



Republika e Kosovës  
Republika Kosovo - Republic of Kosovo



Autoriteti i Aviacionit Civil i Kosovës  
Autoritet Civilnog Vazduhoplovstva Kosova  
Civil Aviation Authority of Kosovo

**Technical Publication – TP 27**

# **Procedures for Aerodrome Changes**

**Guidance Manual**

This manual is property of:

**Civil Aviation Authority of Kosovo**

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## Foreword

The purpose of this manual is to provide guidance on the procedures to be used to notify the CAA of changes at an aerodrome, covering both infrastructure and management system changes, in order that these developments do not compromise the national and International requirements for safe air operations. Additionally, it includes guidance to help ensure that changes comply with certification and approval criteria and are managed safely.

Aerodrome operators are required to inform and to seek prior acceptance from CAA for any change. The advance notification is to ensure that infrastructure and management system changes have been properly planned in advance and obtained prior acceptance of CAA. This will ensure that the requirements of the State's national regulations and the ICAO SARP's are complied.

Throughout this document the CAA refers to both approved and certificated aerodromes. To clarify the difference it should be noted that "approved" aerodromes are those issued with an aerodrome approval in accordance with Regulation on approved aerodromes, whereas certificated aerodromes are those issued with an aerodrome certificate in accordance with Regulation No. 17/2017 on Requirements and administrative procedures related to aerodromes.

In addition, this manual offers guidance to those responsible for the safe operation of an aerodrome or technical facilities and those responsible for changes, to assess the impact that the proposed development may have on the safety of air navigation and operations.

CAA requires that all involved parties are familiar with the contents and procedures described herein.

**Dritan Gjonbalaj**  
Director General  
Civil Aviation Authority

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### Distribution List

Copy no.	Location	Media	Qty
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## Terms and Definitions

Term	Definition
<b>Aerodrome</b>	Means a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.
<b>Aerodrome inspector</b>	Aerodrome inspector means any person authorized by the Authority to inspect an aerodrome.
<b>Aerodrome operator</b>	Is the holder of the aerodrome certificate or aerodrome approval;
<b>Approved aerodrome</b>	Means an aerodrome whose operator has been granted a aerodrome approval;
<b>Birdstrike</b>	Means a collision between an airborne bird and an aircraft. It is a common threat to aircraft safety and has caused a number of fatal accidents.
<b>CAA</b>	Means the Civil Aviation Authority of the Republic of Kosovo.
<b>Certified Aerodrome</b>	Means an aerodrome, whose operator has been granted an aerodrome certificate.
<b>Electronic aids</b>	Means non-visual or instrumental aids used for air navigation at the airport.
<b>ICAO</b>	Means International Civil Aviation Organization.
<b>Instrument flight paths</b>	Or IFR flights means a flight conducted in accordance with instrument flight rules.
<b>Obstacle</b>	Means all fixed (whether temporary or permanent) and mobile objects, or parts thereof, that are located on an area intended for the surface movement of aircraft or that extend above a defined surface intended to protect aircraft in flight.
<b>Obstacle limitation surfaces</b>	Means the defined airspace surfaces around aerodromes that are to be maintained free from obstacles.

<b>Runway</b>	Means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.
<b>Sign</b>	a) "Fixed message sign". Sign presenting only one message. b) "Variable message sign". Sign capable of presenting several pre-determined messages or no message, as applicable.
<b>Aeronautical Ground Lighting (AGL)</b>	Means the generic term used to describe the various lighting systems that are provided on an aerodrome for the guidance of pilots operating aircraft both at night and in low visibility conditions.
<b>Visual aids</b>	Means aids at the airport that visually assist air navigation at the airport.
<b>Visual flight paths</b>	Or VFR flights means a flight conducted in accordance with visual flight rules.

## CHAPTER 0: General

### Introduction

The primary objective of CAA is to improve safety in partnership with industry, and ensure that the frequency of incidents does not increase in line with forecast traffic growth. Aerodrome development should involve improving existing safety standards where possible, or maintaining them where such improvement cannot be achieved. This publication is intended to assist aerodrome operator in the effective planning and safe management of on-aerodrome development.

