

Privacy and confidentiality

Every alcohol test performed during ramp inspection will respect **privacy and confidentiality of results.**

Tested crew members can request a witness to attend the test as far as it does not cause unreasonable delay and that it is compatible with the testing procedure.

The operator and its competent authority are informed about all alcohol tests through the ramp inspection reports uploaded in the ramp inspection tool; these reports do not include personal data. In case of a positively tested crew member, detailed test results and personal data of the concerned crew member are provided to the competent authorities through the focal point appointed by them, using other channels than the ramp inspection tool.

All personal data is processed in compliance with the **General Data Protection Regulation** (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data).



Your safety is our mission.

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11 Attachment RAMP (AMC/GM to PART.ARO.RAMP)

(for information purposes only)

AMC/GM to PART.ARO.RAMP issue 3 Amendment 11

GM1 ARO.RAMP.005 Scope

RAMP INSPECTION MANUAL

The following information may be found in the ramp inspection manual established by the Agency:

- (a) Additional guidance and best practices, in the manual and its attachments;
- (b) Additional provisions which are referenced in AMCs to this subpart, in its appendices.

AMC1 ARO.RAMP.100(b) General

SUSPECTED AIRCRAFT

In determining whether an aircraft is suspected of not being compliant with the applicable requirements, the following should be taken into account:

- (a) information regarding poor maintenance of, or obvious damage or defects to an aircraft;
- (b) reports that an aircraft has performed abnormal manoeuvres that give rise to serious safety concerns in the airspace of a Member State;
- (c) a previous ramp inspection that has revealed deficiencies indicating that the aircraft does not comply with the applicable requirements and where the competent authority suspects that these deficiencies have not been corrected;
- (d) lists, referred to in ARO.RAMP.105, indicating that the operator or the State of the operator has been suspected of non-compliance;
- (e) evidence that the State in which an aircraft is registered is not exercising proper safety oversight;
- (f) concerns about the operator of the aircraft that have arisen from occurrence reporting information and non-compliance recorded in a ramp inspection report on any other aircraft used by that operator;
- (g) information stemming from EASA Third-Country Operator (TCO) monitoring activities; or
- (h) any relevant information collected pursuant to ARO.RAMP.110.

AMC1 ARO.RAMP.100(c) General

ANNUAL RAMP INSPECTION PROGRAMME

- (a) The competent authority should establish an annual ramp inspection programme and determine the number of inspections for the upcoming calendar year.

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(b) To establish the annual ramp inspection programme, the competent authority should consider layer 1 and layer 2 operators as defined in AMC1 ARO.RAMP.150(b)(4)(iii).

(c) For layer 1 operators, the annual ramp inspection programme should meet the target numbers of inspections as assigned by the Agency for the Member State territories in ICAO EUR region.

The assigned targets for layer 1 operators may be exceeded in the following cases:

- (1) operators recently considered in the lists provided by the Agency as per ARO.RAMP.105(a); or
- (2) safety reasons that were not identified in the annual programme.

The competent authority should keep records of the reasons leading to such over-inspections on layer 1 operators.

(d) For layer 2 operators, the total planned number of inspections as defined in the annual ramp inspection programme should not be less than the layer 2 operators' target assigned by the Agency for the Member State territories in ICAO EUR region.

(e) The annual ramp inspection programme should take seasonal traffic patterns into account and, as far as possible, evenly distribute the inspections over the year.

(f) The competent authority should ensure that the annual ramp inspection programme leaves appropriate time and resources to enable the inspections of aircraft operated by layer 2 operators suspected of not being compliant with the applicable requirements.

