







Standard Forms of Contract in the Australian Construction IndustryResearch Report

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Part A - Introduction

Every year, hundreds of thousands of contracts are entered into for construction work in Australia. The work undertaken under these contracts, and the value of that work, is extremely varied, ranging from minor home renovations to multi-billion dollar infrastructure and resources projects.

The complexity and diversity of risks, and the administrative procedures involved in construction projects, have together resulted in industry perception that use of standard forms of contract tends to minimise avoidable transaction costs and overall leads to greater efficiency in procurement. However, it seems increasingly to be the case that – especially in high-value commercial projects involving sophisticated industry participants (including legal advisers) – standard forms are less frequently being used and, where they are used, they are heavily amended.

In late 2013, Melbourne Law School's construction law program, with the support of the Society of Construction Law Australia, launched a research project to investigate whether these perceptions reflect current practice in the Australian construction industry. It sought to assess the current use and effectiveness of the range of standard forms of construction contract in Australia, particularly in terms of their ability to reflect an appropriately-balanced risk allocation and to facilitate efficient project administration.

The research project involved a web-based survey (which collected data between November 2013 and February 2014) and interviews with construction industry stakeholders (between January and March 2014). It was undertaken, and this Report was prepared, by a research team comprising the following Melbourne Law School personnel:

- Professor John Sharkey AM (Honorary Professorial Fellow)
- Matthew Bell (Senior Lecturer and Co-Director of Studies; lead author of this Report and Responsible Researcher under the Melbourne Law School's Human Ethics Advisory Group approval for this project)
- Wayne Jocic (Senior Lecturer)
- Rami Marginean (Research Assistant).

This Report outlines the key findings of the research project. In addition, it flags a number of matters arising from this initial project which, in the research team's view, warrant further research.

'the research project involved a web-based survey and interviews with construction industry stakeholders'

Message from the Dean of Melbourne Law School



I am delighted that Melbourne Law School has been able to provide support for this important research.

Melbourne Law School is an outstanding research institution with internationally recognised scholars who strive to produce research of the very highest quality. This report is one example of important

research being undertaken at the Law School in conjunction with members of the profession and industry to provide insight and understanding into the important practical issues in law. It was a pleasure to deepen our connection with the Society of Construction Law Australia, whose support of this project I gratefully acknowledge.

The construction law program at the Law School has long been recognised as one of the world's leading teaching programs within this speciality area of scholarship and practice. Students and teachers within the program have published widely and received recognition at the highest levels for their scholarship, including by way of international construction law essay prizes.

In 2013, our construction law program's research capability received a significant boost through the appointment by the University of Mr John Sharkey AM as an Honorary Professorial Fellow. John is one of Australia's most experienced and highly-respected construction law practitioners and has published and lectured widely in the area, including having been a subject coordinator in the Melbourne Law Masters from 2000-2013.

The detailed research project which has led to publication of this Report represents the first major research venture undertaken under Professor Sharkey's leadership. My thanks and congratulations to him, Matthew Bell, Wayne Jocic and Rami Marginean for the expertise and hard work that they have put into this Report. The Report represents a significant milestone in the continuing development of our construction law program, and I am delighted to commend it to members of the construction law community.

Professor Carolyn Evans

Dean

Harrison Moore Professor of Law

Message from the Chair of the Society of Construction Law Australia



The questions of 'What contract should I use?' and 'What amendments should I make?' are constantly asked by developers, owners and contractors and constantly answered by their advisers.

Lying behind the questions are issues of cost effectiveness, efficiency, appropriate risk allocation and familiarity. The preferences which have

developed over many decades are very often manifested in bespoke contracts or very heavily amended standard form contracts.

How have these preferences developed? Is there a better approach; that is, an approach which will see improvements in cost effectiveness and efficiency? What is the role for standard form contracts? An understanding of these questions and the possible answers to these questions could have a significant impact on the construction industry.

It is this potential impact which motivated the Society of Construction Law Australia to support this University of Melbourne research project. The choice of Professor John Sharkey AM, to lead the project, and the experience and wisdom which Professor Sharkey could bring to bear, brought added interest to the project.

The Society is grateful for the opportunity to support this important project and looks forward to continuing to participate in the discussion which this report is certain to provoke.

Phillip Greenham

Melbourne Law School's Construction Law Program



Melbourne Law School brings together leading local and international scholars, alumni, researchers and members of the legal profession to provide students with a range of transformative experiences, both inside and outside the classroom. Melbourne Law School staff and students commit to excellence and strive to make a difference to our local community and beyond.

Melbourne Law School commenced teaching graduate courses in construction law in 2000. The program offers a specialist Master of Construction Law and Graduate Diploma in Construction Law. The specialisation in construction law has been tailored to give construction lawyers and professionals in building, construction, engineering and associated industries the specialised legal knowledge to take the next step in their careers. Working with teachers who are leaders in their fields, and fellow students from throughout Australia and around the world, students have a unique opportunity to gain a thorough understanding of this vital area of law and its interaction with the commerce and practice of the industry.

www.law.unimelb.edu.au/constructionlaw

The Society of Construction Law Australia



The object of the Society is 'to promote the education, study and research (and publication of the useful results of such research) in the field of construction law and related subjects both in Australia and overseas for the benefit of the public and the construction industry.'

The Society was founded in 2009. It is a single national organisation of members drawn from all professions involved with construction, industry representatives and the legal profession who share an interest in construction law. The Society encourages the widest possible involvement of all its membership and encourages discourse across the broad spectrum of issues which comprise the subject of construction law.

www.scl.org.au

Acknowledgements

The research team acknowledges with thanks the contribution of the following organisations and individuals:

- The project was funded by grants by the Dean of Melbourne Law School and by the Society of Construction Law Australia.
- The following organisations allowed (and, in many cases, actively assisted in) the promotion of the survey to their respective memberships:
 - Australian Constructors' Association
 - Australian Construction Industry Forum
 - Australian Institute of Architects
 - Civil Contractors Federation
 - Consult Australia
 - Engineers Australia
 - Master Builders Australia
 - Melbourne Law Masters construction law program
 - Property Council of Australia
 - Society of Construction Law Australia.
- The many construction industry professionals, lawyers and students who participated in the survey or interviews.
- The Melbourne Law School Construction Law Advisory Board and many colleagues within or associated with the Law School who provided valuable advice in the planning and implementation stages of the project.

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Part B – Summary of findings

This Report into the use of standard forms of construction contract in Australia is based upon:

- survey responses by 295 individuals, representing 379 projects, between December 2013 and February 2014; and
- 47 interviews conducted by the project team between January and March 2014.

The experience reflected in these survey responses and interviews covers a diverse range of participation in the industry (including lawyers and industry professionals), project types, contract values and geographical locations.

Our primary findings are summarised as follows.²

Attitudes towards standard forms (section 4)

- There is broad support in principle for the industry having available to it standard forms of contract which are capable of being used without substantial amendment.
- However, a majority (54%) of respondents believe that there is no such form currently available.

Use of standard forms (section 5)

- Overall, 68% of the contracts reported upon were based upon standard forms.³
- There is, however, wide variation in the rate of usage depending upon factors including:
 - where the contract sits within the 'contracting chain': 75% of head contracts use a standard form as a base, compared to 33% of subcontracts/trade contracts;⁴
 - Contract value: use of standard forms is close to universal on contracts with a value less than \$100,000, ranges between 66% and 78% on values between \$100,000 and \$500 million, and drops to 28% on values over \$500 million;⁵
 - Location: a lesser proportion of contracts use standard forms in the States and Territories where mining and resources projects predominate (WA, NT and Queensland here, the range is (43%-58%)) compared to the ACT, NSW, SA, Tasmania and Victoria (65%-100%);⁶ and
 - Contracting sector: use of standard forms is highest in the residential building sector, remains high in the commercial building and process engineering sectors, and drops progressively through the public sector and private sector infrastructure sectors, with the lowest use being in the mining and resources infrastructure sector.⁷

'68% of the contracts reported upon were based upon standard forms'

¹ See section 3.

² As is noted throughout this Report, the degree of confidence with which the various findings can be stated depends upon a range of factors including sample size, so the specific discussion should be referred to. ³ Section 5.1.

⁴ Section 5.2.

⁵ Section 5.3.

⁶ Section 5.4.

⁷ Section 5.5.

Which standard forms⁸ are being used? (section 6)

- Overall, the Australian Standards forms continue to dominate the Australian construction contracting landscape. In aggregate, the four main forms (AS4300 (23% of projects using a standard form), AS4000 (18%), AS2124 (17%) and AS4902 (14%)) represent close to 70% of the standard forms which are used, as reported upon in this survey. Applying that 70% to the 68% of projects overall which use standard forms, these forms are used in nearly half of all projects reported upon in this survey.
- The Australian Standards major works forms are used across all sectors (other than for residential building with a private individual as principal) and across all contracting values (although no AS4000 forms were reported as being used on projects with a value in excess of \$500 million).
- The **FIDIC forms** are only used on relatively high value projects (>\$100 million), in private sector infrastructure (both mining and non-mining) and process engineering projects.
- The **GC21** form is primarily used in NSW, but there is also some use of it in Queensland; we found that it was used only for contracts with a value over \$5 million.
- The ABIC MW form is little used outside relatively small value (up to \$5 million) contracts; its primary use is to be found in the residential building sector where the owner is a private individual but it also has some use in the commercial building (private sector principal) and infrastructure (public sector principal) sectors.

Which party makes the decision to use the standard form? (section 7)

• The **principal** (55%) or the **principal's lawyer** (26%) were responsible for choosing the standard form in more than 80% of cases.

Why are standard forms used? (section 8)

 The dominant factor identified by participants was 'familiarity with the form of the party choosing it'.9

Amendment of standard forms (sections 9-12)

• **84%** of the contracts which employed a standard form were amended from the relevant published form.¹⁰

- Whilst we did not attempt systematically to identify the extent of amendments, the responses in interviews indicated that the amendments are typically voluminous.
- The incidence of amendment exceeds 75% across almost all contract values, contracting sectors and standard forms, and is particularly high in the following categories:
 - Contract value: \$50 million-\$100 million (94%); \$100 million-\$500 million (97%); >\$500 million (100%);¹¹
 - Contracting sector: residential building-commercial developer (95%); private sector infrastructure (non-mining/ resources) (95%); private sector infrastructure (mining/ resources) (100%); process engineering (100%);¹² and
 - **Forms:** AS2124 (97%); AS4300 (98%); FIDIC (100%).¹³
- The primary reason identified for amending standard forms was the 'need to shift risk'.¹⁴
- As to the types of clauses which are amended from (including added to) the standard forms, the highest incidence of amendment across all forms, contracting sectors and values was in respect of: extensions of time (76% of forms where amendments were reported), delay damages (including liquidated damages) (71%), site conditions (68%), payment (65%) and variations (63%).¹⁵
- That said, there were substantial variations across categories as to the types of clauses amended. For example (but, see section 11 for further, detailed analysis):
 - the highest incidence of amendment in respect of extension of time clauses was in the residential building-commercial developer sector (92%) and contract values from \$20 million to \$50 million (84%); and
 - limitations of liability were added to 48% of forms overall, but this incidence rose to 73% in the private sector infrastructure (mining and resources) sector.
- Overall (but, this was subject to wide variation in views), the perception of amendment of standard forms was that it led to:¹⁶
 - increased understanding between the parties and efficiency in project administration (which may be regarded as positive outcomes); and
 - increased need for legal advice, outturn cost and disputation (negative outcomes).

'84% of the contracts which employed a standard form were amended from the relevant published form'

⁸ See *section 1.1* for an overview of the forms referred to in this Report.

⁹ Section 8.2.

¹⁰ Section 9.1.

¹¹ Section 9.2.

¹² Section 9.3.

¹³ Section 9.4.

¹⁴ Section 10.

¹⁵ Section 11.

¹⁶ Section 12.

Part C – Background and methodology

1. Background

1.1 Standard forms of contract in the Australian construction industry¹⁷

1.1.1 Overview

The range of forms available in Australia today has its origins in the forms promulgated by professional bodies in the late 19th and early 20th centuries in the United Kingdom and then Australia. Typically, these forms have evolved by a process whereby a consensus is forged among various industry interest groups and reflected in a standard form, that form becomes increasingly the subject of amendments, and then the interest groups sit down once again in an endeavour to document a revised common approach.

The fact that many of the standard forms are developed through a process of negotiation and discussion has important consequences. First, such 'consensus' forms are more likely to be 'fair' to all parties. For example, both the ABIC MW form and AS4000-1997 (both of which are discussed further below) have been put forward on the basis that they reflect the 'principled' risk allocation promoted in the National Public Works Conference/ National Building and Construction Council Joint Working Party *No Dispute* report of 1990. Secondly, in a negative sense, they are likely to contain many compromises.

