

Final Report No 2 - Defence Building Works Manual 20 April 2020



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Scope of review

This is the second of 2 reports on a review of various documents from the Defence Estate Quality Management System (DEQMS) which sets out the policy and procedure for oversight of the design, certification, construction, sign off and ongoing maintenance of buildings on the Defence estate and the safety and compliance of other Defence occupied buildings (Defence Building Regulatory Policy and Procedure).

The first report, dated 10 February 2020:

- 1. compared various DEQMS documents to recommendations in the Building Confidence Report1 that are relevant to building works on the Defence estate and Defence occupied buildings and
2. provided comments and suggested changes to the draft Building Works Manual (BWM) which are intended to enhance the document and align it to best practice building regulation.

This second report is prepared following the incorporation of recommendations from the first report into the Draft Building Works Manual. This second report is on the pre-final draft Building Works Manual set out in Appendix A. This report confirms that the processes provided for in the pre-final draft BWM are robust and sets compares that document to the relevant recommendations of the Building Confidence Report.

1 Building Confidence: Improving the effectiveness of compliance and enforcement systems for the building and construction industry across Australia, Peter Shergold and Bronwyn Weir, February 2018

The author

Bronwyn Weir is a co-author of the Building Confidence Report. Her appointment with Professor Shergold to undertake that work reflects her reputation as a legal advisor on building regulations for more than 22 years. Bronwyn has been advising the NSW and WA governments on their implementation of the Building Confidence Report and she is also part of the Expert Advisory Group appointed to advise the ABCB on its work to develop a national framework for the implementation of the report. Bronwyn is an inaugural Board member of the recently established International Building Quality Centre at University of Canberra. Other related work includes advising on the Victorian Government's response to combustible cladding and on security of payment reforms for the Queensland government.

In addition to her expertise in building regulation, Bronwyn advises regulators in a range of sectors including, early childhood education and care, human services, environmental regulation and food safety.

Background and context

The following information was provided as context for this review:

1. Defence occupied buildings are made up of buildings on the Defence estate (i.e. on land owned by Defence) and other buildings occupied by Defence personnel (i.e. buildings on land not owned by Defence but leased to Defence);
2. The Defence Building Regulatory Policy and Procedure applies to all Defence personnel and to contractors engaged by Defence to design, certify, construct and maintain relevant buildings.
3. The Defence Building Regulatory Policy and Procedure mandates that buildings and building works comply with the National Construction Code (NCC) and other applicable Defence policies which provide for additional, specific requirements for some types of Defence buildings.
4. The Defence Building Regulatory Policy and Procedure is also intended to align, where practicable to State and Territory building regulations.
5. Contractors that provide construction and maintenance services to Defence are engaged through Defence procurement arrangements under which they are contractually obliged to comply with the Defence Building Regulatory Policy and Procedure.
6. Head contractors engaged to carry out building work on the Defence estate are required to sub-contract the services of designers, building surveyors/certifiers, trade contractors and suppliers to deliver the specified building work.
7. Defence contracts with Warrington Fire and other specialise consultants to:
 - a. provide advice on the ongoing development of the Policy and Procedure;

- b. peer review proposed performance solutions under the NCC and dispensations from special building requirements under applicable Defence policies;
 - c. provide advice to resolve:
 - i. inconsistencies between the NCC, Defence policy and/or State and Territory legislation;
 - ii. non-complaint building work;
 - d. provide audit and inspection services to assist Defence to oversee compliance with the Defence Building Regulatory Policy and Procedure.
8. For many years, the building certification process for building work on the Defence Estate was primarily set out in the Manual of Fire Protection Engineering (MFPE). In 2019, it was decided that the policy and processes should be removed from the MFPE and consolidated into a Building Works Manual. A key task for this review has been to provide a close assessment and advice on the Draft BWM before it is approved for use.
9. The Draft BWM has already been the subject of detailed consultation with a range of stakeholders.
10. Defence is keen to ensure that its building certification process is consistent with modern best practice building regulation in Australia and in particular relevant recommendations of the Building Confidence report.

Documents considered for this review

11. The key documents provided for consideration as part of this review are set out in **Appendix B**. In addition, regard has been had to the DEQME website which contains all relevant documents approved or published for consultation.
12. Contract documents that apply to building works on Defence occupied buildings have not been reviewed.
13. This report concerns the content of the pre-final draft BWM which incorporates changes in response to the first report dated 10 February 2020.