(g) The competent authority should ensure that layer 2 operators, including unforeseen ones which cannot be a part of the established annual programme, receive inspections proportionate to the traffic pattern in the State. The following priority criteria should be considered before deciding to inspect the aircraft:

- (1) prioritised ramp inspections as per ARO.RAMP.105(a);
- (2) aircraft suspected of not being compliant with the applicable requirements; and
- (3) inspection of an operator which was not inspected in accordance with ARO.RAMP in any State in the previous 12 months;

(h) The competent authority should amend the annual ramp inspection programme as necessary to the extent possible:

- (1) when new targets are assigned by the Agency;
- (2) when new layer 2 operators start operations; or
- (3) following the identification of a significant increase of the safety risks level as per ARO.RAMP.100(c)(1).





AMC1 ARO.RAMP.106 Alcohol testing

GENERAL – ALCOHOL TESTING METHODOLOGY

- (a) If alcohol testing is carried out by RAMP inspectors under the RAMP inspection programme, the following alcohol testing methodology should be used to ensure accurate testing results.
 - (1) The alcohol test should be carried out with an appropriate and approved testing device in accordance with national requirements on alcohol testing of individuals.
 - (2) The ramp inspector that carries out the alcohol test should be adequately trained and qualified.
 - (3) After an initial positive alcohol test, a further confirmation test should be carried out in accordance with national requirements on alcohol testing of individuals.
 - (4) Testing procedures should specify the following:
 - (1) Handling of test results, in order to determine a true positive test
 - (2) The process to be followed in case of a confirmed positive test result, including how to inform the crew member concerned about the actual testing result
- (b) Initial alcohol test
 - (1) The initial alcohol test should be carried out using a breath alcohol analyser to ensure that initial alcohol testing is non-invasive.
 - (2) The breath alcohol concentration (BrAC), measured by a breath alcohol analyser during the initial alcohol test, should not exceed a level equivalent to 0.2 grams of blood alcohol concentration (BAC) per litre of blood or the lower of the national statutory limits, whichever is the lower.
- (c) During a confirmation alcohol test, the BAC should not exceed a level equivalent to 0.2 grams per litre of blood or the lower of the national statutory limits, whichever is the lower.
- (d) In case of a positive alcohol test following a confirmation alcohol test or in case of a refusal by the crew member to cooperate during an alcohol test, the competent authority should inform the crew member concerned, as well as the competent authority and the authority responsible for the crew concerned.
- (e) A refusal by a crew member to cooperate during an alcohol test should be regarded in the same way as a positive test and as such should be regarded as a refusal to grant access in accordance with ORO.GEN.140 in the case of an EU operator or in accordance with TCO.115 of Commission Regulation (EU) No 452/2014 in the case of a third-country operator.
- (f) The competent authority should provide information on its alcohol testing procedures in an easily accessible format.

GM1 ARO.RAMP.106 Alcohol testing

CONDUCT OF THE ALCOHOL TEST

- (a) An alcohol test may be carried out at any time during a ramp inspection.

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- (b) In order to ensure sufficient time in case of a confirmation test, following an initial test, the alcohol test should, where possible, be carried out at the start of the inspection.
- (c) At all times when carrying out an alcohol test, the inspector should ensure a testing environment as discreet as possible.

GM2 ARO.RAMP.106 Alcohol testing

GUIDANCE ON CARRYING OUT A CONFIRMATION ALCOHOL TEST

- (a) The written information after a positive confirmation test provided to the crew member concerned contains information on the time and date of the alcohol test, the equipment used, as well as the actual result of the alcohol test.
- (b) A further confirmation test may be carried out at least 15 minutes, but not more than 30 minutes, after the completion of the initial test. During this time, the inspector should observe that the flight and cabin crew member does not eat or drink or ingest something into their mouth, in order to prevent any accumulation of alcohol in the mouth from leading to an artificially high reading.

GM3 ARO.RAMP.106 Alcohol testing

INFORMATION ON ALCOHOL TESTING

The information by the competent authority on its alcohol testing procedures should include information on the applicable national statutory limit.