For the purpose of this document there are 4 categories defined as follows:

#### **Development**

Where new or upgraded infrastructure is to be provided. Examples include new or extensions to buildings, aerodrome infrastructure (such as taxiways and aprons), visual aids and navigation aids. Developments are classified as major or minor, details of which are provided in Chapter 3.

#### **Changes**

Where existing aerodrome infrastructure or physical characteristics are being changed, for example reconfiguration of stands, changes to the runway or declared distances. Changes include projects that involve removing or amending existing aerodrome non-conformities.

#### **Maintenance**

Where existing infrastructure is being repaired, refurbished or replaced but without changing the characteristics of the piece of infrastructure. See Chapter 8.

#### **Management system**

Significant changes to the management system, involving organisational structure changes. It is not intended that changes to personnel need prior approval from the CAA, however where it is intended that an individual role takes on additional responsibility or the current structure's reporting line changes, it is likely this will need prior approval. This requirement applies to certificated aerodromes only.

## CHAPTER 1: Regulation requirements

### 1.1 Aerodrome certification

The certification of an aerodrome shall be in accordance with Regulation No. 17/2017 on Requirements and administrative procedures related to aerodromes 'the Regulation on Certified Aerodromes'. When an aerodrome receives its certificate, it is granted on the basis that it meets aerodrome certification criteria including the establishment of a Certification Basis (CB) and a management system.

The regulation on certified aerodromes requires that any change to aerodrome facilities and those procedures and policies that have the potential to:

1. affect the terms of the certificate, its certification basis and safety-critical aerodrome equipment; or
2. significantly affect elements of the aerodrome operator's management system

shall require prior approval by the CAA (ADR.OR.B.040 (a) Changes).

For other changes requiring prior approval in accordance with the Regulation No. 03/2009, as amended, ("Basic Regulation") and its Implementing Rules, the aerodrome operator shall apply for and obtain an approval issued by the CAA (ADR.OR.B.040 (b) Changes).

This publication defines those and changes that do not require prior approval (see Chapter 7).

### 1.2 Aerodrome approval

The grant of an aerodrome approval is governed by the Regulation on aerodrome approval. CAA will issue an approval to aerodrome operator on the basis that it meets aerodrome approval criteria, unless variations to these criteria have been agreed by the CAA. Nevertheless, the aerodrome shall be safe for use by aircraft, having regard in particular to the physical characteristics of the aerodrome and of its surroundings.

An aerodrome approval condition requires that changes in the physical characteristics of the aerodrome, including the erection of new buildings and alterations to existing buildings or the visual aids, shall not be made without prior approval of the CAA. The purpose of this is to ensure that the CAA is satisfied that changes in the physical characteristics meet approval criteria and do not present a safety hazard.

Project proposals should comply with the criteria contained within the appropriate regulations. Additionally, some proposals provide an opportunity to review existing non-compliances, with the intention of removal, where possible. Where a non-compliance cannot be removed, a supporting risk assessment should be carried out, taking into account current and foreseeable operations, and the outcome of the analysis acted upon accordingly.

## CHAPTER 2: Engagement with the CAA

### 2.1 Submission process

The purpose of advance notification is to ensure that changes to aerodrome facilities, equipment and service level have been planned in accordance with National Regulations and ICAO SARPs.

An Aerodrome is a complex organization with many interactive disciplines and functions. Therefore, it is possible that even the simplest developments may need inter-departmental co-ordination. To initiate the development procedure, the aerodrome operator should appoint a project coordinator to liaise with CAA.

Depending on complexity of the proposed change, aerodrome operator shall inform CAA either electronically by email or hard copy for changes prior to the intended implementation date to give sufficient time for the assessment and approval processes. The following table may assist as example in the planning process, however, engagement with the CAA at the earliest opportunity is recommended:

Development that impacts on	Minimum lead-in time
Approach Aids and Airspace	6 months before completion of the project
Installation of new ATC facility	6 months before installation
Installation of new AGA lighting	6 months before installation

The CAA will assess the proposed change and determine if the project is minor or major, using the criteria shown in Chapter 3, and inform the aerodrome operator accordingly to proceed with formal application, if applicable.

For certified aerodromes, changes that require prior approval from the CAA (see paragraph 5.5) should be submitted using AACK/AGA-FRM 23.