Findings and general comments on the pre-final version of the draft BWM

1. The pre-final draft BWM incorporates recommendations from the first report. A summary of the key changes made to the draft BWM following the first report is set out in **Appendix C**.
2. The pre-final draft BWM is well written and provides a robust process for the approval of building work on the Defence estate by building surveyors and competent design practitioners with mechanisms in place that provide strong oversight by Defence.

3. Particular strengths of the process provided for in the BWM are as follows:
- a. The requirement for all proposed performance solutions or dispensations to be reviewed and approved by specialist consultants engaged by Defence provides a level of assurance over the quality of performance solutions that does not exist in any of the State or Territory building regimes.
 - b. The requirements for documentation and recording performance solutions and dispensations are comprehensive. The BWM requires performance solutions to be supported by documentation which meets the IFEG and the ABCB's guide to documenting performance solutions. It also requires early and ongoing consultation with stakeholders and identification of approved performance solutions and dispensation on building approvals and certificates of completion.
 - c. The policy and procedures make the best use of State and Territory based licensing schemes for design practitioners by requiring the building surveyor to undertake an assessment of all persons preparing designs and specifications to ensure they are 'competent persons'. In undertaking this assessment, the building surveyor must have regard to the licensing requirements in the state or Territory where the work is being undertaken. If there are none, they must undertake an assessment of the person's qualifications and skills to undertake the work. The competency assessment must be documented by the building surveyor and referenced in the building approval document.
 - d. The GEMS and Objective record keeping platforms and hand over process provide Defence with comprehensive, central repositories of data about building work on the Defence estate. States and Territories do not have centralised data platforms for building approval documentation, although many are keen to develop this capacity. The GEMS and Objective data basis should provide Defence with the ability to efficiently manage their assets over the life of the building and ensure ongoing safety and compliance. Ultimately the ability to effectively use this data will depend on the quality of data input and how easy these systems are to use, an assessment which is beyond the scope of this report.
 - e. The policy and procedures for building regulation are tailored to the peculiarities of Defence assets. By providing for contribution factors and special structure assessment, this enables Defence to modify the application of the NCC where appropriate to ensure adequate levels of safety and flexibility in the use of buildings on the Defence estate. The BWM provides for Defence specific considerations to be undertaken during the process in a clear and appropriate manner.
 - f. Inspections of building work are required to be carried out and documented by the building surveyor or a competent person (as assessed by the building surveyor). There is a process that must be followed where non-complaint work is detected during inspections which involves directing the builder to rectify work and have it reinspected or submit revised drawings or specifications. If the non-compliance is unresolved after 60 days, the building surveyor must notification the Defence policy contact.
 - g. Where variations to approved works are proposed, they are required to be properly documented and approved by the building surveyor.

Comparison of the pre-final draft BWM with the relevant recommendations of the Building Confidence Report

5. An analysis of the pre-final draft BWM and related documents against the applicable recommendations of the Building Confidence report is contained in **Appendix D**.
6. In summary, of the 24 recommendations made, 10 are not relevant to Defence. Of the 14 that are relevant, the Defence Building Regulatory Policy and Procedure meets 13 and partially meets 1. A summary of this assessment is set out in the following table.

BCR Rec no	N/A, meets fully, partially or does not meet	Comments
1.	Meets (to the extent possible, noting the states are responsible for registration of practitioners)	There is a clear process for the buildings surveyor to assess whether design practitioners are 'competent persons'. Defence could consider providing additional guidance to surveyors on what qualifications are required for a person to be competent where registration is not required in the jurisdiction where the work is being carried out.
2.	Not applicable	
3.	Not applicable	
4.	Not applicable	
5.	Not applicable	
6.	Not applicable	
7.	Not applicable	
8.	Meets fully	Strong obligations to apply IFEG and consult with relevant fire authorities
9.	Meets partially	Not all minimum controls recommended in the BCR are in place to mitigate conflicts of interest because the building surveyor is a sub-contractor to the builder rather than appointed directly by Defence.
10.	Meets	Building surveyors are required to comply with relevant codes of conduct
11.	Meets	The process includes obligations on building surveyors for how they are to manage and report non-compliance to Defence
12.	Meets	Well established centralised data platforms in place and clear obligation for lodgement
13.	Meets	The BWM provides that design certificates must be issued by competent designers.
14.	Meets	There are strong obligations to document performance solutions properly and oversight by Defence to ensure compliance
15.	Meets	There are strong obligations to document performance solutions for constructed work and oversight by Defence to ensure compliance
16.	Meets	The process includes an obligation to document all variations
17.	Meets	All performance solutions and dispensations must be approved by Defence – potential weakness is