AMC1 ARO.RAMP.110 Collection of information

COLLECTION OF INFORMATION

The information should include:

- (a) important safety information available, in particular, through:
 - (1) pilot reports;
 - (2) maintenance organisation report;
 - (3) incident reports;
 - (4) reports from other organisations, independent from the inspection authorities;
 - (5) complaints; and
 - (6) information received from whistleblowers (such as, but not limited to, ground handling or maintenance personnel) regarding poor maintenance, obvious damage or defects, incorrect loading, etc.
- (b) information on action(s) taken subsequent to a ramp inspection, such as:
 - (1) aircraft grounded;





- (2) aircraft or operator banned from the Member State pursuant to Article 6 of Regulation (EC) No 2111/2005 of the European Parliament and of the Council¹⁰;
 - (3) corrective action required;
 - (4) contacts with the operator's competent authority; and
 - (5) restrictions on flight operations.
- (c) follow-up information concerning the operator, such as:
- (1) implementation of corrective action(s); and
 - (2) recurrence of non-compliance.

AMC1 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

ELIGIBILITY CRITERIA

- (a) The candidate should be considered eligible to become a ramp inspector provided he/she meets the following criteria:
- (1) has good knowledge of the English language attested by a certificate, unless English was used as a medium of instruction during secondary or higher education; and
 - (2) relevant education or training and appropriate recent work experience (over the previous 5 years) in accordance with one of the following items:
 - (i) has successfully completed 3 years of post-secondary education followed by 2 years aeronautical experience in the field of aircraft operations and/or maintenance, and/or personnel licensing;
 - (ii) has or has had a commercial/airline transport pilot licence and carried out such duties;
 - (iii) has or has had a flight engineer licence and carried out such duties;
 - (iv) has been a cabin crew member and carried out such duties in commercial air transport;
 - (v) has been licensed as maintenance personnel and exercised the privileges of such a licence;
 - (vi) has successfully completed professional training in the field of air transport of dangerous goods, followed by experience in this field; or
 - (vii) has successfully completed post-secondary aeronautical education with a duration of at least 3 years, followed by aeronautical experience.

AMC2 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

QUALIFICATION PROCESS

- (a) The competent authority should ensure that its inspectors meet, at all times, the qualification criteria with regard to training and recent experience.





- (b) Any competent authority or ramp inspection training organisation (RITO) approved in accordance with ARO.RAMP.120(a) may provide the initial theoretical and practical training.
- (c) The senior ramp inspectors delivering the on-the-job training may be appointed by any competent authority.
- (d) The initial theoretical and practical training, as well as the on-the-job training as per ARO.RAMP.115(b)(2), should be completed within 12 months. If the qualification of the candidate is not completed within 12 months, the entire process should be re-initiated.
- (e) The competent authority should issue a formal qualification statement, including the inspection privileges, for each candidate who has successfully completed the initial theoretical, practical, and on-the-job-training, as demonstrated by:
 - (1) for theoretical and practical trainings, a satisfactory evaluation by the competent authority or by the RITO which has delivered the training;
 - (2) for on-the-job training, the positive assessment, made by the senior ramp inspectors who have provided the training, of the candidate's ability to effectively perform ramp inspections in an operational environment;
 - (3) a final assessment of the inspector's competency performed at the end of the initial training process by the competent authority.

AMC3 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

INITIAL THEORETICAL AND PRACTICAL TRAINING

- (a) The initial theoretical and practical training for ramp inspectors should be developed on the basis of the syllabi that are established by the Agency and which are included as appendixes of the ramp inspection manual.
- (b) The duration of the initial theoretical training should be no less than 3 training days, except for cases when previous training can be credited to the candidate, following an assessment made by the competent authority.

In case of an integrated training course, intended to transfer both technical and specific ramp inspection knowledge, the duration of the course should be extended accordingly.
- (c) The duration of the initial practical training should be not less than 1 day. The competent authority of the candidate may decide to lengthen or shorten the training taking into account the level of expertise of the candidate.