For approved aerodromes, changes that require prior approval from the CAA should be submitted using AACK/AGA-FRM 24.

Aerodrome Operator should be aware that significant maintenance projects may result in a secondary effect on the Certification Basis e.g. installation of new airfield ground lighting as part of a runway/taxiway rehabilitation project and may, therefore require prior approval. For maintenance projects see Chapter 8.

In the case of certified aerodromes, when the proposed change is significantly affecting the Certification Basis, the operator shall apply for amendment of the certificate using AACK/AGA-FRM 01.

## 2.2 Initial change meetings

An Initial Change Meeting (ICM) is required to brief the CAA on the major change and when the CAA deems it beneficial. Where possible, all aspects of the change should be covered at the ICM and a presentation, given by the aerodrome operator, often proves the most successful way to brief all participants. Notes of the meeting should be produced by the aerodrome operator and agreed by all parties.

Ideally, outline plans and drawings should be made available to the CAA before the ICM, in sufficient time to ensure that the meeting achieves the maximum benefit. Further meetings may be expected both whilst preparing for and during the change.

It is important that all areas affected by the change are covered at the ICM and that all necessary departments within CAA and representatives of responsible authorities are invited to attend.

The CAA will deal directly with the aerodrome operator or his appointed representative.

## CHAPTER 3: Classification of proposed change

Aerodrome developments are classified as either major or minor. CAA will evaluate each development proposal in detail and classify it as major or minor depending on the level of regulatory oversight expected to see the project to a satisfactory conclusion. The team will ensure all development proposals are evaluated consistently, will explain the reasons for the decision reached, and may also involve the aerodrome operator in assisting with the evaluation process. The CAA will inform the aerodrome in writing of the outcome of the evaluation process and the rationale for the decision.

The criteria used to determine whether a development is deemed to be major or minor may include the following, although this list is not exhaustive:

- The complexity of the development;
- The number of site visits required;
- The impact on aerodrome operations (level of disruption to normal operations);
- Changes required to aerodrome operations resulting from the new facility;
- Changes required to the Aerodrome Manual;
- Whether the development would create a new non-conformance that would require detailed evaluation;
- The level of internal CAA liaison required – Air Traffic Services, Flight Operations, Airspace/Instrument Flight Procedures).

Typically, the projects listed in Table 1 are those that may qualify as a major development and for which the CAA may levy charges in respect of approving the development and change of aerodrome certificate. This list is indicative only and projects may be excluded or included, dependent upon the complexity of the proposal and regulatory oversight required.

**Table 1: Developments that might be classed as 'major'**

Project	Description
New runway	A development resulting in the construction of a 'new' runway (e.g. new construction or the change of an existing grass to hard surface).
Runway extension	A runway extension resulting in an amendment to declared distances or the provision of extra RESA.
Threshold relocation (instrument status)	A development involving relocation of the instrument runway threshold, or relocation of a non-instrument runway threshold in preparation for instrument status.
AGL installation, instrument status runways	A new lighting installation or upgrade intended to facilitate additional operations (e.g. to accommodate low visibility operations and/or night operations).
New buildings/structures	A proposal involving a new terminal or terminal extension, hangars, or any other structure that may affect aircraft operations.



Installation of aids to navigation	An installation of ILS or MLS, glide path or associated equipment, radar, or other navigation equipment.
Taxiway development	A new taxiway or significant change to the existing taxiway system.
Apron development	A new apron or apron development resulting in a substantial increase in area.
New or replacement visual control tower (VCT)	Introduction of a new or replacement ATC.
Any other development which materially affects the basis upon which the aerodrome certificate or approval has been granted.	

## CHAPTER 4: Project planning and preparation

Changes often require extensive planning, and the following areas will need to be considered. However, it is stressed that this list is neither mandatory nor exhaustive and it is recognised that these elements may not be available or fully developed at the planning stage:

- Aeronautical ground lighting
- Aerodrome manual changes
- Air traffic procedures during and post-development
- ATC line of sight requirements
- Wildlife hazard implications
- Building induced turbulence
- Changes to the existing aerodrome operating procedures
- Changes to magnetic field density as a result of development
- Emergency procedures
- Environmental impact
- Instrument approach and departure procedures and minima
- Project safety management procedures (outline)
- Proposed timescale
- Revised low visibility procedures
- Removal of certificate/approval variations
- Revised runway incursion prevention measures
- Signage
- Site access plan
- Security measures as required by aerodrome security program

Whenever a project is proposed, it is essential to establish whether it will result in a change to the established operating procedures at the aerodrome. Therefore, at an early stage, aerodrome operators should undertake a hazard identification and risk assessment to identify the potential hazards and associated risks surrounding any proposed changes, including the impact on stakeholders.