		that building surveyor may not be identifying all matters that require performance solutions.
18.	Meets	The process requires the building surveyor to inspects a broad range of work and required inspections include those to be undertaken by design consultants.
19.	Meets	On the understanding that contracts provide that design and installation certificates must be issued by designers, installers and surveyors involved in fire safety systems
20.	Meets	The HOTO process is well developed and results in a comprehensive building manual as part of hand over.
21.	Not applicable	
22.	Not applicable	
23.	Not applicable	
24.	Not applicable	

Appendix A Pre-final draft of the Building Works Manual last reviewed on 20 April 2020

Appendix B – Key Documents considered as part of this review

	Document	Relevance to this review
1.	Draft Building Works Manual Edition 1	For close review and detailed comment
2.	Estate Engineering Governance and Integrity System Framework Nov 2019	For review and general comment
3.	Estate Engineering Governance and Integrity System Handbook Nov 2019	For review and general comment
4.	Estate Engineering Governance and Integrity System Statement of Intent – 28 June 2019	For review and general comment
5.	Manual of Fire Protection Engineering – edition 3 May 2018	For review noting that parts of this document have been removed will now be contained in the Building Works Manual
6.	MFPE Edition 3, amendment 2 – table of amendments made to the MFPE in May 2018	For noting
7.	Guidelines for certification, performance solutions and dispensations – June 2019	For review and general comment
8.	Guidelines for Contribution Factors – June 2019	For review and general comment
9.	Guidelines for aircraft handler assessment forms – Version 2 June 2019	For review and general comment
10.	MFPE design inclusions – version 2, 7 June 2019	For review and general comment
11	Template forms <ul style="list-style-type: none"> - Building Approval - Design Certificate - Request for Performance Solution and Dispensation - Request for Performance Solution - Installation Certificate - Certificate of Completion - Request for Dispensation - HOTO Checklist - Fire Safety Measures – example of performance requirements and relevant maintenance standards 	For review and general comment
12	Building Works Manual Consultation Record – showing feedback from stakeholders	For noting

Appendix C - Summary of changes following first Report

1. Improvements to the definitions section and minor edits to simplify text.
2. Referring to building certifiers as building surveyors. Both terms are commonly understood but more jurisdictions use the term 'surveyor' in their legislation and relevant industry associations prefer the term surveyor.
3. Improvements to the conflict of interest provisions as follows:
 - a. providing that the prohibitions apply to the building surveyors and 'related persons'. This was in recommendation 9 of the Building Confidence report and is consistent with conflict of interest provisions in many states and territories.
 - b. creating an obligation on the surveyors to comply with any code of conduct applicable to their State or Territory licence/accreditation (recommendation 10 of the Building Confidence Report);
 - c. given the conflict of interest requirements and/or such codes may prevent the surveyor from being sub-contracted to a builder, a new clause says that nothing in the BWM prevents them from being subcontracted to a builder engaged by Defence.
4. New paragraphs in relation to inspections to require inspection reports be prepared and to create an obligation on the surveyor to follow a process where the works inspected are identified as non-complaint with the building approval. This creates transparency over how non-complaint work is detected and managed and provides for mandatory reporting to Defence where non-compliances are not promptly resolved. This relates to recommendation 11 of the Building Confidence Report.
5. New paragraphs to set out the process required to document variations to building work. This relates to recommendation 16 of the Building Confidence Report.
6. Setting out more clearly the obligation on the building surveyor to undertake 'competent person' assessments on designers and to record their assessment. Amending the template building approval document to require the building surveyor to confirm that they have undertaken the required competent person assessment for each design practitioner. This relates to recommendation 1 of the Building Confidence Report.
7. Setting out more clearly the obligation on the building surveyor to undertake a 'building assessment' and prepare a report showing their assessment of proposed design against the NCC.
8. The MFPE design inclusions document provides helpful guidance on what level of documentation should be provided through the development of design. The name of this document will be changed to the BWM design inclusions guideline and it has been referenced in the BWM as a document that building surveyors should have regard to when determining whether to issue a building approval.