The difficulties in getting the agreement of all parties concerned when a new form is being developed or where amendment is required mean that almost all standard form contracts – including those discussed in this Report – contain anomalies and ambiguities, and that these are likely to remain part of the form until adverse legal interpretation necessitates amendment. The individual organisations usually advise their members of the problem areas and often suggest amendments which might be incorporated.

Aside from such 'consensus' standard forms, forms drafted from the point of view of one of the parties also continue to have wide use in the Australian industry. For example, in the public sector:

- the Australian Department of Defence (through its Defence Support and Reform Group) has its own suite of facilities contracts for the construction and maintenance of its significant estate throughout the country, including the Head Contract (current version, HC-1 2003), Managing Contractor (MCC-1 2003) and Medium Works (MW-2 2004) forms;¹⁸ and
- the NSW Government has a suite of contracts as part of its 'Procurement System for Construction', including GC21 Edition 2 (essentially, for projects valued at over \$1 million), MW21 and Minor Works (less than \$1 million) and Mini Minor Works (less than \$50,000).¹⁹

Private-sector organisations, whether they be procurers of, or contractors for, construction work, likewise commonly put into the market bespoke forms representing the terms on which they expect to do business. An example of a peak industry body promulgating such a form explicitly to represent its preferred contracting strategy is the Project Contract PC-1 1998, published by the Property Council of Australia. Whilst PC-1 is not widely used nowadays (as noted in *section 6.1* below, less than 1% of the forms reported upon in the survey used PC-1), its drafting forms the basis for many contracts, whether bespoke or standard forms used by particular organisations. Notably, HC-1 2003 (used, we found, in 2.1% of projects employing a standard form) is derived from PC-1, although the form has been significantly adapted to address specific concerns of the Department of Defence.²⁰

'almost all standard form contracts contain anomalies and ambiguities'

¹⁷This section is adapted from ch 8 of Ian Bailey and Matthew Bell, Construction Law in Australia (3rd ed, 2011).

¹⁸ See www.defence.gov.au.

¹⁹ See https://www.procurepoint.nsw.gov.au/before-you-buy/procurement-system-construction/standard-form-documents-construction.

²⁰ Australian Government, Department of Defence, 'Infrastructure Division Suite of Contracts: An Introduction' (2007), p 2, available at www.defence.gov.au/estatemanagement.

In addition, particular sectors within the industry have their own forms. In the process engineering sector, for example, the use of internationally-recognised forms is not unknown (but, as our survey indicates (see section 6), remains relatively infrequent) in Australia. Such forms include the 'rainbow' of forms (so-nicknamed because of the colours of the covers of the various contracts in their printed forms) published by FIDIC (Fédération Internationale des Ingénieurs-Conseils – International Federation of Consulting Engineers)²¹ and the New Engineering Contract (the latest version of which is the 2013 edition of NEC3) published by the Institution of Civil Engineers (ICE)²² based in England.

The FIDIC forms were revised in 1999 by introduction of new edition 'Red' (construction designed by the employer), 'Yellow' (plant and design-build), 'Green' (short form) and 'Silver' (EPC/ turnkey) forms. It has had its spectrum augmented in subsequent years by a form for dredging (2006); a variant on the 'Red' book to incorporate the requirements of Multilateral Development Banks (2006); and a 'Gold' book for design-build-operate delivery (2008). A Subcontract for use under the Red book was issued in 2011, and a 'Representative Agreement' was published in 2013. At the time this Report was being prepared, it was understood that FIDIC was preparing a 'second edition' of its suite.

The NEC3 suite²³ is designed to foster a collaborative approach to contracting, with the forms themselves being flexible in scope and expressed in simple language. There are also the Infrastructure Conditions of Contract, promulgated by the Civil Engineering Contractors Association and the Association for Consultancy and Engineering, which are based upon the ICE Conditions (which themselves date back to the middle of the 20th century).²⁴ Also available to the Australian industry is the suite of contracts published by the Institution of Chemical Engineers (IChemE),²⁵ which also is based in the UK. This suite was last revised in 2013 and includes forms based on lump sum, reimbursement and target cost remuneration strategies.²⁶

1.1.2 Australian Standards

The Australian Standards (AS) suite of construction contracts (along with various forms for associated works and services) is prepared by the Standards Australia Committee on General Conditions of Contract (previously known as 'OB/3', now 'MB/010') and published by Standards Australia Limited (part of SAI Global).²⁷

The Australian Standard forms are identifiable by way of a two-part code – the first being the Australian Standard number and the second the year of publication. The latter can be crucial to identifying the form being referred to; for example, different AS2124 versions were published in 1978, 1981, 1986 and 1992.

At present, the suite comprises:

- AS4000-1997 ('General Conditions of Contract' for construct-only delivery)
- AS4901-1998 (sub-contract for use with AS4000)
- AS4902-2000 (variant of AS4000 for design and construct delivery)
- AS4903-2000 (sub-contract for use with AS4902)
- AS4122-2010 and 4904-2009 (consultants' agreements)
- AS4905-2002 (minor works contract superintendent-administered) and AS4906-2002 (minor works contract – principal-administered)
- AS4910-2002 (equipment supply with installation) and AS4911-2003 (equipment supply without installation)
- AS4912-2002 (periodic supply of goods)
- AS4915-2002 (project management)
- AS4916-2002 (construction management)
- AS4917-2003 (construction management trade contract)
- AS4919-2003 (asset maintenance and services superintendent's version (AS4920-2003 is the principal's version and AS4921-2003 the short version))
- AS4949-2001 (work order).

'the use of internationally-recognised forms remains relatively infrequent in Australia'

²¹ See www.fidic.org.

²² See www.ice.org.uk.

²³ See www.neccontract.com.

²⁴See John Uff, 'Draft Infrastructure Conditions of Contract: 2014 Edition' (SCL Paper D167, March 2014).

²⁵ See www.icheme.org.

²⁶ See the article by Tony Dymons and Michael Mendelblat at (2013) 30 International Construction Law Review 274.

²⁷ See www.saiglobal.com.

AS2124 and AS4000 are designed for use on major building and engineering projects where a 'superintendent' is engaged to administer the contract. The superintendent may be an independent professional (or a firm of consultants) or an employee of the principal. The contract price may be calculated as a lump sum or re-measurement (schedule of rates/bill of quantities) or a combination of these.

Though Standards Australia intended to discontinue publication of the AS2124-1992 edition (which itself replaced the superseded 1978, 1981 and 1986 editions) when the AS4000 contract was released, it remains available as a current Standard.

As at the time of preparation of this Report, a process initiated by Standards Australia to revise (at least) the major works forms was well underway. See, further, *section 2.3* below as to the potential interplay between that process and this research project.

1.1.3 ABIC

The Australian Building Industry Contract suite (ABIC) is promulgated through a Joint Development Committee which is a joint venture of Master Builders Australia Ltd and the Australian Institute of Architects (AIA). It is designed for use with an architect as the principal's representative.

The original version of the major works contract (ABIC MW-2001) was based upon the Construction Industry Contract (CIC-1 1997) which was produced by the (then Royal) Australian Institute of Architects alone. The current version (ABIC MW-2008) has evolved significantly from that base.

Forms in the ABIC suite are updated from time to time to add clarity or to reflect minor changes to the relevant law, and a full revision occurs approximately every three to five years. It is understood that the next edition is expected to be published later in 2014.

The suite currently comprises:²⁸

- ABIC MW-2008 (major works), with residential works variants for each State and Territory
- ABIC MW-SC-1 (subcontract under MW form; there are also short form subcontracts)
- ABIC SW-2008 (simple works), with residential works variants for each State and Territory
- ABIC SW-SC-1 (subcontract under SW form; there are also short form subcontracts)
- ABIC BW-1 2002 (basic works (up to \$50,000 in value))
- ABIC BW-SC-1 (subcontract under BW form)
- ABIC EW-1 2003 (early works).

1.1.4 Other standard forms

There are numerous standard forms produced apart from those discussed above. Many public authorities and local government bodies have their own standard forms. Moreover, Master Builders Australia Ltd and its (State-based) member associations produce standard forms for various purposes.²⁹

Master Builders recommends the use of certain Australian Standards and the ABIC suite but also has its own forms (some of which are for use nationally and others in certain States and Territories) including:³⁰

- BC3 (commercial) and BC4 (residential) lump sum
- CM2012 Construction Management Contract
- CP3 (commercial) and CP5 (residential) cost plus contract (there are also other cost plus-based forms in the suite)
- DB1, RBC-1 and RBW 2014 (contract sum >\$500,000) domestic (residential) building

'a standard form contract should be assumed to be binding in accordance with its terms'

²⁸ See www.architecture.com.au.

²⁹ See, eg, www.masterbuilders.asn.au for Queensland.

³⁰ See www.masterbuilders.com.au/portfolios/contracts for further guidance about each form and when it is to be used.

- DECON 2013 and DECON 2 design and construct, lump sum
- GCC5 head contract for commercial construction (with SC-7 subcontract)
- HC6 new homes
- HIC5 home improvement
- LSC2 Commercial Building Contract
- MWC-C (commercial) and MWC-1 (residential) minor works
- PB-1 pool building
- PM2 project management
- SWC small works and SWC-R simple works
- TC2012 trade contract under CM2012 (also trade contract TC-H).

1.2 The legal underpinnings of standard forms³¹

The subject matter of this Report is 'contracts'. That term has many different connotations. In this Report, it is largely being used to refer to documentation which reflects the parties' agreement, but – in the classical legal conception – a 'contract' is in fact the (legally-binding) agreement itself.³² The legal conception of construction contract documentation proceeds from an assumption that it reflects the parties' 'deal' and, therefore, the parties will be bound by it whether or not they fully understood (or, in fact, actually agreed to) the terms which are recorded.

This assumption is especially prevalent in commercial arrangements (as opposed to those involving individuals as consumers where, to a certain extent, the position has been modified by the common law and legislative intervention).³³ In many ways, this assumption sets the context for the way in which standard forms of construction contract are used in Australia and, we think, helps explain many of the findings in this Report.

It is, therefore, worth restating the basic legal principles applicable where parties seek to escape their liabilities and obligations on the basis that they did not fully comprehend what they were signing up to.

These are illustrated by the High Court of Australia's decision in *Toll (FGCT) Pty Ltd v Alphapharm Pty Ltd*.³⁴ In that case, an agent of the pharmaceutical company signed a standard form 'application for credit' to have Finemores (now Toll) distribute its Fluvirin vaccines. He did not notice the limitation of liability clause on the back of the form. Finemores failed to keep its trucks at the correct temperature and the vaccines spoiled.

Toll admitted negligence but sought to rely upon the limitation clause to exclude its liability. Ultimately, the High Court found in its favour. In doing so, the Court took the opportunity to restate the relevant rule as follows:

[W]here there is no suggested vitiating element, and no claim for equitable or statutory relief, a person who signs a document which is known by that person to contain contractual terms, and to affect legal relations, is bound by those terms, and it is immaterial that the person has not read the document.³⁵

Applying this principle to the construction sphere, Justice David Byrne has observed that, by the time a dispute stemming from inappropriate conditions reaches the court,

[t]he law is very much powerless ... to set things aright. It accepts, as it must, that, subject to limited exceptions, a contract freely entered into between competent parties must be given effect to. The seeds of the financial disaster for all the parties ... had been sown months before.³⁶

In a commercial context, therefore, in the absence of recognised vitiating factors in the formation of the contract, a standard form contract should be assumed to be binding in accordance with its terms as objectively interpreted. In turn, the onus is on the person or organisation signing it to understand those terms. This does not mean that the formal contract is by any means the 'be-all and end-all' for project success – as many interviewees noted, the relationship between the parties and their ability to avoid and resolve issues during the project is crucial.³⁷ However, the contract inevitably does become vital if that relationship breaks down and the parties need to have recourse to their respective legally-enforceable rights.

'there is a dearth of publiclyavailable data as to the Australian construction industry's use of, and attitude towards, standard forms of contract'

³¹ This section is adapted from Matthew Bell, 'Standard Form Construction Contracts in Australia: Are our Reinvented Wheels Carrying us Forward?' (2009) 25 BCL 79, pp 86-87.

³² Jeannie Paterson, Andrew Robertson and Arlen Duke, *Principles of Contract Law* (4th ed, 2012), p 3. That passage also notes, however, that there are 'many different ways of understanding what a contract is, and what contract law is about.'

³³ See, eq, ibid, Part VII.

^{34 (2004) 219} CLR 165.