The level of detail should be as required by the appropriate regulation and should also be commensurate with the size and complexity of the change.

## CHAPTER 5: Change submission process

### 5.1 Introduction

The CAA has developed a 3-stage process to assist aerodromes and ensure that aerodrome operators meet their obligations under their respective regulation. This chapter details the information required for each of the 3 stages and the process to be followed.

This process should be used for all changes requiring prior approval. It is acceptable to submit Parts 1 and 2 together.

The submission process consists of 3 separate parts:

- Part 1: Compliance
- Part 2: Control
- Part 3: Completion

### 5.2 Changes requiring prior approval

#### 5.2.1 Approved aerodromes

For approved aerodromes, all infrastructure changes require prior approval by the CAA, as specified in aerodrome approval conditions.

In addition, the CAA may, provided that the requirements of the Regulation on approved aerodromes are met, amend an aerodrome approval where:

- there is a change in the operator of the aerodrome;
- there is a change in the use or operation of the aerodrome;
- there is a change in the boundaries of the aerodrome;
- the holder of the aerodrome approval requests the amendment.

#### 5.2.2 Certified aerodromes

For certificated aerodromes, in addition to the changes required in ADR.OR.B.040(a)(1) affecting the terms of the certificate, its certification basis and safety-critical aerodrome equipment, the CAA requires that the additional following changes are subject to prior approval:

- Changes significantly affecting elements of the aerodrome operator's management system as required by ADR.OR.B.040(a)(2) Changes;
- Changes affecting DAADs;
- Use of alternative means of compliance as required by ADR.OR.A.015 Means of Compliance;

- Changes to the management and notification procedure for changes not requiring a prior approval, as required by ADR.OR.B.015(b)(4) Application for a certificate;
- Changes to the level of protection of rescue and firefighting services as required by ADR.OPS.B.010(a)(1)(2) Rescue and firefighting services;
- Changes to low visibility procedures as required by ADR.OPS.B.045(b) Low Visibility Operations
- Operation of aircraft with higher code letter as required by ADR.OPS.B.090(a) Use of the aerodrome by higher code letter aircraft;
- Constructions affecting sightlines from ATC;
- New, or relocation of, wind socks;
- Developments on the movement area (e.g. new aprons, taxiways);
- Developments which might impact on the movement area (e.g. new or extensions to terminals or piers); or
- Significant maintenance projects (e.g. runway rehabilitation).

Moreover the operator shall apply for an approval for changes to any obstacles, developments and other activities within the areas monitored by the aerodrome operator in accordance with ADR.OPS.B.075, which may endanger safety and adversely affect the operation of an aerodrome, as required by ADR.AR.C.005(e).

## 5.3 Approval process

### 5.3.1 Compliance: Application for changes (Part 1)

Each change proposal should be submitted on the appropriate form (AACK/AGA-FRM 23 or AACK/AGA-FRM 24), providing clear evidence that the change conforms to the relevant regulation, including:

- Change overview;
- Supporting documentation, where applicable (e.g. Safety Assurance Documentation or change assessment);
- Compliance matrix (to demonstrate that the project design meets regulatory requirements); and
- Scaled drawings, where applicable.

When the CAA has assessed the Part 1 submission and is satisfied that change meets regulatory requirements, CAA will approve the change. It should be noted that where a Part 1 approval has been issued and a subsequent change is proposed to the design or build, the modified information shall be notified to CAA.