AMC4 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

ON-THE-JOB TRAINING

- (a) The on-the-job training (OJT) should be conducted within the scope defined by ARO.RAMP.005.
- (b) The content of the OJT should be established on the basis of the list of elements to be covered, which is included in appendixes of the ramp inspection manual.





- (c) The competent authority should ensure that only the candidates that have successfully completed the initial theoretical and practical trainings are undertaking the OJT.
- (d) The OJT should comprise 2 phases:
 - (1) Observation:

During this phase, the candidate should accompany and observe a senior ramp inspector performing a series of ramp inspections (including the preparation of the inspection and post-inspection activities such as reporting).

The senior inspector should also provide details on applicable follow-up activities.
 - (2) Under supervision:

During this phase, the candidate should perform ramp inspections under the supervision and guidance of a senior ramp inspector.
- (e) The duration of the OJT should be customised to the individual training needs of each candidate. As a minimum, the OJT should include at least 6 observed ramp inspections and 6 ramp inspections performed under the supervision of a senior ramp inspector, over a period of maximum of 6 months. Notwithstanding (a), up to 3 of these observed ramp inspections and 3 of these inspections under supervision may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (f) The OJT should cover in each phase all inspection items that the inspector will be privileged with, and it should be delivered by senior ramp inspectors who are privileged with the same items.
- (g) The OJT should be documented by the senior ramp inspectors who have provided the training, using OJT forms detailing the training content.
- (h) Certain OJT items may be replaced by alternative training using representative examples when no operational environment is required (e.g. documents, dangerous goods).

AMC5 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

EXTENSION OF THE RAMP INSPECTOR PRIVILEGES

- (a) The competent authority may extend the privileges of a ramp inspector provided that the following conditions are met:
 - (1) the relevant knowledge of the ramp inspector has been satisfactorily complemented by additional theoretical and/or practical training relevant to the scope of the extension; and
 - (2) the ramp inspector has received OJT on the new inspection items that will be added to his/her privileges.
- (b) The competent authority should determine the necessary number of ramp inspections of the OJT on a case-by-case basis, taking into account both the complexity and the criticality of the new items to be covered during this training, as well as the inspector's aeronautical education and practical knowledge.





- (c) Certain OJT items may be replaced by alternative training using representative examples when no operational environment is required (e.g. document inspections, dangerous goods).

AMC6 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

RECENT EXPERIENCE AND REQUALIFICATION

- (a) The minimum number of inspections to be performed by a ramp inspector to meet the recent experience requirement should be 12 per calendar year.
- (b) Up to half of these ramp inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (c) In the calendar year during which the ramp inspector is qualified, the minimum number of inspections to meet the recent experience requirement should be determined on a pro rata basis.
- (d) When qualification is lost as a result of failure to perform the minimum number of inspections, the ramp inspector may be requalified by the competent authority after having performed at least half of the missing inspections under supervision of a senior inspector within the following calendar year. These inspections under supervision should not be counted for the recent experience requirements for that calendar year. Up to half of these inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (e) If the ramp inspector cannot regain the qualification following the process described in (d), he/she should perform a complete OJT during the calendar year that follows.
- (f) If the ramp inspector fails to regain the qualification following the process described in (e), the conditions for initial qualification should apply.

AMC7 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

RECURRENT TRAINING

- (a) The competent authority should ensure that all ramp inspectors undergo recurrent training at least once every 3 calendar years.
- (b) In addition, the competent authority should ensure that additional training is provided to all ramp inspectors when information is received from the Agency about the necessity for ad hoc training. In developing such training, the competent authority should take into account any Agency instructions related to the training content and the associated timeframe for implementation. This ad-hoc training may be considered as recurrent training.
- (c) Recurrent training should be delivered by a competent authority, by ramp inspection training organisation approved in accordance with ARO.RAMP.120(a) or by the Agency.
- (d) The recurrent training should cover at least the following elements:





- (1) regulatory and procedural developments;
- (2) operational practices;
- (3) articulation with other European processes and regulations; and
- (4) standardisation and harmonisation issues including those communicated by the Agency.