^{35 (2004) 219} CLR 165 at 185 (Gleeson CJ. Gummow, Havne, Callinan and Hevdon JJ).

³⁶ Preface to Ian Bailey and Matthew Bell, *Understanding Australian Construction Contracts* (2008), p viii.

³⁷ See, generally, Paula Gerber and Brennan Ong, Best Practice in Construction Disputes (2013).

1.3 Previous research

As was noted above, a key reason for this research project being undertaken is that there is a dearth of publicly-available data as to the Australian construction industry's use of, and attitude towards, standard forms of contract. That said, the topic has been (at least, indirectly) the subject of research in the past two decades, including the following reports:

- Athol Yates and Bill Sashegyi, 'Effective Risk Allocation in Major Projects: Rhetoric or Reality?' (2001 – 'Yates and Sashegyi Report'); and
- Blake Dawson, 'Scope for Improvement 2011: Project Risk Getting the Right Balance and Outcomes' (2011 – 'Blake Dawson Report').

Both of these studies were undertaken in the framework of risk allocation and management for major projects. Thus, whilst neither of them investigated specifically the types of contract forms which were used, the touchstone for each study was 'principled' (or 'efficient') risk allocation of the type espoused by Professor Max Abrahamson and carried through, to various degrees, in Australian standard forms. A key focus of these studies, therefore – related to the aims of this Report – was the extent to which parties to construction contracts were taking on risks through the contract which they were not best placed to control or manage.

The Yates and Sashegyi Report sought to determine whether 'there was a difference between efficient risk allocation and actual risk allocation' in major projects carried out in Western Australia. 39 It was undertaken by the WA Chamber of Commerce and Industry and the Institution of Engineers Australia (now, Engineers Australia). The research was by way of a survey, sent to industry participants in early 2001, which received 122 responses.

The Blake Dawson Report focused upon 'developing a better understanding of approaches to risk identification, risk allocation and risk management, and the impact of those approaches on project outcomes'. ⁴⁰ It was undertaken by law firm Blake Dawson (now, Ashurst Australia) with the support of the Australian Constructors Association, the Energy Supply Association of Australia and Infrastructure Partnerships Australia. The research was based upon surveys of, and

interviews with, industry participants, conducted between May and December 2010. The survey related to projects completed over the past five years with a minimum project value of A\$20 million. Survey responses were received from 121 participants.⁴¹

Findings from this research which are of primary relevance to the current project include:

- Significant differences exist in the perceptions of principals and contractors as to whether risk is allocated in construction contracts on the principled/ efficient basis referred to above; whilst the figures differed across the studies, the percentage of principals which believed that risk had been allocated on such a basis was in the range 70-87% yet it was 35-55% for contractors.⁴²
- The risk categories most commonly identified as being key (time, design, scope and site conditions) were also the risks most commonly viewed as being inappropriately allocated.⁴³
- The most important factor influencing risk allocation in major projects was the requirements of the principal. This was identified in the Blake Dawson Report by 83% of respondents, compared to the ability of a party to manage or price the risk, which were identified, respectively, by 56% and 36%.⁴⁴ Similarly, in the Yates and Sashegyi Report, 79% of contractors and 33% of principals believed that risks were allocated at the project delivery stage (that is, following contractual negotiations) on the basis of minimising risk to the principal.⁴⁵
- A substantial majority of the parties to major projects (according to the Blake Dawson Report, in the order of 80-90%)⁴⁶ have risk identification, management and allocation policies; however, parties reported that such processes had been put in place in around 60% of projects.⁴⁷

The current Report does not focus on risk allocation to the same extent as these previous studies. That said, a number of key findings from these previous studies were matters in respect of which this Report has been able to make observations. These are identified in the following table. Whilst the previous surveys and the current Report differed in their methodology and sample size, 48 the relevant findings are broadly consonant.

'The most important factor influencing risk allocation in major projects was the requirements of the principal.'

³⁸ See, eg, Matthew Bell, 'Standard Form Construction Contracts in Australia: Are our Reinvented Wheels Carrying us Forward?' (2009) 25 *Building and Construction Law* 79, p 81. ³⁹ Yates and Sashegyi Report, p 2.

⁴⁰ Blake Dawson Report, p 4.

⁴¹ Blake Dawson Report, p 30.

⁴² Extrapolated from Yates and Sashegyi, pp 7-8; Blake Dawson Report, p 12.

⁴³ Blake Dawson Report, p 13.

⁴⁴ Ibid p 14.

⁴⁵ Yates and Sashegyi Report, p 7.

⁴⁶ Blake Dawson Report, p 15.

⁴⁷ Ibid p 15; Yates and Sasheqvi Report, p 17.

⁴⁸ For example, as noted above, the Yates and Sashegyi Report was conducted in 2001 and based upon 121 responses from Western Australia only whereas the current survey was Australia-wide and received 295 responses overall and 47 responses in respect of WA projects.

Findings in Yates and Sashegyi/ Blake Dawson Reports	Applicable findings in this Report		
In the majority of contracts (the Yates and Sashegyi Report puts the figure at around 60%), 49 the risk clauses in the contract varied from those in the relevant standard form.	Overall, 84% of the standard forms used were amended. ⁵⁰		
Inappropriate risk allocation was perceived to lead to detrimental project outcomes, ⁵¹ in particular: • 70% of the respondents to the Yates and Sashegyi survey (86% of contractors and 43% of principals) observed that changes to the risk allocation at the project delivery stage were likely to lead to claims; ⁵² and • 59% of contractors and 38% of principals believed that the project cost would have been lower if risk had been allocated on the	Overall (but, there was a wide variation of responses on these points), amendments to the standard forms were seen as leading to increases in: ⁵⁴ 1. understanding between the parties (greatest increase); 2. need for legal advice during the project; 3. project outturn cost; 4. efficiency in project administration; and 5. disputation (least increase).		
principled basis referred to above. ⁵³	Of these factors, the increases in 1 and 4 may be seen as beneficial project outcomes and the increases in 2, 3 and 5 as detrimental.		
Industry standard forms were used in 47% of contracts (Western Australia, 2001).55	Standard forms are used in 68% of projects Australia-wide ⁵⁶ and 43% of projects in WA. ⁵⁷		
The most commonly-used standard forms used (WA, 2001) were AS2124 (44%), AS4000 (5%) and AS4300 (13%). ⁵⁸	The most widely-used forms Australia-wide are AS4300 (23%), AS4000 (18%), AS2124 (17%) and AS4902 (14%). ⁵⁹ In WA, they are AS2124 (20%), AS4000 (15%), FIDIC (10%) and AS4902 (10%). ⁶⁰		

⁴⁹ Yates and Sashegyi Report, pp 9, 16, 22.
⁵⁰ Section 9.1; breakdowns are set out throughout section 9.
⁵¹ Blake Dawson Report, p 7.
⁵² Yates and Sashegyi Report, pp 13, 28.
⁵³ Ibid p 14.
⁵⁴ Section 12.
⁵⁵ Yates and Sashegyi Report, p 43.
⁵⁶ Section 5.1.
⁵⁷ Section 5.4.
⁵⁸ Yates and Sashegyi Report, p 44.
⁵⁹ Section 6.1.
⁶⁰ Figures produced by applying the overall rate of usage of standard forms (68%) to the WA-specific figures in section 6.3.

2. Aims of this research

2.1 Key questions and the approach this study undertakes to answering them

This research project aims to make a substantial, evidence-based contribution to the continuing evolution of the use of standard forms of construction contract in Australia.

Its primary aim is to suggest ways of approaching the following key questions:

- 1. How *are* standard forms being used in the Australian construction industry in 2014?
- 2. What *ought* to be the role of standard form construction contracts in the Australian construction industry in 2014?
- 3. To the extent there is a mismatch between current practice and an optimal role, *what strategies* (whether by way of amending existing forms, developing new forms or otherwise) should be put in place to address it?

The study seeks to fulfil this aim by providing a snapshot of current practice in relation to the use of standard forms on Australian construction projects as at early 2014. Our research has, therefore, been directed to the following key questions:

- To what extent *are* standard forms being used on Australian construction projects?
- Where they are being used, how are they being used?

Acknowledging from the outset the extraordinary diversity of modes in which construction projects operate in Australia, ⁶¹ and the inevitable limitations of our data-collection exercise (see *section 3*), we have nonetheless sought to offer as comprehensive and detailed a picture as possible of how standard forms are being used. To do this, we set up our survey and analysed its data to identify correlations across numerous variables.

This Report, therefore, is directed primarily towards the first of the three questions identified above – *how are standard forms being used?* It also offers insights into the types of issues which ought be considered by construction industry stakeholders in framing the debate around the next stage of evolution of Australian standard forms.

These issues include, crucially:

- the extent to which the Australian construction industry values the availability of a standard form which is capable of being used without substantial amendment;⁶² and
- current perceptions as to whether such a form currently is available to the Australian construction industry.⁶³

'This research project aims to make a substantial, evidence-based contribution to the continuing evolution of the use of standard forms of construction contract in Australia.'

⁶¹ See, eg, Commonwealth of Australia, Royal Commission into the Building and Construction Industry, Discussion Paper 1: Overview of the Nature and Operation of the Building and Construction Industry (2002) ⁶² Section 4.1.

⁶³ Section 4.2.

2.2 Further research

Our findings in respect of the key questions referred to in *section 2.1* above are summarised in *Part B* and set out in detail in *Part D*.

In addition to these findings, in the course of the research, the project team has encountered certain issues relating to the use of standard forms which we consider merit further, detailed research. Whilst we were able in this Report to make preliminary findings in respect of some of them, more focused research could allow for more meaningful analysis.

These include:

- More detailed investigation of the correlation (if any) between contract value and standard form use, especially at the higher contract value end (see section 5.3). It would also be of interest to ascertain the total value of projects which are let each year based upon the various forms.
- The extent of amendments made to standard forms (section 9 makes findings in relation to the proportion of standard forms which are amended to some extent, and section 11 sets out data in respect of the types of clauses which are amended, but the survey did not other than by reference to observations made in interviews provide data indicating directly how extensive those amendments are).
- More detailed correlation, against factors including the type of form, contract value and contracting sector (and other possible factors, such as the forms' readability, format, accessibility to nonlawyers and incorporation of document automation systems), as to the following matters dealt with in a preliminary manner below:
 - Which party made the decision to use the standard form (section 7);
 - Factors going to use of standard forms (section 8); and
 - Factors going to why standard forms are amended (section 10).

- Perceptions as to the effect of amendments to standard forms upon project outcomes (some preliminary findings on this are set out in *section 12*).
- The role of lawyers (whether external to the organisation or inhouse) in recommending forms of contract and amendments to them (section 10).

The project team would be happy to discuss these potential avenues further with interested researchers and – to the extent that it is consistent with the human ethics approval granted in respect of this Project (see *section 3* below) – make available to them more detailed data than has been published in this Report.

Moreover, we believe it would be useful to refine the survey in the light of our findings and repeat it periodically – perhaps, every two to three years – in order to ascertain whether (and, if so, how and why) attitudes towards and use of standard forms change over time.

2.3 Australian Standards revision process

As was noted in *section 1.1.2* above, Standards Australia is currently engaged in a process for revision of (at least) its major works contract forms. Although this research project has been undertaken at arm's length from this process, members of the project team are broadly aware of its aims and progress.

To that end, we expect that findings in this Report – whether as to the Australian Standards forms or more generally – will be of interest to those charged with revising those forms. In addition, we have set out in *Appendix 2* a compilation of feedback on the Australian Standards forms which goes to specific aspects of the current forms.

'The Report offers insights into the types of issues which ought be considered in framing the debate around the next stage of evolution of Australian standard forms.'

3. Data collection for this project

This project has been undertaken in accordance with a methodology approved by the Melbourne Law School Human Ethics Approval Group. That methodology involved two key elements: a web-based survey and interviews. Each of these was conducted on an anonymous basis: the survey did not collect identifying details of participants (unless they opted-in to be contacted to undertake an interview) and, in the interviews, participants were given the option whether or not comments were to be attributable to them: most chose not to make them so attributable.

3.1 Survey

The survey questions are set out in *Appendix 1*. Essentially, participants were invited to answer questions about the contracts which were used on up to three construction projects undertaken in Australia during the past five years of which they had knowledge, either as a direct project participant or an adviser.