### 5.3.2 Control: Operational Requirement and Safety Statement (Part 2)

Following completion and acceptance of development design, the aerodrome operator shall demonstrate to the CAA that the project will be managed safely. Accordingly, the CAA will expect aerodrome operators to develop safety assurance documentation that describes how the aerodrome will manage the construction works, and operating procedures, to ensure that aerodrome operations can continue safely during the project. Aerodrome operators should develop and implement a formal system for the strict control, safety management, safeguarding and safety coordination of all airside works. Safety Assurance Documentation can take many forms but should be proportionate to the size of the project.

The aerodrome operator shall ensure that systems for control and safe management extend to contractors working at the aerodrome.

All members of the project management team should have clearly defined responsibilities and accountabilities in the project programme. During construction on an aerodrome, safety levels and standards of conduct must be maintained. These are essential to promoting safety, preventing accidents and meeting the aerodrome certification requirements.

It is important that accurate, up to date information is made available to all stakeholders involved in the project, including the CAA, both as part of the project planning and during the work itself. Therefore, the safety assurance and project management documentation may include any or all of the following information:

- A clear statement of the supervision structure for the safety management and monitoring of works, including contact details of key duty personnel concerned, for both project and aerodrome management. This should include clear responsibilities, including the person with overall accountability for the development;
- Airfield Operating Procedures during the development, including contingencies such as low visibility procedures;
- Arrangements for liaison meetings/briefings between the aerodrome management and the contractors;
- Appropriate plans and diagrams relating to the contraction process;
- Control of contractors;
- Day and night start, control and completion of work procedures;
- Communications procedures between the aerodrome operating units (e.g. ATC, Airfield Operations) and construction teams;
- Emergency procedures;
- Method of working;
- Plans of site and diagrams of works;
- Site access plan;
- Site safeguarding and marking;
- Weather minima that will affect the works;

- The general layout of the aerodrome including airside access points;
- The location and limits of works areas;
- The specific security access points to be used and the location and marking of the access routes to be used to reach airside sites;
- Methods of control and access for works sites within the Apron and Manoeuvring Area including arrangements for crossing taxiways and runways (if applicable);
- The methods and equipment to be used for protecting, marking and lighting the boundaries of works sites and for protecting normal aerodrome operations in the vicinity of the site. Also the requirement to control site lighting to prevent distraction of aircraft crews, drivers and ATC;
- The strict timing for the setting up of work sites, the start of work, daily permitted working hours at the site and procedures to be followed for starting and stopping work;
- Aerodrome emergency procedures, including response times during periods of work in progress, should not be compromised. This extends to ensuring compensatory arrangements are in place to cover depletions of fire main or fire hydrants when the fire main has been deactivated due to work in progress;
- Vehicle and equipment requirements, operating rules and the requirements for staff discipline;
- Calculating and communicating amended runway declared distances;
- Maintaining appropriate pavement friction characteristics;
- Information on special safety requirements for aircraft operations in the vicinity of works and the methods of control available on the Manoeuvring Area, including radio telecommunication procedures if appropriate;
- Arrangements for the special control of 'hot works';
- Requirements for the operation of cranes and other tall structures;
- Arrangements for the receipt and movement of heavy or bulky loads;
- Requirements for vehicle and area cleanliness, also the implications of Foreign Object Debris (FOD) and loose material hazards for aircraft operations;
- Arrangements for the disposal of waste;
- Information on the safety implications for the site and staff of special aircraft hazards including blast, vibration, fumes and noise;
- Information on the effects of strong winds at the aerodrome;
- Site safety, including personnel protection.

Rules and guidance on control of work is given in AMCs and GM to ADR.OPS.B.070.

Aerodrome operators should ensure that all stakeholders are notified of aerodrome projects in a timely manner. These communications should continue through the project and may include Safety Instructions, Aerodrome Information Circulars, NOTAMs or other local procedures.

Before contractors start work at any aerodrome location, aerodrome operators should provide a comprehensive safety briefing including the results of ongoing hazard analyses, to ensure all information needed to achieve the safe completion of any works or activity is clearly understood and agreed. Additionally, aerodrome operators should hold regular progress meetings to ensure project safety and operational objectives continue to be met. There should be close monitoring of the safety of aerodrome operations while the project work is in progress and, when reaching decisions, project priorities should be subordinate to the maintenance of safety standards.

When the CAA has been assured that the aerodrome can continue to operate safely during the project, approval will be given to commence work.