AMC8 ARO.RAMP.115(a)(b) Qualification of ramp inspectors

SENIOR RAMP INSPECTORS

- (a) The competent authority may appoint senior ramp inspectors provided that the appointees meet the following criteria:
 - (1) the appointees have been a qualified ramp inspector for the 36 months preceding his/her appointment; and
 - (2) during the period under (1), the appointees have performed a minimum of 72 ramp inspections, with no less than 24 ramp inspections during the last 12 months.
- (b) Senior ramp inspectors should maintain their seniority only if performing at least 24 ramp inspections during each calendar year. Up to 6 of these ramp inspections may be performed on national operators, as long as they are performed in accordance with ARO.RAMP.
- (c) For the calendar year during which the senior inspector was appointed, the recent experience requirements should be applied on a pro rata basis.
- (d) When seniority is lost, but not the ramp inspector qualification, as a result of failure to perform the minimum number of ramp inspections, it can be regained if:
 - (1) the inspector performs 2 ramp inspections under the supervision of a senior ramp inspector; or
 - (2) the inspector performs the missing number of ramp inspections.

These inspections should be performed within the following year, and should not be counted for the recent experience requirements for that year.

The above provision should not be used for two consecutive years.

- (e) If the senior ramp inspector cannot regain his/her seniority following the provisions under (d), the conditions under (a)(2) apply.
- (f) For each appointed senior ramp inspector, the competent authority should establish, based on his/her experience, the privileges for which he/she may deliver OJT.





AMC1 ARO.RAMP.120(a) Approval of training organisations

APPROVAL OF A RAMP INSPECTION TRAINING ORGANISATION BY THE COMPETENT AUTHORITY

(a) When evaluating the ramp inspection training organisation's capability to deliver training, the competent authority should verify that the training organisation:

(1) Has established a detailed description of:

- (i) the organisational structure;
- (ii) the facilities and office accommodation;
- (iii) the instructional equipment;
- (iv) the instructor recruitment criteria and their continuous competence;
- (v) the record keeping system;
- (vi) the process for the development of the training course material and its continuous update; and
- (vii) additional means and methods used to fulfil its tasks,

The documents and information specified above may be included into an organisation manual.

(2) Has developed the training course materials adequate for all types of training to be delivered;

(3) Ensures compliance with its own procedures on adequate control of the training development, preparation, delivery process and records keeping, as well as compliance with the legal requirements. The training organisation should evaluate the effectiveness of the training provided, based upon written feedbacks collected from course participants after each training delivery;

(4) Conducts the training in English with the aim to train trainees in the jargon used during ramp inspections.

(b) The competent authority should issue the approval for an unlimited duration.

AMC2 ARO.RAMP.120(a) Approval of training organisations

OVERSIGHT OF APPROVED RAMP INSPECTION TRAINING ORGANISATION

(a) The oversight programme of ramp inspection training organisations should be developed taking into account the scope of the approval, the size of the organisation, and the results of past certification and/or oversight activities.

(b) An oversight cycle not exceeding 24 months should be applied. The oversight planning cycle may be extended to a maximum of 48 months if the competent authority has established that, during the previous 24 months;

(1) all corrective actions have been implemented within the time period accepted or extended by the competent authority; and

(2) no level 1 findings as described in ARO.GEN.350 have been issued.





AMC1 ARO.RAMP.120(a)(4) Approval of training organisations

TRAINING INSTRUCTORS

- (a) The competent authority should verify that:
- (1) the training organisation has a sufficient number of instructors with at least adequate:
 - (i) aviation knowledge and experience;
 - (ii) knowledge of the EU ramp inspection programme;
 - (iii) knowledge of training delivery techniques; and
 - (iv) English language communication skills.
- (b) Instructors delivering training on inspection items and/or delivering practical training should:
- (1) have been a qualified ramp inspector for 36 months before being nominated as instructors and have performed a minimum of 72 ramp inspections during this period;
 - (2) have conducted at least 24 inspections as qualified ramp inspectors in the calendar year prior to the year in which the training is delivered; and
 - (3) deliver training only on those inspection items which they are entitled to inspect;
- (c) Notwithstanding (a), for the delivery of the theoretical and practical training on Dangerous Goods, the competent authority may accept instructors who are certified in accordance with the Technical Instructions for the latest effective edition of the Safe Transport of Dangerous Goods by Air (ICAO Doc 9284-AN/905), provided that they possess adequate English language communication skills.