The survey was web-based, using the SurveyMonkey tool.⁶⁴ The web link, which participants could click on if they wished to undertake the survey, was disseminated to potential participants in a number of ways, including:

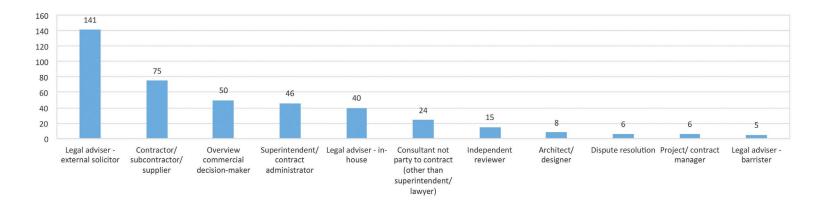
 Direct emails to students, alumni and associates of the Melbourne Law School construction law program, and members of the Society of Construction Law Australia;

- News items on webpages of the Australian Construction Industry Forum and Society of Construction Law Australia; and
- Social media, including via the Twitter and LinkedIn feeds maintained by the Melbourne Law School construction law program.

The survey was available online to participants from 3 December 2013 to 14 February 2014. 295 individuals participated in the survey. The ability of participants to report on up to three projects in their responses meant that responses were received in respect of 379 projects (that said, given that the survey did not ask participants to identify the projects reported on, it is possible that multiple participants reported in respect of the same project).

The somewhat diffuse nature of the survey's dissemination, including the overlap in recipient cohorts (for example, many Melbourne Law School alumni are also members of the Society of Construction Law Australia) makes it impossible to state with certainty the number of potential participants in the survey. However, it was likely in the order of 2,000-3,000, resulting in a notional response rate of approximately 10-15%.

Survey participants identified themselves as falling within a range of project party types, and could identify more than one type. There were 419 responses to the question 'Which of the following roles describes your own involvement in the project? (Please choose as many as apply.)', with the results as follows:



⁶⁴ See www.surveymonkey.com.

Respondents to the survey represented, therefore, the perspectives of a diverse range of project participants (though, none identified themselves as being funders/ financiers). Approximately half were lawyers, a little over a quarter were drawn from within the primary contracting parties and a little over a quarter from consultants (of which, more than half were contract administrators and independent reviewers).

Survey participants were not asked to describe their primary location. However, it is evident from the locations of projects reported upon, and the interviews, that participants were drawn from every State and Territory of Australia, and – whilst most participants were based in the major cities – there was a substantial representation of participants based in rural and regional areas.

3.2 Interviews

The research team conducted 47 interviews between January and March 2014. 39 (83%) were conducted by telephone and 8 (17%) face-to-face. The majority of interviewees had self-selected through a prompt in the survey, but several were approached directly by the research team on the basis that they had significant experience in relation to standard forms.

The interviewees represented a range of perspectives within the industry, falling broadly into the following categories:



They were overwhelmingly industry participants and advisers with substantial experience in the area, including construction firm executives, senior public servants, in-house lawyers at large contracting and consulting firms, law firm principals, senior counsel and representatives of peak bodies. Most respondents had significant experience relating to the construction industry: 81% had 10 or more years, and 51% had 20 or more years.

Part D - Detailed findings

This Part provides the research team's detailed findings in relation to this research project. It does so, under each heading (reflecting the questions), by presenting the relevant data in tabulated and chart form. The Report seeks to make use of all meaningful data but anticipates that not all survey respondents responded to every question and, as such, there are differences in the sample sizes for

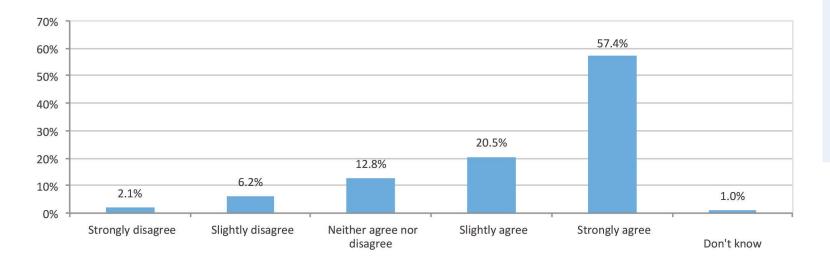
each element reported upon. Where relevant, these sample sizes are noted: for example, by numbers at the tops of columns.

Commentary on the findings is provided for most questions, including by reference to observations arising from the interviews conducted for the purposes of this research project.

4. Attitudes towards standard forms

4.1 Broad support in principle for standard forms

Participants were asked to indicate whether they agreed with the statement 'The Australian construction industry needs to have available to it standard forms of contract which are available for use without substantial amendment.' 197 responses were received, with the responses summarised in the chart below. The aggregate of these responses placed the mean between 'slightly agree' and 'strongly agree'.



'experienced industry participants were supportive of the idea that a form might be available for use without substantial amendment across the industry'

In line with this apparent strong support (at least, in principle) for standard forms, many interviewees made comments along the lines of this statement from a contract administrator with more than 20 years' experience: 'they establish a benchmark of reasonableness and this benchmark is important for the industry to have.'

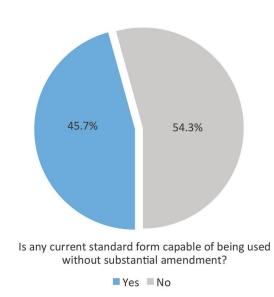
That said, 98 survey participants (33.2%) skipped the question: such a lack of response could be indicative of a range of attitudes to the question and should be taken to temper the confidence that otherwise would exist as to support for standard forms.

The interviews undertaken for this research project provided insights into the complex foundations underpinning these responses. Broadly speaking, experienced industry participants were supportive of the idea that a form might be available for use across the industry without substantial amendment. One lawyer suggested that development of such a form would be a worthwhile cooperative project in which the Federal and State governments should take a lead. However, interviewees identified a number of challenges to such development, primarily the diversity of types of projects which it would need to cover and the need to anticipate increasingly-sophisticated (and constantly evolving) legislative and financing requirements.

4.2 Suitability of currently-available forms

Participants were asked whether, in their view, there is any current standard form of contract which is capable of being used without substantial amendment in the Australian construction industry. 197 responses were received, with 98 survey participants (33.2%) skipping the question. The responses are set out in the chart to the right.

Thus, whilst there is strong support in principle for the availability of standard forms which are capable of use without substantial amendment (see *section 4.1*), a clear majority of respondents indicated that there was no such form currently available. One interviewee – a commercial manager for a tier 2 contractor – commented that there is at present no satisfactory standard form in Australia capable of use without substantial amendment and that contractors 'put up with' the Australian Standards 'because they have to'.



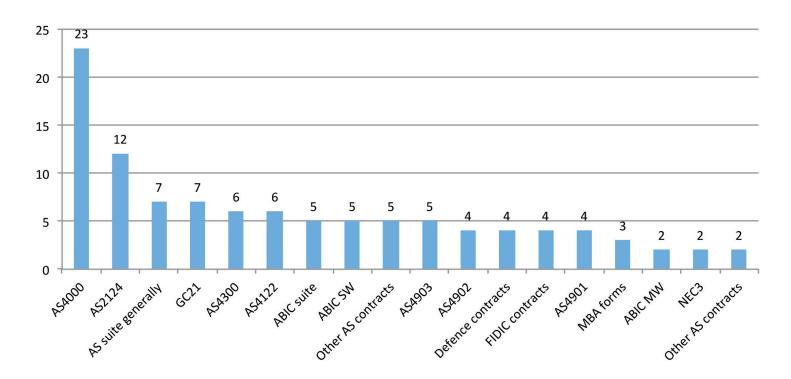
'contractors
"put up with"
the Australian
Standards
"because they
have to"'

⁶⁵ Substantial investment has in fact already been made into public-sector contracting suites, such as those of the Department of Defence and NSW Government – see section 1.

4.3 Forms viewed as being capable of use without substantial amendment

Of the respondents who indicated that there is a standard form of contract currently available capable of use without substantial amendment, a range of responses was received as to which form that might be. These are summarised in the chart below. The aggregate number of forms identified exceeds the number of participants (90) who responded to the question, because participants were able to identify more than one form as being suitable.

The only forms which received significant support as being suitable were AS4000 and AS2124 (though, an additional seven responses referred generally to the Australian Standards suite). There is therefore a partial correlation between perceived suitability of the forms and the forms' frequency of use (as is noted in *section 6.1* below, the four most widely-used forms are (in order) AS4300, AS4000, AS2124 and AS4902). However, there is also an apparent correlation between perceived suitability and frequency of *amendment* – as is noted in *section 9.4*, the reported rates of amendment of AS4000 and AS2124 are 88% and 97% respectively.



Figures at the top of each column indicate number of responses received.

It may be, therefore, that the results indicated in the chart above primarily reflect the high degree of familiarity in respect of these forms (see, further, *section 8.2*) rather than, necessarily, a widely-held view that they are, in fact, suitable for use without amendment.

It does need to be acknowledged, however, that the (relatively) high degree of perception that the Australian Standard forms are suitable was also reflected in our interviews with highly-experienced industry participants. Whilst almost everyone who commented on the issue noted that the forms were outdated and in need of revision (a fact implicitly acknowledged by Standards Australia itself through its initiation of the review process referred to in *section 2.3*), comments received included that:

- there was 'nothing much wrong' with the forms (in-house lawyer in a government department); and
- the suite 'met the market' for the 'middle band' of projects, especially bearing in mind that the head contract risk allocation then needs to be backed down to let subcontracts (lawyer/ superintendent).

The chart also indicates that there is support – albeit small – for the suitability of forms outside of the four key Australian Standards forms. Our interviews reflected this support; generally speaking, where interviewees had used ABIC, GC21, Defence or NEC forms, they had a reasonably positive view of them. Particular observations included:

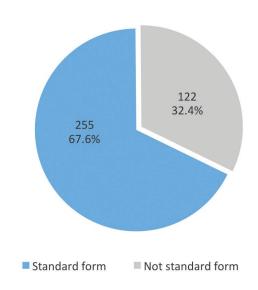
On ABIC, a compilation of feedback from architects who had used
it includes descriptions of it being reliable, available for a range of
projects, balanced in risk allocation, practically-focused in terms
of contract administration and written in simple language; on the
other hand, some non-architect interviewees saw the form as
giving too much discretion and protection to architects.

- On GC21, a number of interviewees commented positively along the lines that it had had a lot of thought go into it (including specific issues such as eschewing the traditional dual agent/ certifier role for the superintendent and replacing the traditional concept of practical completion with 'defects free completion') and that its associated processes (such as contracting workshops) assisted in avoiding disputes. There was also praise for the 'mini minor works' (flowchart) form. That said, contractors complained in the interviews about the 'defects free' regime and lack of a limitation on delay damages and various other aspects (though noting that they needed to accept these aspects in order to qualify at tender time).
- Similarly, on the **Defence** forms (in respect of which we only received one comment in interviews, from a lawyer), it was noted that they work 'quite neatly' from an administrative point of view and that the 'just in time' training allowed specific issues of concern to be addressed for particular projects.
- Likewise, only one interviewee commented on the **NEC** form.
 However, they indicated a very positive view of the experience with the form, reporting that, by using the cost reimbursable form rather than a traditional lump sum approach for a complex relocation project, substantial savings on out-turn cost were achieved.

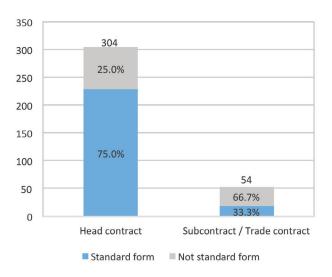
5. Use of standard forms

5.1 Overall

This chart is a compilation of responses to the survey question 'Thinking... about the contract with which you were primarily involved on the project... was that contract based upon a standard form?' 377 responses were received to that question, of which 255 (67.6%) were 'yes' and 122 (32.4%) 'no'. In other words, standard forms were used as at least a base in approximately two-thirds of contracts across all contracting sectors and values.



5.2 Breakdown by position of contract within the contracting chain

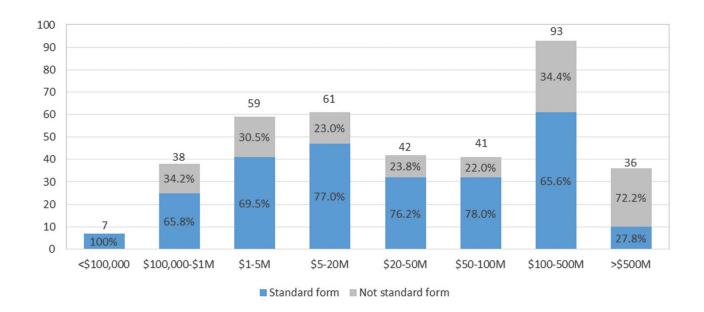


This chart indicates that standard forms are more commonly used in 'head' or 'main' contracts (between the principal/ owner/ developer and contractor/ consultant) than subcontracts and trade contracts (the latter term describing contracts entered into directly by a principal in a construction management arrangement).