### **5.3.3 Completion (Part 3)**

Transition into service is a critical phase of the project and can present complex challenges. Careful planning and robust procedures need to be established to ensure that the change is introduced safely and efficiently. This may be demonstrated by undertaking a process of operational readiness, which may include simulations, testing, audits or sample inspections, involving appropriate key stakeholders.

On completion of the change, the aerodrome operator should confirm to the CAA that it meets the agreed design criteria and is fit for purpose.

Where the change impacts on the contents of the Aerodrome Manual, these should be incorporated and a revised version submitted to CAA.

In addition to this, the aerodrome operator of certified aerodrome should resubmit the amended CB reflecting the changes. The CAA will sign the CB to confirm its approval and forward this to the aerodrome operator.

The CAA will amend the certificate and related terms of certificate to determine the continued compliance with the basic regulation and its implementing rules.

## CHAPTER 6: Changes to the management system (Certified aerodromes only)

The Regulation No. 17/2017 on Certified Aerodromes specifies that changes significantly affecting elements of the aerodrome operator's management system (as listed in ADR.OR.D.005(b)) require the approval of the CAA before the change can take place.

The CAA has further defined these as changes significantly affecting the organisation chart (changes to the clearly defined lines of responsibility and accountability), policies or safety culture of the aerodrome operator's management system, including the safety management system.

In practice this means changes to the organisational structure (as opposed to individual posts being replaced on a like-for-like basis) or material changes to the way the management system and SMS are operated.

The CAA is looking for evidence that the aerodrome operator has appropriate resource and correct competences in the management structure and the management system can deliver safety according to the regulation. The CAA would expect aerodrome operators to be able to demonstrate how a revised organisational structure or major change to the management system will be able to deliver the safe management of the aerodrome, as required by the regulation. Additionally, the CAA would expect that the aerodrome operator has developed safety assurance to satisfy itself that change will be managed during any transition period. The CAA will then assess the proposed change against the management system requirements and would expect the process to be completed before the change takes effect.

If the aerodrome operator is unsure about whether a change to the management system requires prior approval, the CAA should be contacted in the first instance.

The submission process for changes to the management system differs slightly from the one used for infrastructure described earlier in this document. Each proposal should include an overview of the change including supporting documentation, (e.g. Safety Assurance Documentation or change assessment), providing clear evidence that the change conforms to the relevant regulation. The CAA forms available for the changes to infrastructure are suitable for completing changes to the management system; however there is no requirement to complete the compliance matrix section of the application form.

All members of the change management team should have clearly defined responsibilities and accountabilities in the change programme. These are essential to meeting the aerodrome certification requirements.



Aerodrome operators should ensure that all stakeholders are notified of the change in a timely manner. These communications should continue through the project and may include Safety Instructions and other local procedures.

On completion of the change, the aerodrome operator should confirm to the CAA that it meets any agreed criteria and is fit for purpose. The aerodrome operator should resubmit the amended Operations Basis (OB) and Aerodrome Manual reflecting the change. The CAA will sign the OB to confirm its approval and forward this to the aerodrome operator.

## CHAPTER 7: Changes not requiring prior approval (Certified aerodromes only)

With the introduction of the Regulation No. 17/2017 on Certified Aerodromes, there are some subtle differences to the way infrastructure and management changes are approved by the CAA. These differences are only relevant to certified aerodromes.

