FACTSHEET – MILITARY AERODROME CERTIFICATION REVIEW ITEMS

INTRODUCTION

A Military Aerodrome Certification Review Item (MACRI) is a tool used to record tailoring applied to the Certification Basis (CB) of an Aerodrome when addressing non-compliances. Where an Applicant¹ is unable to demonstrate compliance to a CB requirement, the Applicant pursues approval for tailoring the CB by submitting a MACRI form. The MACRI provides a consistent mechanism for proposing CB tailoring and Authority approval. This factsheet provides information about what is a MACRI. It identifies and describes the types of MACRIs and when each of them can be used. An outline of the overall process for addressing non-compliances in aerodrome design is also provided.

WHAT IS A MACRI

A MACRI is a document, which captures an Applicant's proposal to modify an aerodromes CB design requirement, and the Authorities approval of the proposal.

When a CB non-compliance is identified² and it is not possible to demonstrate compliance to the design requirement, or it is not reasonably practicable to change the design of the aerodrome to become compliant, the non-compliance must be addressed prior to applying for certification. These non-compliances against the CB should be examined for impact to certification and safety of flight operations.

Non-compliances may be addressed through two ways. First an applicant may demonstrate requirement tailoring or use of an alternate requirement achieves an Equivalent Level of Safety (ELOS). Or alternatively, if requiring compliance would impede a Defence capability and warrants seeking operator retention of residual risk, an Applicant can identify and treat all risk of the non-compliance through comprehensive risk management, including operator's approval for the reduced level of safety afforded by the design. Both approaches tailor the applicable design requirement and a MACRI is used to capture this tailoring and seek Authority approval to update the CB.

There are two types of MACRIs, an Equivalent Safety Finding (ESF) MACRI and an Exception MACRI:

- (1) **Equivalent Safety Finding (ESF) MACRI** is used when a requirement cannot be met through direct compliance, and a safety argument can demonstrate that a tailored requirement can achieve an equivalent level of safety.
- (2) Exception MACRI is used when there will be an enduring retention of risk above that presented by a compliant design. If Defence has a well-defined capability imperative that would be impeded if compliance was required and warrants seeking operator retention of residual risk, the Applicant must use Defence's 7-Step Safety Risk Management (SRM)³ process to demonstrate that risks arising from the non-compliance have been eliminated or otherwise minimised So Far As is Reasonably Practicable (SFARP).

A MACRI only captures sufficient information to understand the reasoning for and the tailoring of the affected CB requirement. A MACRI does not capture any of the safety or risk argument required to underpin the tailoring approval. Therefore, a MACRI must be preceded by an appropriate document, which captures any ELOS argument for an ESF MACRI or the safety risk management for an Exception MACRI.

An Aerodrome Issue Paper (ADIP)⁴ template has been developed to document the completion of the Defence 7-Step SRM and capture required risk decisions. An Exception MACRI will always be underpinned by documented SRM – e.g. in an ADIP. For an ESF MACRI, an ADIP may be provided as formal demonstration of operator



¹ The Applicant is any Defence organisation or operator or its representative with an interest in the Certification of the aerodrome. Normally it is expected the MACRI applicant would be the same applicant which applies for an aerodrome certificate or the Aerodrome Operator or delegate.

² A non-compliance could be identified during design, construction, and testing phases for new aerodrome facilities, when completing re-certification for changes, or during the service life of an aerodrome when new evidence identifies a non-compliance

³ GM SMS.A.25(b)(2)(2.2) – Safety risk management and mitigation (AUS)

⁴ While DASA has developed an ADIP template it is not mandatory for use and equivalent document can be used by the applicant.

agreement to the discussed controls – particularly if they are contentious, otherwise a safety argument may take any appropriate form.

For further guidance on ADIP, see – <u>Factsheet – Aerodrome Issue Paper</u>.

ADDRESSING NON-COMPLIANCES IN AERODROME DESIGN PROCESS OVERVIEW

Addressing non-compliances in aerodrome design should follow a structured process as summarised in Appendix A. The process begins when the Applicant identifies a non-compliance to a design requirement – i.e. the Aerodrome does not meet the CB requirements. The Applicant should, in the first instance, confirm that options to generate further evidence to demonstrate compliance have been exhausted, or otherwise that it is not reasonably practicable to change the design.

At this point the Applicant should investigate if compliance to a tailored requirement which meets an ELOS can be demonstrated. If so, a documented safety argument agreed by the operators (both Aerodrome and Air Operators) will underpin an ESF MACRI. If tailoring involves limitations which may be contentious, an ADIP may be used to capture the safety argument in a structured way. Any limitations and controls provided in an ESF MACRI must be captured in an Authority approved document.

If an ELOS cannot be established, and the risk is not able to be eliminated through limitations, the Applicant needs to confirm there is a capability imperative that would be impeded if compliance was required and warrants seeking operator retention of residual risk. If an imperative can be documented, the 7-Step SRM follows (through an ADIP or other suitable mechanism) to support an application for an Exception MACRI. During the assessment, agreement is to be established from the operators (both Aerodrome and Air Operators) that the SRM is complete, controls are implementable and the reduction in the level of safety is understood and accepted.

The Applicant will need to prepare the Safety Argument, ADIP or SRM documentation and gain operator approval prior to completing and submitting a MACRI. DASA will review the Safety Argument or ADIP and MACRI applications and communicate the review outcomes with the Applicant. Mature draft submissions are encouraged to allow final documents to be developed in a state which support approval.

MACRIs are recorded against the relevant requirement(s) in an Aerodrome CB. Any ensuing limitations and conditions are recorded both on the Aerodrome Certificate Data Sheet and also in the Aerodrome Manual. Therefore, when submitting a MACRI, the Applicant should have available for review updates of the Aerodrome CB, the Aerodrome Manual, and the Aerodrome Certificate. By approving a MACRI DASA approves the tailoring of the CB.

USEFUL INFORMATION

- Document templates can be accessed from the DASA website: http://www.defence.gov.au/DASP/DASR-Regulations/DASR-Templates.asp
- Factsheet
 <u>Factsheet-Aerodrome Issue Paper</u>
- DASA Point of Contact: Aerodrome and Heliport Certification (AHCERT) Section: <u>dasa.aerodromes@defence.gov.au</u>

APPENDIX

A. Addressing Non-Compliances in Aerodrome Design - Process Overview

APPENDIX A - ADDRESSING NON-COMPLIANCES IN AERODROME DESIGN - PROCESS OVERVIEW



BP17860866 v1.0