The survey questions (see *Appendix 1*) sought information about where reported-upon contracts sat within the 'contracting chain'. 377 responses were received. Most contracts (80.6%) were the 'head' or 'main' contract and the bulk of the remainder were subcontracts and trade contracts (14.3%). A very small number fell into the 'supply agreement' (2.4%) or 'other' (2.7%) categories: these were excluded from the analysis for this chart.

'standard forms
were used as at
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approximately
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sectors and
values'

5.3 Breakdown by initial contract value



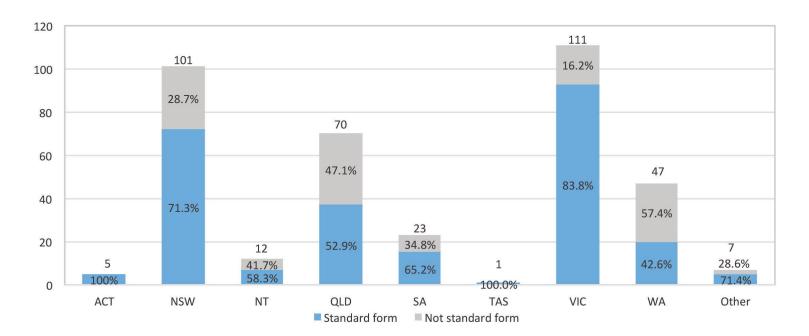
The survey sought to obtain a comprehensive picture of contracting in all aspects of the construction industry in Australia – it therefore set no upper or lower threshold for participation by reference to contract value. 66 In turn, the survey employed categories of contract value based upon the initial (unvaried) contract scope rather than final project outturn cost. This was primarily to ensure comparison of 'apples with apples' and also because many of the projects reported upon were still in progress.

The use of categories rather than absolute contract values does not allow for a strict linear assessment of the correlation between use of standard forms and contract values. That said, the chart does indicate that standard form use is close to universal on contracts with a value less than \$100,000 (albeit based on a relatively small sample size), ranges between 66% and 78% on values between \$100,000 and \$500 million and then drops sharply on values exceeding \$500 million. This correlates with a view expressed in the interviews that, specifically, the Australian Standards, were most suitable for use in the 'middle band' of projects.

'standard form use is close to universal on contracts with a value less than \$100,000 and drops sharply on values exceeding \$500 million'

⁶⁶This is by way of contrast with, for example, the Blake Dawson Report which only sought responses in respect of projects with a contract value exceeding \$20 million – see p 31 of that Report.

5.4 Breakdown by project location

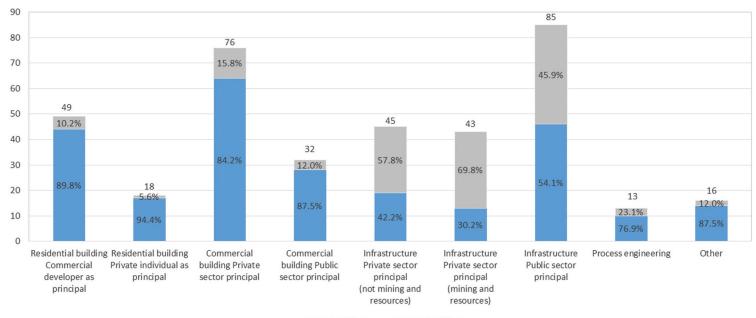


The survey data indicates, when aggregating all contracting sectors, that a lesser proportion of contracts use standard forms (whether amended or unamended) in the States and Territories where mining and resources projects predominate (WA, NT and Queensland – here, the range is 43%-58%) compared to the ACT, NSW, SA, Tasmania (albeit only one project was reported upon) and Victoria (range 65%-100%). This correlates with the findings based upon sectors (see section 5.5 below).

The 'other' category primarily represented work being done by Australian government agencies in Australian external territories. 'a lesser
proportion of
contracts use
standard forms
in the states and
territories where
mining and
resources projects
predominate'

⁶⁷ See, eg, Jim Minifie, 'The Mining Boom: Impacts and Prospects' (Grattan Institute, July 2013), p 13.

5.5 Breakdown by contracting sector



■ Standard form ■ Not standard form

This chart indicates a diversity of level of use of standard forms (whether amended or unamended) across sectors. Use is highest in the residential building sector, remains high in the commercial building and process engineering sectors, and drops progressively through the public sector and private sector infrastructure sectors, with the lowest use being in the mining and resources infrastructure sector.

Whilst further, detailed research would be required to confirm this, and to analyse its detailed implications, it may be surmised that a number of factors contribute to these results, including that:

- standard forms are not available for all delivery methodologies (see *section 1.1*), being primarily directed to building projects on a 'traditional' (construct only/ design and construct) head contract basis rather than for relationship-based models such as alliancing; and
- contracting in the residential building sector is the subject of substantial legislative intervention, including, in many States and Territories, the mandatory inclusion of certain warranties and other matters.⁶⁸ This, along with the relatively small value of the bulk of residential projects, would appear to militate in favour of using the numerous standard forms which are available in order to minimise transaction costs.

'use of standard forms is highest in the residential building sector, with the lowest use being in the mining and resources infrastructure sector'

⁶⁸ See, eg, Philip Britton and Julian Bailey, 'New Homes and Consumer Rights: England and Australia Compared' (2011) 3 International Journal of Law in the Built Environment 269.

6. Which standard forms are being used?

The chart in section 6.1 aggregates 250 responses across all contract values, geographic locations and contracting sectors. Breakdowns by reference to each of these factors, in respect of the most widely-used major works forms (AS4300, AS4000, AS2124, AS4902, GC21, ABIC MW and FIDIC), are provided in the charts following in sections 6.2-6.4.

The chart in section 6.1 also reflects our key finding that, overall, the Australian Standards forms continue to dominate the Australian construction contracting landscape. In aggregate, the four main forms represent close to 70% of the standard forms which are used, as reported upon in this survey. Applying that 70% to the 68% of projects overall which use standard forms (see section 4.1), these forms are used in nearly half (48%) of all projects reported upon in this survey.

There appears to be a large gap in usage between the AS forms and the other commercially-available suites of forms for major works: the ABIC MW form was used in 2.4% of projects (albeit the 'Simple Works' form was slightly more frequently used, at 4.0%) and FIDIC forms in 2.0% of projects. Only one project in the entire survey was reported as using the NEC3 form.

The breakdowns in *sections* 6.2-6.4 provide the basis for drawing out a number of detailed observations. In terms of the degree of confidence with which these observations may be stated, however, varying sample sizes apply. These are noted in brackets beside the relevant category. For example, whilst the second chart in *section* 6.3 indicates, on its face, that (of the most widely-used forms) only AS2124, AS4000 and AS4300 are used in South Australia, this was based on a sample size of 8 contracts in total for that State. Similarly, in *section* 6.4, the '100%' result for use of ABIC in the 'residential building contracts – private individual as principal' sector was based on a sample size of only 2 for that category, and the results in respect of process engineering were based on a sample size of 9. It needs

also to be emphasised that the data relates only to contracts where a standard form was used – as noted in *section 5.5* above, less than half of the contracts in the infrastructure sectors used a standard form.

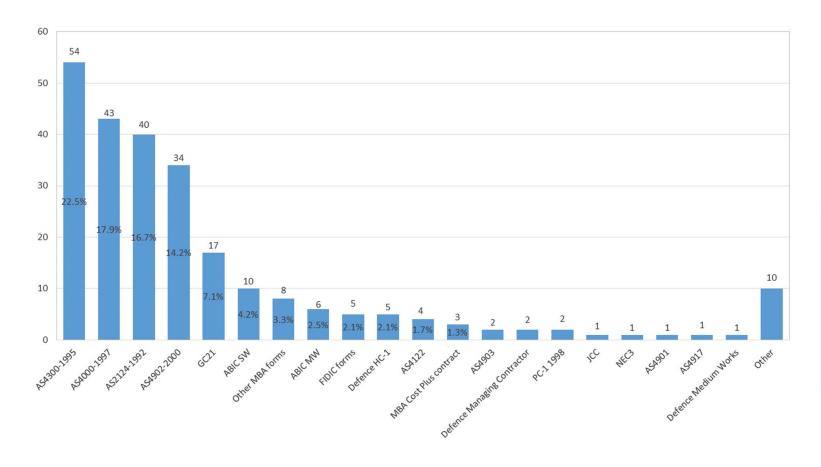
That said, (at least) the following observations may be made with a reasonable degree of confidence:

- the AS major works forms are used across all sectors (other than for residential building with a private individual as principal), including across the public and private sectors, and for project delivery methods (such as process engineering) for which they are not specifically designed;
- those AS forms are also used across all contracting values, although no AS4000 forms were reported as being used on projects with a value in excess of \$500 million;
- the FIDIC forms are only used on relatively high value projects (>\$100 million), in private sector infrastructure (both mining and non-mining) and process engineering projects;
- the GC21 form is primarily used in NSW, but there is also some use of it in Queensland; whilst, as was noted in *section 1.1.1* above, it is designed for use on contracts with a value exceeding \$1 million, our survey responses indicated that it was used only for contracts with a value over \$5 million; and
- the ABIC MW form is little used outside relatively small value (up to \$5 million) contracts; the primary use is to be found in the residential building sector where the owner is a private individual, but it also has some use in the commercial building (private sector principal) and infrastructure (public sector principal) sectors.

These findings are also broadly consonant with observations arising from the interviews in respect of use of, and attitudes towards, these standard forms (see *section 4.2* above).

'the Australian Standards forms continue to dominate the Australian construction contracting landscape'

6.1 Overall

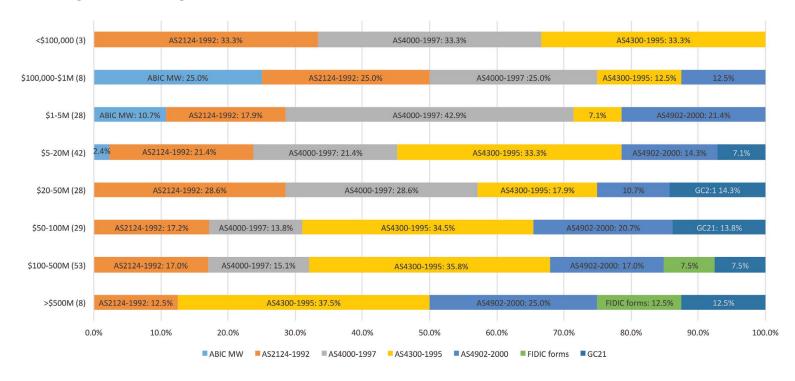


'the four main Australian Standards forms represent close to 70% of the standard forms which are used'

This chart aggregates the 250 responses to question 12 of the survey (see *Appendix 1*), which asked participants who had previously indicated that the relevant contract was based upon a standard form to identify the form.

6.2 Breakdown by initial contract value

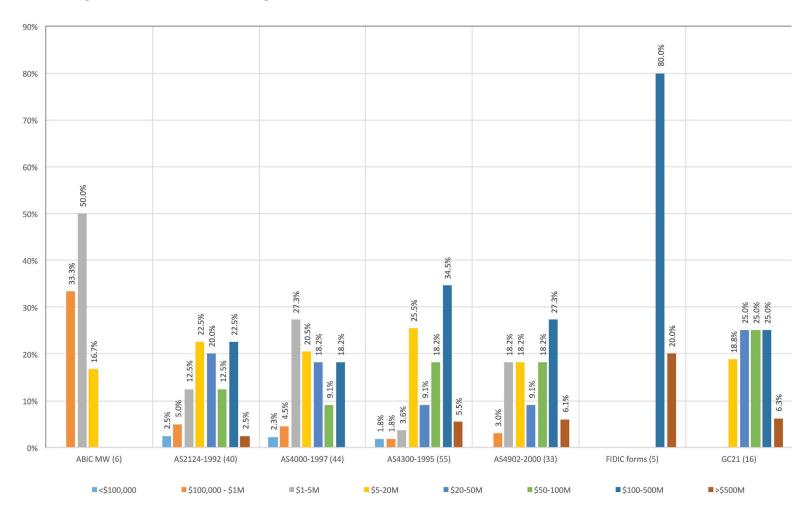
Applying value categories to forms



'the Australian
Standards forms
are used across
all contracting
values (although
no AS4000
forms were
reported as
being used on
projects with a
value in excess
of \$500 million)'

Figures in brackets indicate the number of responses analysed for each value category.