Appendix D – Comparison of draft BWM and related documents with recommendations in the Building Confidence Report

	BCR recommendation	Pre final draft of BWM or other document	Comments
1.	<p>That each jurisdiction require the registration of the following categories of building practitioners involved in the design, construction and maintenance of buildings:</p> <ul style="list-style-type: none"> • Builder • Site or Project Manager • Building Surveyor • Building Inspector • Architect • Engineer • Designer/Draftsperson • Plumber • Fire Safety Practitioner <ul style="list-style-type: none"> ○ Designer/engineer ○ Installers ○ Certifiers ○ Maintenance contractors 	<p>BWM paras 3.6-3.8 provide for ‘competent person assessments’ by the building surveyor. The building surveyor must keep records of the competent person assessment.</p> <p>The template building approval document requires the building surveyor to confirm that they have undertaken competent person assessments for each design practitioner.</p>	<p>The BWM seeks to ensure all design practitioners are qualified and experience through this process. It would not be practicable for Defence to register practitioners (as recommended by the BCR) but through the competent person assessment process a level of assurance is provided that designers will have appropriate skills and qualifications. Defence could consider issuing guidance to surveyors on how to assess qualifications where designers are not required to be licenced/registered in the relevant jurisdiction where the work is being carried out.</p>
2.	<p>That each jurisdiction prescribe consistent requirements for the registration of building practitioners including:</p> <ul style="list-style-type: none"> • certificated training which includes compulsory training on the operation and 	Not applicable to BWM	

	<p>use of the NCC as it applies to each category of registration;</p> <ul style="list-style-type: none"> • additional competency and experience requirements; • where it is available, compulsory insurance in the form of professional indemnity and/or warranty insurance together with financial viability requirements where appropriate; and • evidence of practitioner integrity, based on an assessment of fit-and-proper person requirements. 		
3.	That each jurisdiction require all practitioners to undertake compulsory Continuing Professional Development on the National Construction Code.	Not applicable to BWM	
4.	That each jurisdiction establish a supervised training scheme which provides a defined pathway for becoming a registered building surveyor.	Not applicable to BWM	
5.	That each state should establish formal mechanisms for a more collaborative and effective partnership between those with responsibility for regulatory oversight, including relevant state government bodies, local governments and private building surveyors (if they have an enforcement role).	Not applicable to BWM	

6.	That each jurisdiction should give a broad suite of powers to monitor buildings and building work to regulators so that, as necessary, they can take strong compliance and enforcement action.	Not applicable to BWM	Contractual rights can be exercised
7.	That each jurisdiction make public its audit strategy for regulatory oversight of the construction of Commercial buildings, with annual public reporting on audit findings and outcomes.	Not applicable to BWM	Defence may wish to consider doing proactive audits of design documents or works under construction to ensure compliance with the Defence Building Regulatory Policy and Procedure. Such strategy would not be documented in the BWM.
8.	That, consistent with the International Fire Engineering Guidelines, each jurisdiction require developers, architects, builders, engineers and building surveyors to engage with fire authorities as part of the design process.	BWM para 3.21(c) and 8.13 provides for consultation with fire service before approval is issued BWM para 8.13 – must develop PS in accordance with IFEG	
9.	That each jurisdiction establish minimum statutory controls to mitigate conflicts of interest and increase transparency over the role of private building surveyors.	BWM paras 3.12-3.16 impose conflict of interest controls on building surveyors and related persons Guide to certification, performance solutions and dispensations, cl 2.3 limits ability to replace surveyors BWM para 3.31 provides that copies of inspection reports and documents relating to the surveyors actions where non-	Appointment of surveyor by builder rather than Defence– not referenced in the BWM but does not meet BCR recommendation for appointment by owner of work. To reflect this position, the BWM provides that notwithstanding the conflict of interest provisions, building surveyors may be sub-contractors to builders.