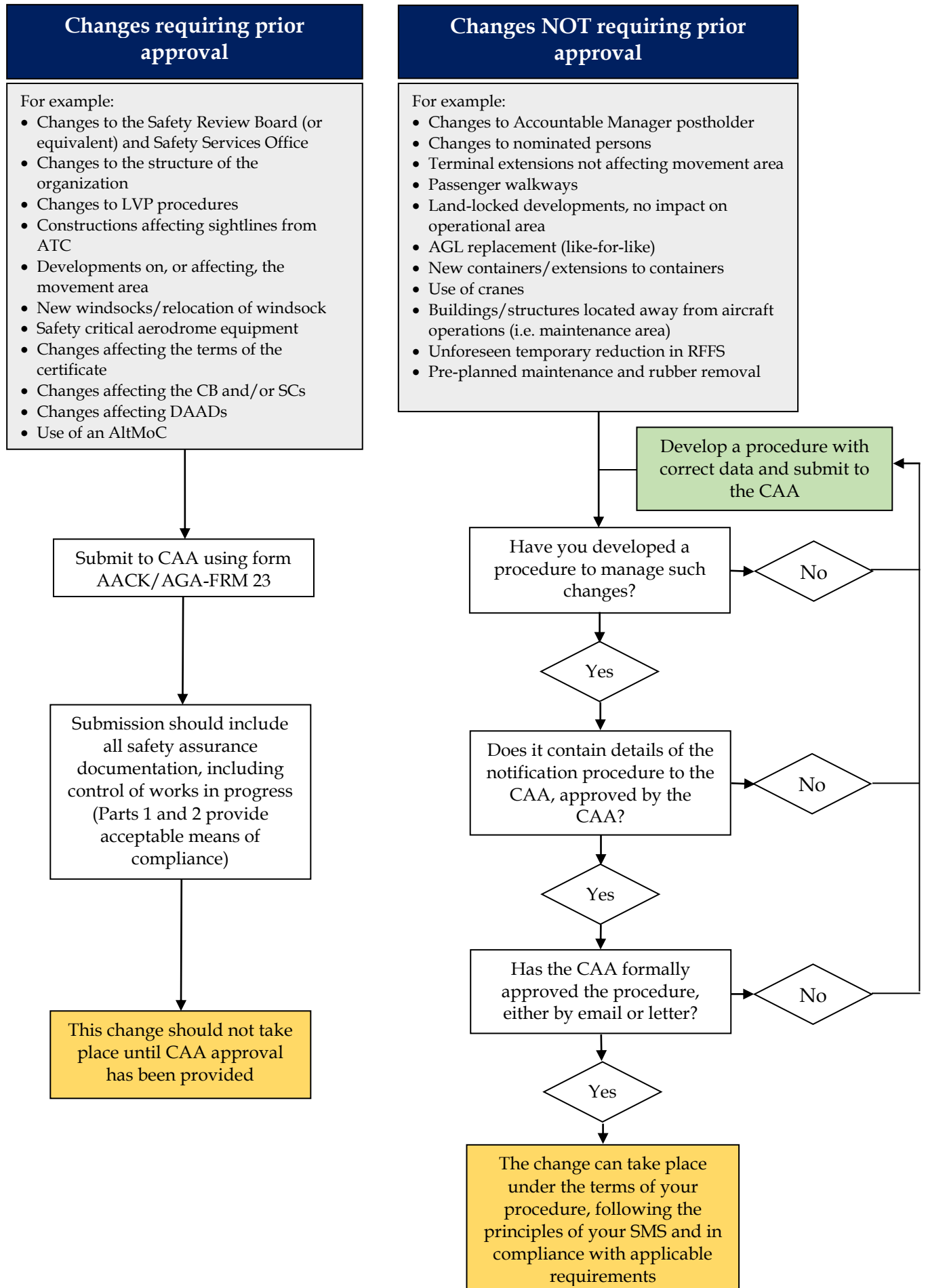
Some changes do not require prior approval before the change is introduced. However, for this to be available the CAA has to approve the aerodrome's procedure to manage such changes. Therefore, it is imperative that the aerodrome operator submits its 'change management procedure' to the CAA for approval, prior to the commencement of any works, and ideally at the point of conversion of its Certificate.

For example:

- Changes to the Accountable Manager postholder;
- Changes to nominated persons;
- Terminal extensions not affecting movement area;
- Passenger walkways;
- Land-locked developments, no impact on movement area;
- New, or extensions to, portable containers;
- Use of cranes;
- Unforeseen temporary reduction in RFFS;
- Pre-planned maintenance and rubber removal.

The procedure to manage these changes should be developed taking into account the aerodrome's policies and processes, but should include as a minimum:

- Accountabilities for changes;
- A policy statement on those changes that require prior approval
- Inclusion in the Aerodrome Manual;
- The process for undertaking safety assessments, including hazard analysis;
- A list of projects that do/do not require prior approval; and
- The process, agreed with the CAA, on how changes not requiring prior approval shall be notified to the CAA.