Applying forms to value categories



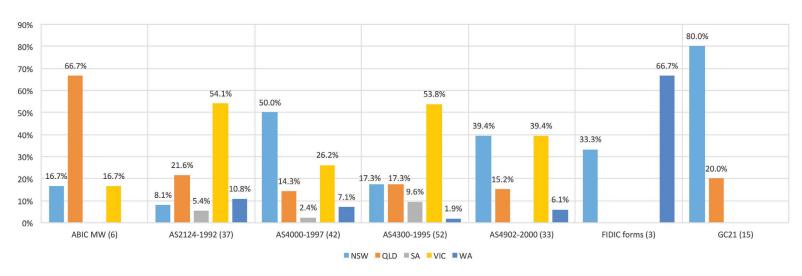
'the FIDIC forms are only used on projects with a value over \$100 million, in private sector infrastructure and process engineering projects'

Figures in brackets indicate the number of responses analysed for each form.

6.3 Breakdown by project location

Results from the ACT, NT and Tasmania are not taken into account in the charts in this section 6.3 due to their almost negligible number (respectively, 5, 7 and 1 contracts using a standard form).

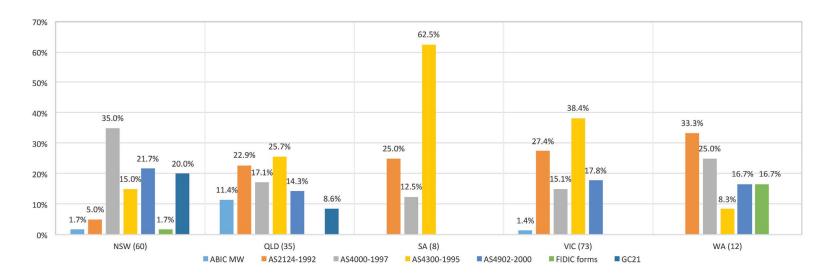
Applying forms to locations



Figures in brackets indicate the number of responses analysed for each form.

'the GC21 form is primarily used in NSW, but there is also some use of it in Queensland'

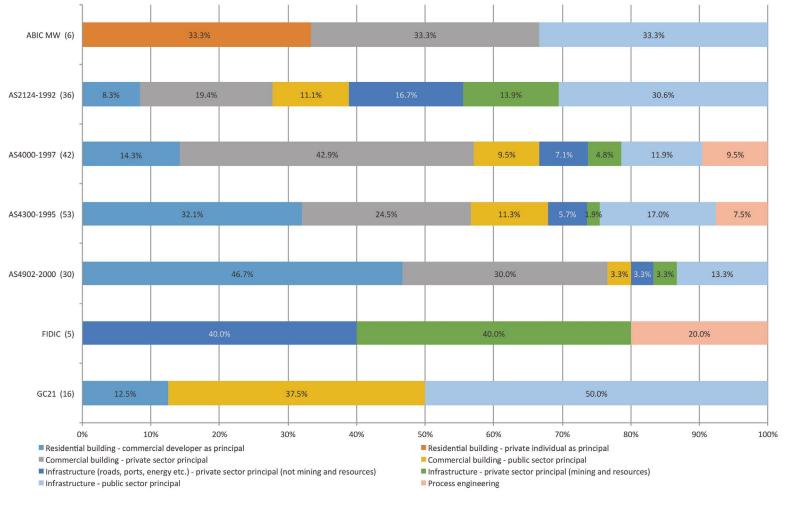
Applying locations to value categories



Figures in brackets indicate the number of responses analysed for each location.

6.4 Breakdown by contracting sector

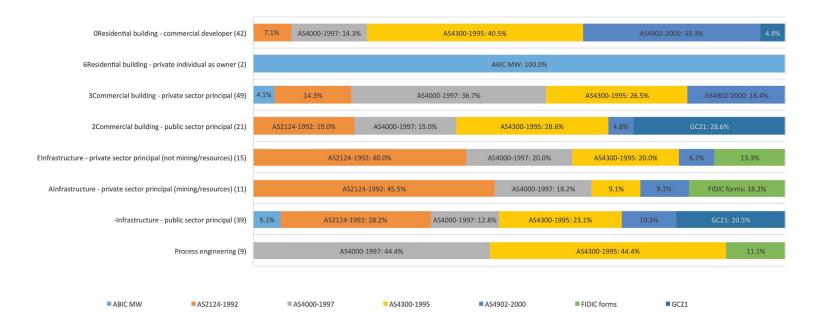
Applying forms to sectors



'the Australian
Standards major
works forms
are used across
all contracting
sectors (other
than for
residential
building with a
private individual
as principal),
and across
the public and
private sectors'

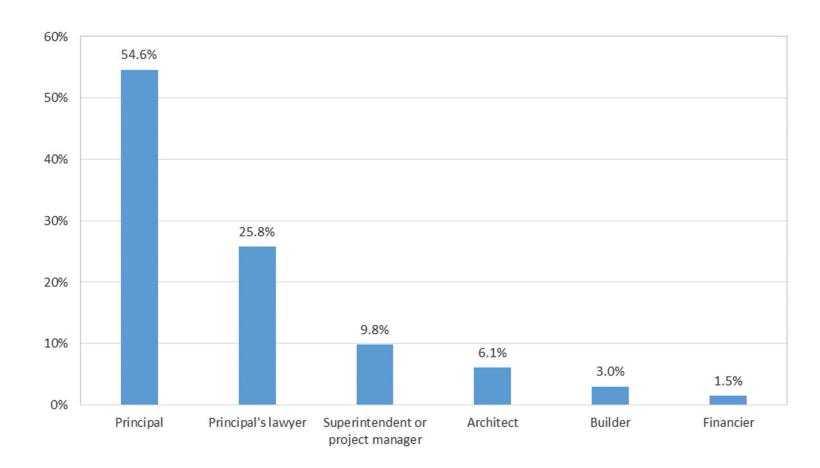
Figures in brackets indicate the number of responses analysed for each form.

Applying sectors to forms



Figures in brackets indicate the number of responses analysed for each sector.

7. Which party makes the decision to use the standard form?



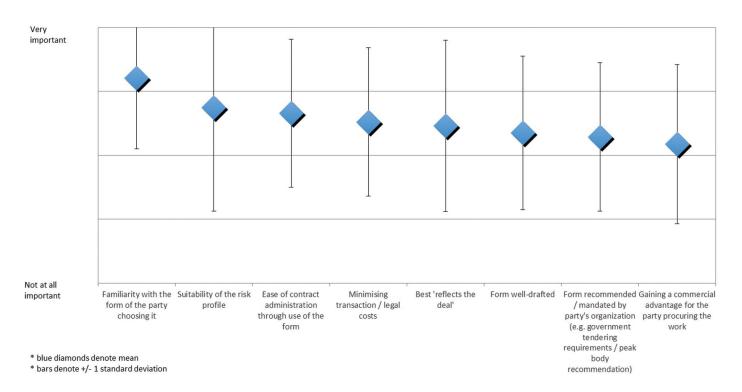
'the principal or the principal's lawyer were responsible for choosing the standard form in more than 80% of cases'

Frequently, it was not possible to determine which party made the decision to use a particular standard form. Where it was possible, respondents sometimes indicated that multiple parties were responsible. The chart above reflects this.

Despite these limitations, it is clear that the principal (in more than 54% of cases) and the principal's lawyer (in nearly 26% of cases) were primarily responsible for the decision. Together, the principal or the principal's lawyer were responsible for choosing the standard form in more than 80% of cases.

8. Why are standard forms used?

8.1 Overall



This chart aggregates responses to a question which asked participants to indicate, in respect of the factors listed, their perception of where each of those factors sat on a spectrum from 'not at all important' to 'very important' ('don't know' was also available). Each of the identified factors was, in aggregate, regarded as falling on the 'important' side of the spectrum, with 'familiarity with the form' being regarded as the most important factor and 'gaining a commercial advantage' the least.

The data which produced this chart (and also the data which produced similar charts in *sections 10* and *12*) produce a mean, as indicated, but are based on widely variable results. By way of indication of this spread, we have marked on the chart one standard deviation either side of the mean. In a normal distribution, this would indicate the range within which 68% of the results for each matter lie. However, for this data, the markings are by way of indication only given the limitations inherent in using a five-point scale.

So, in this *section 8*, the standard deviation for each category (based on representing the range between 'not at all important' to 'very important' as a 5-point scale), is: familiarity (1.1), suitability of the risk profile (1.2), ease of contract administration (1.2), minimising costs (1.2), reflects the deal (1.2), form well-drafted (1.2), form recommended (1.6), commercial advantage (1.3).

Participants were also able to nominate other factors. That said, the most commonly nominated factor also related to familiarity of one or more parties with the standard form. Small numbers of respondents nominated factors such as suitability of the standard form for the particular project or a preference for that standard form over another particular standard form.

8.2 Familiarity

The finding that familiarity was the most important factor (by a substantial margin – the mean score for it was 4.21 out of 5, compared with the next highest score of 3.75 out of 5) has, we think, significance in at least two ways:

- it helps explain why AS2124 and AS4300 two forms which were intended by Standards Australia to become redundant and be withdrawn from sale upon the publication of, respectively, AS4000 (in 1997) and AS4902 (in 2000) remain, as noted in *section 6.1* above, respectively the third-most-used and most-used standard forms in Australian;
- conversely, it indicates that 'new' forms (at least, in the Australian context) seeking to gain a foothold in the market on a competitive basis (such as ABIC, FIDIC and NEC3) as opposed to government-mandated forms such as the Defence Suite and GC21 need to overcome familiarity-generated inertia; this goes, arguably, to the relatively low use of these forms discussed in section 6.

Observations made in the interviews add detail to this picture:

- A strong theme came through that 'familiarity' does not necessarily mean 'informed familiarity'. For example:
 - One highly-experienced project manager commented that the Australian industry is 'at large, very naïve in their contractual obligations'.
 - Several interviewees commented in respect of their own (contracting) organisations along the lines that the company had used standard forms for relatively low-value/ risk projects when the company was in its early years of development. The organisation had continued to use those forms as it moved into contracting of (often significantly) greater value and complexity and had then been 'caught out', either through deficiencies in the forms or by their continuing to resource the project management of the project as though it were a low-value/risk project.
- Amongst those who may reasonably be regarded as possessing a detailed knowledge of the various available forms (for example, 'front-end' construction lawyers and in-house counsel), most described the currently-available forms in terms of being a 'baseline' only, which then ought be modified.
- The interviews confirmed that familiarity was a key factor in why
 forms other than the Australian Standards are rarely selected for
 use where a party has a choice (that is, leaving aside forms such as
 Defence and GC21, which essentially are mandated for the relevant

work). For example, one architect who had worked extensively with the ABIC contracts and had a fairly positive view of them, observed that the ABIC MW form is seldom used 'not because it has a bad reputation but simply because most large institutions have a heavily-amended version of AS2124 or AS4000 which has been knocking around the project management team for years'.

Indeed, a number of interviewees identified familiarity as a reason why the newer Australian Standards forms (AS4000 and AS4902) were not as widely used as the older ones (AS2124 and AS4300).
 One lawyer opined that the newer forms are 'better drafted' but that they are not as widely used due to a combination of familiarity (or, in their view, 'stubbornness') and the fact that they did not make any significant changes to the risk allocation vis-à-vis the older forms.

8.3 Risk allocation

The survey indicates that factors relating to risk allocation – including 'suitability of the risk profile', 'reflecting the deal' and gaining a commercial advantage' – remain of importance to project parties in their choice to use a standard form. These underpinned the investigations in the Blake Dawson and Yates and Sashegyi Reports referred to in *section 1.3*.

8.4 Minimising transaction costs

The survey results, and observations made in the interviews, support the continued currency of the oft-stated premise that standard forms are used so as to minimise transaction/ legal costs. ⁶⁹ However, where standard forms are amended, any such gains in efficiency may be reduced: see *section 12*, which reports upon perceptions that amendments lead to increases in the need for legal advice, project outturn cost and disputation.

The interviews indicated a perception, at least on the part of contractors, that unnecessary amendment leads to higher project outturn costs. For example:

- one tier 2 contractor indicated that they have been prepared to offer clients a lower price on a lump sum contract if the client entered into an unamended Australian Standard contract; and
- an in-house lawyer at an engineering consultancy firm who is
 responsible for reviewing the several thousand consultancy
 contracts which that firm enters into each year estimated that
 approximately half of the forms are bespoke, requiring a significant
 in-house and external legal spend.

'the ABIC MW form is seldom used "not because it has a bad reputation but simply because most large institutions have a heavilyamended version of AS2124 or AS4000 which has been knocking around the project management team for years"

⁶⁹ See, eg Philip Loots and Donald Charrett, *Practical Guide to Construction Contracts* (2009), pp 32-34.