		<p>compliance is ongoing, are provided to Defence.</p> <p>BWM paras 3.21 and 3.37 requires the surveyor to ensure that designer or installer certificates are prepared properly.</p>	
10.	That each jurisdiction put in place a code of conduct for building surveyors which addresses the key issues set out below and which, if contravened, would be a ground for a disciplinary inquiry.	BWM para 3.14 place an obligation on building surveyors to comply with any codes of conduct in the applicable state.	Suggest call up national code of conduct once the is published by the ABCB.
11.	That each jurisdiction provide private building surveyors with enhanced supervisory powers and mandatory reporting obligations.	BWM para 3.28-3.31 provides a process for preparation of inspection reports and mandatory notification to Defence if non-compliances are not promptly resolved.	
12.	That each jurisdiction establish a building information database that provides a centralised source of building design and construction documentation.	<p>EEGIS Assurance box – data repository where ‘product milestones are submitted’ (Handbook cl 49)</p> <p>BWM para 3.24 must lodge electronic copy of approved docs with delivery authority and in Objective prior to handover</p> <p>BWM para 3.39 must lodge certificate of completion with delivery authority and in Objective at the time of handover</p> <p>Also references to lodgement of documents in GEMS</p>	

13.	That each jurisdiction require building approval documentation to be prepared by appropriate categories of registered practitioners, demonstrating that the proposed building complies with the National Construction Code.	BWM para 3.21– certified design required to be lodged with the building surveyor	
14	That each jurisdiction set out in its legislation the information which must be included in performance solutions, specifying in occupancy certificates the circumstances in which performance solutions have been used and for what purpose.	BWM para 3.21 details about performance solutions to be listed on building approval BWM para 3.38 details of performance solutions to be listed on certificate of completion	
15.	That each jurisdiction provide a transparent and robust process for the approval of performance solutions for constructed building work.	EEGIS Framework (cl 33, 47-51) provides for a documented risk assessment process for management of non-conformances which may include signing off on a performance solution to accept the non-conformance by the policy owner (who is independent from contractors who caused or identified the non-conformance) BWM Ch 3 and 8 provides for Defence approval of all performance solutions and para 8.15 requires compliance with ABCB Development of Performance Solutions document	
16.	That each jurisdiction provide for a building compliance process which incorporates clear obligations for the ongoing approval of	BWM para 3.32 provides that all variations must be documents under the same process used to issue a building approval.	

	documentation by the appointed building surveyor throughout a project.		
17.	That each jurisdiction require genuine independent third party review for specified components of designs and/or certain types of buildings.	EEGIS Framework (cl 12, 36, 37)– all performance solutions and dispensations must be approved by Defence (policy owner). Defences engages experts to review applications providing an independent peer review mechanism for all performance solutions BWM para 8.9-8.12 – requires approval of all proposed PS by policy contact	Defence could consider auditing design to confirm that surveyor has identified all aspects of the design which required a performance solution or dispensation
18.	That each jurisdiction require on-site inspections of building work at identified notification stages.	BWM para 3.27 sets out required inspections including those to be performed by design consultants	
19.	That each jurisdiction require registered fire safety practitioners to design, install and certify the fire safety systems necessary in Commercial buildings.	BWM paras 3.21 and 3.37 requires the surveyor to ensure that designer or installer certificates are prepared properly.	Assume contractual obligations are imposed on design consultants to certify fire safety and that builders are required to appoint competent installers.
20.	That each jurisdiction require that there be a comprehensive ‘building manual’ for Commercial buildings that should be lodged with the building owner and made available to successive purchasers of the building.	HOTO process well developed BWM cl 7.25 - CC required to be displayed Designated Building Entry Point	
21.	That the Building Ministers’ Forum prioritise the tasks it has commenced through the Australian Building Codes Board and the Senior Officers’ Group to reach a common position on the establishment of a compulsory product certification system for high-risk building products.	Not applicable	

22.	That the Building Ministers' Forum develop a 'national dictionary of terminology' to assist jurisdictions, industry and consumers to understand the range of terminology used to describe the same or similar terms and processes in different jurisdictions.	Not applicable	
23.	That the Building Ministers' Forum acknowledges that the above recommendations are designed to form a coherent package and that they be implemented by all jurisdictions progressively over the next three years.	Not applicable	
24.	That the Building Ministers' Forum prioritise the preparation of a plan for the implementation of our Framework against which each jurisdiction will report annually, including the governance arrangements and resources that the Building Ministers' Forum will commit to its oversight.	Not applicable	