## CHAPTER 8: Maintenance projects

Maintenance projects can vary enormously in size. Much maintenance work involves short-term minor works, such as painting, planned periodic replacements (e.g. light cleaning in accordance with a preventative maintenance schedule), refinements to systems/infrastructure and small repairs to aerodrome infrastructure, which can be completed in short timescales and with limited disruption. Smaller planned or routine maintenance works need not be notified to the CAA, although the CAA would expect to be kept informed of these activities.

However, maintenance may also involve large, longer-term projects (weeks/months), which may involve many key stakeholders, and which may have significant impacts on operations and so test the aerodrome's safety management system. Examples of major maintenance would include partial or complete runway rehabilitation and replacement of aerodrome ground lighting systems.

The CAA has additionally included major maintenance work in the approval process. This decision is based on the risk the aerodrome operator is exposed to whilst undertaking major maintenance projects that normally include multiple stakeholders and complex operational procedures during the project.

The CAA will evaluate the proposal and, once the evaluation is complete, and an assurance that the aerodrome can deliver the major maintenance works safely, the CAA will confirm its approval in writing.

## CHAPTER 9: Safety risk assessment

All developments are expected to meet the criteria detailed in Regulation No. 17/2017 on certified aerodromes, Regulation on Approved Aerodromes, ICAO Annex 14 or other applicable regulations. In addition, during the planning process, existing variations on the aerodrome (if existing) should be examined to determine whether they can be removed or improved as part of the development.

Therefore an assessment of risk, showing clearly that the risk is at a level acceptable to both, to the aerodrome management and to CAA, is necessary. Provision and funding of the assessment is the aerodrome's responsibility.

The type of safety risk assessment undertaken will vary depending upon the safety criticality of the development. If the possible consequences were a serious accident to an aircraft (significant damage or worse), a full quantitative analysis by safety specialists might be required. However, in many circumstances where the severity of the potential hazards is not great or can be easily mitigated, the safety risk assessment can be carried out by a small group of aerodrome experts, using their own experience and specialist knowledge. **It should be noted that the submission of a risk or safety assessment does not automatically guarantee, acceptance of a project.**

Whatever the risk comparator chosen, aerodrome management should be aware that it would be most unwise to begin a development before CAA has ensured there are no objections to it.

Further information on safety risk assessment is shown in Appendix A.

## APPENDIX A: Safety Risk Assessment Methodology

### 1. Introduction

An organization should assess all aspects of its operation, and changes to it, for safety significance. Safety assessments should be performed and documented to ensure that due consideration is given to the safety of all parts of the system.

A safety assessment for a change should include:

- a) identification of the scope of the change;
- b) identification of hazards;
- c) determination of the safety criteria applicable to the change;
- d) risk analysis in relation to the harmful effects or improvements in safety related to the change;
- e) risk evaluation and, if required, risk mitigation for the change to meet the applicable safety criteria;
- f) verification that the change conforms to the scope that was subject to safety assessment, and meets the safety criteria, before the change is put into operation; and
- g) the specification of the monitoring requirements necessary to ensure that the aerodrome and its operation will continue to meet the safety criteria after the change has taken place.

### 2. Scope of the safety assessment

The scope of the safety assessment should include the following elements and their interaction:

- a) the aerodrome, its operation, management, and human elements being changed;
- b) interfaces and interactions between the elements being changed and the remainder of the system;
- c) interfaces and interactions between the elements being changed and the environment in which it is intended to operate; and
- d) the full lifecycle of the change from definition to operations.

### 3. Safety criteria

The safety criteria used should be defined in accordance with the procedures for the management of change contained in the aerodrome manual.

The safety criteria used should, depending on the availability of data, be specified with reference to explicit quantitative acceptable safety risk levels, recognised

standards, and/or codes of practice, the safety performance of the existing system, or a similar system.

More information on safety risk assessment mythology may be found in Chapter 4 of the Technical Publication “TP-26 Safety Management System (SMS) for Service Providers”, published by the CAA. This publication is intended to provide guidance material to service providers on the implementation of Safety Management Systems (SMS) and to give sufficient understanding of SMS concepts and the development of management policies and processes to implement and maintain an effective SMS.

## APPENDIX B: Change Process – Flow Chart