9. What proportion of standard forms are amended?

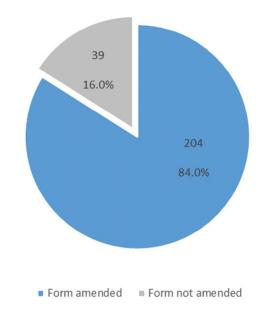
Our key finding in this section is that, where standard forms are used, overwhelmingly they are amended by the parties from the published form. Overall, 84% of the forms reported upon (from a sample size of 243) were amended.⁷⁰ The incidence of use of amended forms amongst the four most widely used forms ranged from 88% (for AS4000) up to 98% (for AS4300).⁷¹

The question which generated the data for this section asked participants to identify whether the general conditions, rather than project-specific information of the type set out in Annexure Part A to AS2124, were amended. However, the survey did not specifically ask respondents to identify the extent of such amendments (as is noted in *section 2.2* above, we have suggested this as an area for further research). That said, a number of interviewees made observations along the lines that the amendments to standard forms that they typically see are more voluminous than the general conditions themselves.

A number of further findings may be identified from the data represented in the charts in this *section 9*. These include:

- the extent of use of amended forms was high across all contract values, contracting sectors and forms (although section 9.4 only reports upon the seven most widely-used major works forms);⁷²
- indeed, the only categories where use of amended forms did not exceed 75% were:
 - contract value: < \$100,000 (67% amended) and \$100,000-\$1 million (54%);
 - contracting sector: residential building-private individual (47%) and commercial building-public sector principal (72%); and
 - forms: GC21 (63%).

9.1 Overall



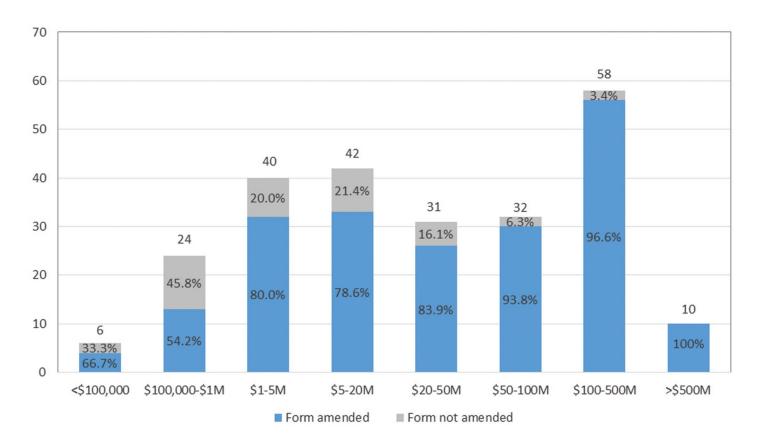
'where standard forms are used, overwhelmingly they are amended by the parties from the published form'

⁷⁰ See section 9.1.

⁷¹ See section 9.4.

⁷² See section 6.

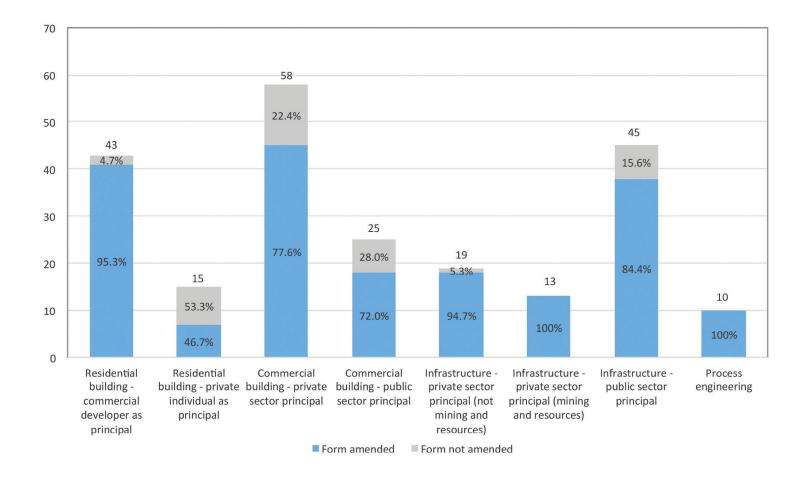
9.2 Breakdown by initial contract value



'the extent of use of amended forms was high across all contract values, contracting sectors and forms'

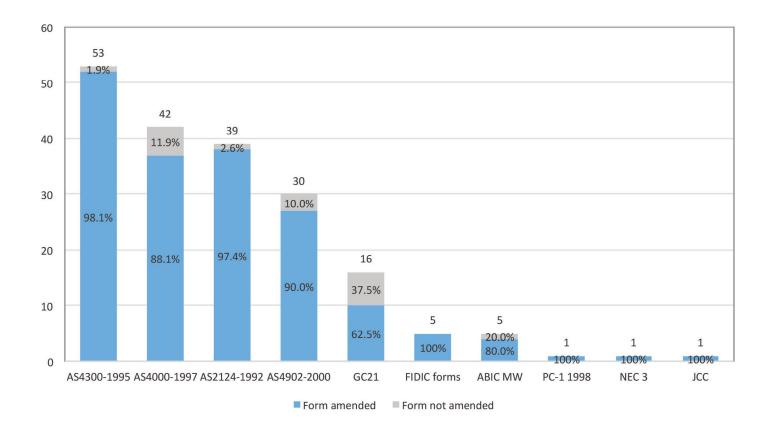
Figures above each column indicate the number of contracts, based upon standard forms, reported upon for each value category.

9.3 Breakdown by contracting sector



Figures above each column indicate the number of contracts, based upon standard forms, reported upon for each sector.

9.4 Breakdown by form



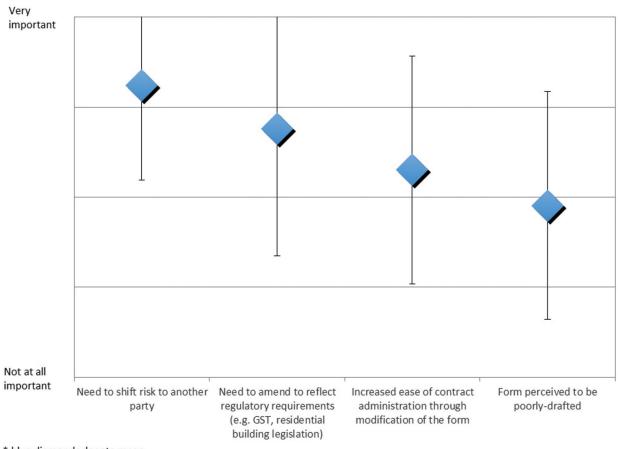
'in 30 years'
experience
as a project
manager, they
had only seen
an Australian
Standard
document used
unamended on
two occasions'

Figures above each column indicate the number of contracts, based upon standard forms, reported upon for each form.

10. Why are standard forms amended?

Like the chart in *section 8*, the chart below aggregates responses to a question which asked participants to indicate, in respect of the factors listed, their perception of where each of those factors sat on a spectrum from 'not at all important' to 'very important' ('don't know' was also available). Participants likewise were also able to nominate

other factors. The factors nominated were generally imprecise concepts such as 'risk allocation'. A smaller number of responses nominated disparate specific factors such as corporate policy, financiers' demands and particular clauses.



'overall, "need to shift risk" was regarded as the primary reason for amending standard forms'

^{*} blue diamonds denote mean

^{*} bars denote +/- 1 standard deviation

It will be noted that, overall, the 'need to shift risk' was regarded as the primary reason for amending standard forms.

As in section 8, the standard deviation for each category (based on representing the range between 'not at all important' to 'very important' as a five-point scale) is relevant. These standard deviations (as indicated by the ranges marked on the chart) were: 'need to shift risk to another party' – 1.1, 'need to amend to reflect regulatory requirements' – 1.4, 'increased ease of contract administration through modification of the form' – 1.3, 'form perceived to be poorly drafted' – 1.3.

Given the high rate of usage (see *section 6*) of forms – primarily AS2124, AS4300, AS4000 and AS4902 – the published versions of which have not been substantially amended for well over a decade, it is not surprising that, overall, the 'need to reflect statutory requirements' was identified as an important factor. This also correlates with the findings in *section 11* that clauses dealing with relatively recent statutory requirements such as GST and security of payment are added to approximately 60% of standard forms.

The question of *why* standard forms are amended was one on which the interviews were especially enlightening. Essentially – and, noting that our findings here must be regarded as preliminary only – there seems a clear divide in perception between lawyers and lawyers' clients as to where the 'blame' lies for excessive amendment of standard forms. A sense of the divide may be gleaned from the following representative sample of views:

- About lawyers, by clients:
 - changes are driven by lawyers rather than their clients; when clients are apprised of the effects of the changes suggested by their lawyers (such as in relation to ownership of 'float' in the contractual program), they often say that they do not want the changes to be made;
 - lawyers are risk averse and put to their clients a conservative, high-watermark risk position (ie one which amends the forms to be more onerous to the counter-party);

- external lawyers have a financial interest in (and internal legal departments need to 'justify their existence' by) 'selling' suites of contracts, sets of amendments and providing ongoing advice during the project; and
- lawyers often have a poor understanding of the technical and commercial implications of theiramendments, such as in advising upon contract-specific issues for insertion into the Annexure (contract particulars).
- About clients, by lawyers:
 - clients can be very conservative (especially where they have encountered adverse events on previous projects) and want certainty of risk transfer – this is what drives more draconian risk allocation;
 - many contractors make the mistaken assumption that they understand the legal implications of the standard forms and discount the need to make amendments simply to remove known ambiguities (the 'qualifying cause of delay' definition in AS4000 and AS4902 was identified in this context);
 - certain amendments are uncontroversial, such as to anticipate statutory requirements (eg workplace health and safety, security of payment) or to allow for more efficient contract administration; however, even such uncontroversial amendments will necessarily add significant volume to the standard form; and
 - whilst amendments may be voluminous, once contractors work through them and the reasons for them they will usually be acceptable, especially where contractors are at the more sophisticated end of the market.

Sitting behind these observations is, we think, a broader issue as to the evolving role of construction lawyers. Whilst this issue is beyond the direct scope of this Report, we have identified this (see *section 2.2*) as an area for further, detailed research.

'there seems
a clear divide
in perception
between lawyers
and clients as
to where the
"blame" lies
for excessive
amendment of
standard forms'

11. What types of clauses are amended?

Section 11 reports upon the relative incidence of amendments to standard form contracts based upon key risk, legislative, administrative and other matters. The questions generating the relevant data made a distinction between clauses amended from those in the standard form and those added to the standard form. This distinction is generally carried through in the reporting below, largely to make digestion of the large data set more manageable. Where the distinction is not explicit, it may be assumed that 'amended' is referring to both 'amended' and 'added' clauses.

11.1 Overall

The charts in *section 11.1* indicate the overall incidence of amendments/additions across all forms, contracting sectors and values. They were generated by comparing the total number of responses in respect of each matter to the total number of responses which indicated that a standard form had been amended in respect of one matter or more. So, for example, in respect of standard forms which were amended to any extent, 76% were reported as having had the extension of time clauses amended and 41% the change in law clauses. These are the same figures as those set out in the 'All Sectors' row of the charts in *section 11.3* (breakdown by initial contract value) – a slightly different data set was used for the charts in *section 11.2* (breakdown by contracting sector) but the overall percentages are only marginally different (within 1-2%).

Throughout this *section 11*, it needs to be borne in mind that sample sizes for the underlying data varied, as follows:

By initial contract value	Sample size	By sector	Sample size
Less than \$100,000	3	Residential building - commercial developer as principal	37
\$100,000-\$1 million	12	Residential building - private individual as principal	7
\$1 million-\$5 million	30	Commercial building - private sector principal	43
\$5 million-\$20 million	32	Commercial building - public sector principal	18
\$20 million-\$50 million	25	Infrastructure (roads, ports, energy etc) - private sector principal (not mining and resources)	20
\$50 million-\$100 million	29	Infrastructure - private sector principal (mining and resources)	11
\$100 million-\$500 million	52	Infrastructure - public sector principal	37
Greater than \$500 million	9	Process engineering	10

The data indicate that, overall, there is a high level of amendment (including addition) to standard forms. As is noted in *section 2.2* above, it would be useful for further research to be undertaken into such amendment by reference to the specific forms. However, it may be surmised – given the high level of use and amendment of the Standards Australia forms noted in previous sections – that the Standards Australia forms are routinely being heavily amended in respect of multiple matters.

Across all forms, contracting sectors and values, the *highest* incidence of amendment is in respect of:⁷³

- Extensions of time 76%;
- Delay damages (including liquidated damages) 71%;
- Site conditions 68%;
- Payment generally 65% (security of payment (addition) 60%);
- Variations 63%;
- Warranties as to quality 62%;
- Claims (including time bars) 62%; and
- Goods and Services Tax (addition) 60%.