AMC1 ARO.RAMP.125 Conduct of ramp inspections & ARO.RAMP.130 Categorisation of findings

INSPECTION INSTRUCTIONS ON THE CATEGORISATION OF FINDINGS

Inspectors should follow the inspection instructions as defined in the ramp inspection manual on the categorisation of findings established by the Agency for inspections performed on aircraft used by third country operators (SAFA) and on aircraft used by operators under the regulatory oversight of another Member State (SACA).

AMC1 ARO.RAMP.125(b) Conduct of ramp inspections

GENERAL

- (a) The competent authority should put in place appropriate procedures to allow the inspecting team unrestricted access to the aircraft to be inspected. In this respect, ramp inspectors should possess adequate credentials.
- (b) The inspection should start as soon as possible and be as comprehensive as possible within the time and resources available. This means that if only a limited amount of time or resources is available, not all inspection items, but a reduced number of them, may be verified. According to the time and resources available for a ramp





inspection, the items that are to be inspected should be selected accordingly, in conformity with the objectives of the ramp inspection programme. Items not being inspected may be inspected during a next inspection.

- (c) During the inspection, ramp inspectors should verify the rectification of previously identified non-compliances. Whenever the time available does not permit a full inspection, the items affected by such non-compliances should be prioritised over other items.
- (d) Ramp inspectors should not open any hatches, doors or panels, which are not intended to be operated by passengers during normal operations, themselves nor should they operate or interfere with any aircraft controls or equipment. When such actions are required for the scope of the inspection, the ramp inspectors should request the assistance of the operator's personnel (flight crew, cabin crew, ground crew).
- (e) During an inspection prior to departure, the competent authority should inform the operator of any potential non-compliance with manufacturer's standards after the crew has confirmed that the pre-flight inspection has been performed.
- (f) The items to be inspected should be selected from the Proof of Inspection (POI).
- (g) Items which have been inspected, as well as any possible findings and observations, should be recorded on the POI and in the ramp inspection tool.

AMC1 ARO.RAMP.125(c) Conduct of ramp inspections

PROOF OF INSPECTION

- (a) On completion of the ramp inspection, information about its results should be provided to the pilot-in-command/commander or, in his/her absence, to another member of the flight crew or a representative of the operator, using the Proof of Inspection (POI) form provided as an appendix to the ramp inspection manual, regardless of whether or not findings have been identified. When completing the POI, the following should be taken into account:
 - (1) Only the remarks mentioned in the POI should be reported as findings in the final ramp inspection report. Any other relevant information which was not included in the POI should only be reported in the final report as a general remark under 'G' or in the additional information box.
 - (2) When handing over the POI to the pilot-in-command/commander or operator's representative, the inspector should ask him/her to sign the POI whilst explaining that the signature does in no way imply acceptance of the listed findings. The signature only confirms that the POI has been received by the pilot-in-command/operator representative, and that the aircraft has been inspected on the date and at the place indicated. A refusal to sign by the recipient should be recorded in the document.
- (b) POIs may be completed electronically, including the required signatures, and may be printed on site or delivered electronically (e.g. by e-mail).





AMC1 ARO.RAMP.135(a) Follow-up actions on findings

FOLLOW-UP ACTIONS FOR CATEGORY 2 OR 3 FINDINGS

- (a) Exceptionally, where multiple category 2 findings have been raised and the accumulation of these findings or their interaction justifies corrective action before the flight takes place, the class of action may be increased to the actions foreseen by ARO.RAMP.135(b).
- (b) When communicating findings to the operator, the inspecting authority should:
 - (1) use the ramp inspection tool as the primary communication channel with the operator and limit communication via other channels-;
 - (2) request evidence of corrective actions taken, or alternatively the submission of a corrective action plan followed by evidence that planned corrective actions have been taken;
 - (3) inform the operator's competent authority and the operator no later than 15 calendar days after the inclusion of the report in the ramp inspection tool in order to permit appropriate action to be taken, as well as to confirm to the operator the findings raised;
 - (4) upload in the ramp inspection tool information on actions taken and responses provided by the operator following the ramp inspection and send a communication to the operator only if the operator's actions have not been satisfactory;
 - (5) give the operator a period of 30 calendar days to reply. If the operator does not react to the initial communication within this period, a second request should be sent, including a period of another 30 calendar days to reply, whilst copying the operator's competent authority. If the second attempt is also unsuccessful, the operator's competent authority should be requested to encourage the operator to reply. The inspecting authority should indicate in such request that no reaction from the operator could be interpreted as a 'lack of ability and/or willingness of an operator to address safety deficiencies' under Regulation (EC) No 2111/2005.

AMC1 ARO.RAMP.135(b) Follow-up actions on findings

CLASSES OF ACTIONS FOR CATEGORY 3 FINDINGS

- (a) Whenever restrictions on the aircraft flight operation (Class 3a action) have been imposed, the competent authority should conduct appropriate verification of adherence to such restrictions.
- (b) Whenever the operator is required to take corrective actions before departure (Class 3b action), inspectors should verify that the operator has taken such actions. Depending on the circumstances, this verification may take place after the departure.
- (c) Whenever a category 3 finding is raised, the aircraft should be grounded only (Class 3c action) if the crew refuses to take the necessary corrective actions or to respect imposed restrictions on the aircraft flight operation. However, grounding might be appropriate if an operator refuses to grant access in accordance with ORO.GEN.140 (in case of an EU operator) or contrary to Regulation (EU) 452/2014 (in case of a third country operator). The inspecting authority should then ensure that the aircraft will not depart as long as the reasons for the grounding remain. Any records of communication undertaken pursuant to ARO.RAMP.140(b), as well as other evidences, should be collected and kept as evidential material.





- (d) If inspectors have imposed any restrictions and/or corrective actions, these should be mentioned in the ramp inspection report.

AMC1 ARO.RAMP.145 Safety reports

IMPORTANT SAFETY INFORMATION

- (a) When the competent authority receives safety-related information that could be of interest to the entire RAMP community, it should create a 'safety report' and insert it into the ramp inspection tool pursuant to ARO.RAMP.110.
- (b) Safety-related information should be verified by the reporting authority, as far as possible, before insertion in the ramp inspection tool.
- (c) If available, any relevant information contained in documents and pictures should be attached to the 'safety report'.

AMC1 ARO.RAMP.150(b)(4)(iii) Agency coordination tasks

SYSTEM-WIDE COORDINATION OF RAMP INSPECTIONS

In order to ensure a coordinated approach in establishing a risk-based number of ramp inspections for operators, the Agency should establish annual targets. When doing so, the following should be taken into account:

- (a) Such targets should only be established for operators flying to Member States' territories located in the ICAO EUR region¹;
- (b) The targets for the upcoming year should be distributed to the Member States at the latest by 1 December and updated at least once during the upcoming year; and
- (c) The targets should be established per Member State for two layers of operators as follows:
- (1) a target number of inspections for each operator for which the average number of commercial flights for the previous 12 months in each Member State is beyond a threshold defined by the Agency, based on an assessment of the safety risks and the number of flights ('layer 1');
 - (2) an overall target number of inspections for those operators not covered by (1) ('layer 2').

¹ As defined in ICAO Doc 7030: Regional Supplementary procedures