The lowest incidence of amendment is in respect of:

- Dispute Avoidance Procedures (addition) 8%;74
- Contract administration (addition) 23%; and
- Inspection/testing 30%.

Generally speaking, the interviews indicated a similar spread of incidence of specific amendments. The most commonly commented-upon amendments were in respect of limitations of liability (discussed further below) and time bars: many contractors regarded the latter as being of concern from a risk allocation and administrative burden point of view.

The breakdowns by contracting value and sector (set out, respectively, in *sections 11.2* and *11.3*) reveal substantial variations within these, and other matters. By way of summary in relation to the types of clauses identified above as having the highest incidence of amendment:

	Incidence	Highest incidence	
Clause type	overall	By initial contract value	By sector
Extensions of time	76%	\$20-50 million: 84%	Residential building – commercial developer principal: 92% Infrastructure – private sector principal (mining and resources): 91% Process engineering: 90%*
Delay damages (including LDs)	71%	\$50-100 million: 83%	Residential building – commercial developer principal: 92%
Site conditions	68%	\$50-100 million: 83%	Residential building – commercial developer principal: 89%
Payment generally	65%	\$5-20 million: 78%	Residential building – private individual principal: 86%* Residential building – commercial developer principal: 84%
Variations	63%	>\$500 million: 78%*	Process engineering: 80%*
Warranties as to quality	62%	<\$100,000: 100%*	Residential building – commercial developer principal: 78%
Claims (including time bars)	62%	\$1-5 million: 73%	Residential building – commercial developer principal: 84%
GST ⁷⁵	60%	\$5-20 million: 72%	Residential building – commercial developer principal: 81%
Security of payment	60%	\$50-100 million: 76%	Residential building – commercial developer principal: 84%

^{*} indicates sample size 10 or fewer: see above

^{73 &#}x27;Project-specific requirements' also had a high incidence (at 68%) – it has, however, been excluded from further analysis as the finding is unremarkable in this context – in other words, it is inherent in the nature of standard forms that they will, to varying extents, be unable to anticipate such requirements.

⁷⁴ That said, the survey also found that 56% of the disputes clauses were amended and ADR clauses were added in 36% of contracts using standard forms, so the overall rate of amendment in respect of disputes remains high.

⁷⁵ The only sector where there was no substantial incidence of amendment (indeed, an incidence of 0% was recorded) in respect of GST was residential building with a private individual as principal. This likely may be explained by the fact that (as was noted in *section 5.5*) the legislative requirements in respect of such contracts are highly prescriptive; in turn, the forms typically used in this sector (such as those produced by the Housing Industry and Master Builders Associations) are updated frequently, so provision for GST is usually made in these contract forms.

The tables give rise to a number of further, detailed observations (albeit they need to be tempered by reference to the respective sample sizes, as noted above), including:

• **Limitations of liability** (including in respect of 'consequential loss'), along with **caps on liquidated damages** were identified in our interviews by several contractor representatives as being a vital part of their organisations' preferred risk matrix for contracts. However, none of the most widely-used standard form construction contracts in Australia currently incorporates such general limitations. The survey differentiated between amendments to and additions of such clauses to contracts. Its findings may be summarised in this respect as follows:

Clause type	Incidence	Highest incidence		Lowest incidence	
Clause type	overall	By initial value	By sector	private (mining 82% lding – rincipal: private (mining 82% lding – rincipal: private (mining 73% ering: Sto-100 million (38%) Residential building private individual principal (0%)* Infrastructure – private (mining 73% Residential building private individual principal (23%)* Infrastructure –	By sector
Limitations of liability (amendment)	52%	\$100-500 million: 69%	Infrastructure – private sector principal (mining and resources): 82% Commercial building – private sector principal: 60%		Residential building – private individual as principal (0%)* Infrastructure – public sector principal (49%)
Limitations of liability (addition)	48%	<\$100,000: 67%*	Infrastructure – private sector principal (mining and resources): 73% Process engineering: 60%*	<\$100,000 (33%)*	Infrastructure – private sector principal (not mining and
Cap on liquidated damages	39%	>\$500 million: 67%*	Process engineering: 60%*	\$1<-\$5 million (33%)	Commercial building – public sector principal (17%)

^{*} indicates sample size 10 or fewer: see above

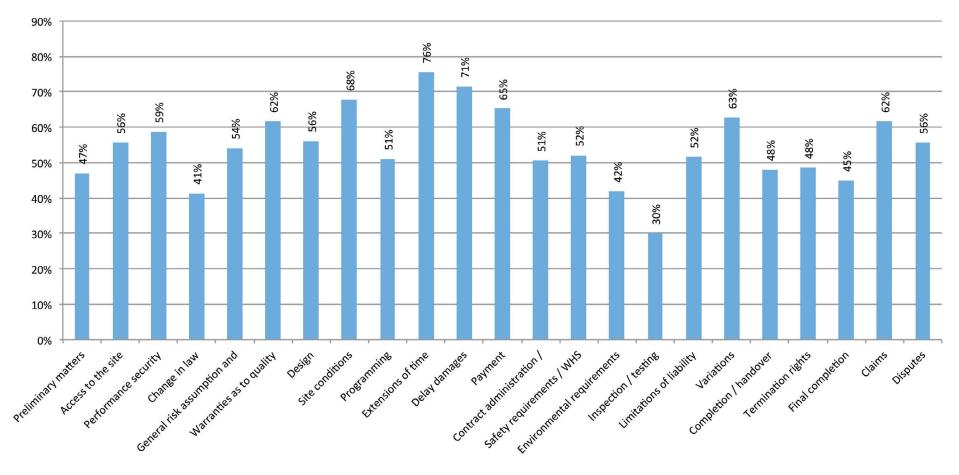
liability along
with caps on LDs
were identified
by several
contractor
representatives
as being a vital
part of their
organisations'
preferred
risk matrix'

'limitations of

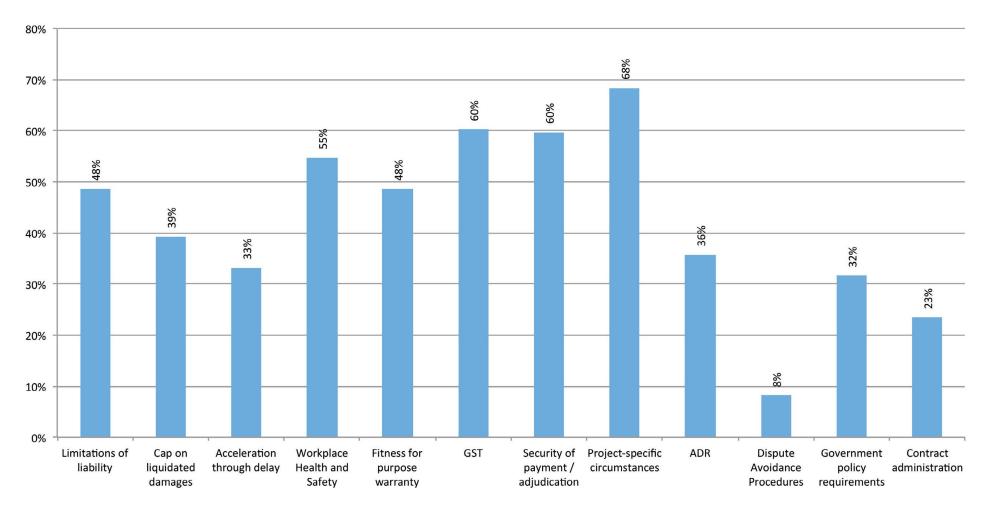
- Overall, there seems to be a relatively low level of amendment (except in relation to payment clauses) in residential building contracts with a private individual as principal. That said, it was only in this sector that there was any substantial reporting of use of **dispute avoidance procedures** (29%) These findings were, however, based upon a sample size of 7.
- The only sectors where there was a high reported incidence of addition of clauses in respect of **government policy requirements** were where there was a public sector principal commercial building (61%) and infrastructure (51%).

⁷⁶ AS2124-1992 and AS4300-1995 include caps on liquidated damages (see clause 35.7) but AS4000 and AS4902 do not. Limitations on liability are included in several widely-used consultancy forms, including AS4122-2010 – see Bailey and Bell, above n 17, pp 283-4. For commentary on current contracting practice, see Patrick Mead, 'Exploring Limitations of Liability and Exclusions of Categories of Loss' (2014) 26(4) *Australian Construction Law Bulletin* 22.

11.1.1 Clauses amended from standard form



11.1.2 Clauses added to standard form



11.2 Breakdown by initial contract value

11.2.1 Clauses amended from standard form

	Preliminary matters	Access to the site	Performance security	Change in law	General risk assumption and insurance	Warranties as to quality	Design	Site conditions	Programming	Extensions of time	Delay damages	Payment
<\$100,000	67%	33%	33%	0%	67%	33%	0%	67%	33%	33%	33%	100%
\$100,000-\$1M	33%	50%	50%	33%	33%	50%	42%	67%	33%	75%	67%	0%
\$1-\$5M	40%	37%	47%	23%	43%	63%	37%	43%	33%	70%	67%	53%
\$5-20M	53%	59%	69%	47%	59%	72%	50%	78%	56%	69%	66%	66%
\$20-50M	40%	52%	60%	44%	56%	64%	48%	72%	56%	84%	72%	68%
\$50-100M	34%	62%	66%	41%	52%	59%	72%	76%	55%	83%	83%	62%
\$100-500M	63%	62%	63%	54%	69%	65%	75%	73%	58%	79%	79%	75%
>\$500M	44%	89%	56%	44%	33%	56%	67%	78%	78%	78%	78%	78%
ALL CONTRACT VALUES	48%	56%	60%	42%	55%	63%	57%	69%	52%	76%	73%	63%

0-25% 26-50% 51-75% 76-100%

Clauses amended from standard form (cont.)

	Contract administration / superintendent	Safety requirements / WHS	Environmental requirements	Inspection / testing	Limitations of liability	Variations	Completion / handover	Termination rights	Final completion	Claims	Disputes
<\$100,000	100%	33%	33%	0%	67%	33%	67%	33%	33%	0%	67%
\$100,000-\$1M	25%	42%	17%	8%	50%	58%	25%	42%	33%	50%	42%
\$1-\$M	47%	43%	20%	20%	47%	73%	40%	40%	43%	60%	50%
\$5-20M	38%	69%	47%	38%	44%	53%	53%	53%	50%	59%	47%
\$20-50M	36%	48%	48%	44%	56%	68%	44%	40%	44%	64%	72%
\$50-100M	52%	59%	52%	31%	38%	66%	55%	59%	34%	76%	62%
\$100-500M	71%	52%	50%	31%	69%	67%	56%	56%	52%	65%	62%
>\$500M	67%	56%	56%	44%	44%	56%	44%	44%	56%	67%	44%
ALL CONTRACT VALUES	52%	53%	43%	31%	53%	64%	49%	49%	45%	63%	57%

0-25% 26-50% 51-75% 76-100%

11.2.2 Clauses added to standard form

	Limitations of liability	Cap on liquidated damages	Acceleration through delay	Workplace Health and Safety	Fitness for purpose warranty	GST	Security of payment / adjudication	Project- specific circumstances	ADR	Dispute Avoidance Procedures	Government policy requirements	Contract administration
<\$100,000	33%	33%	33%	33%	0%	67%	33%	100%	33%	33%	33%	33%
\$100,000-\$1M	50%	33%	17%	42%	33%	33%	58%	58%	0%	0%	0%	8%
\$1-\$M	33%	23%	23%	43%	57%	50%	50%	43%	20%	13%	17%	27%
\$5-20M	38%	47%	41%	66%	41%	63%	59%	59%	41%	6%	34%	25%
\$20-50M	44%	36%	28%	52%	40%	72%	68%	76%	32%	0%	44%	20%
\$50-100M	55%	41%	48%	59%	48%	69%	72%	79%	45%	10%	28%	28%
\$100-500M	62%	48%	38%	58%	63%	65%	62%	87%	50%	10%	37%	25%
>\$500M	67%	44%	11%	78%	44%	56%	56%	56%	33%	11%	56%	22%
ALL CONTRACT VALUES	49%	40%	34%	56%	49%	61%	61%	70%	36%	8%	31%	24%

0-25% 26-50% 51-75% 76-100%

11.3 Breakdown by contracting sector

11.3.1 Clauses amended from standard form

	Preliminary matters	Access to the site	Performance security	Change in law	General risk assumption and insurance	Warranties as to quality	Design	Site conditions	Programming	Extensions of time	Delay damages	Payment
Residential building - commercial developer as principal	65%	70%	81%	70%	73%	78%	81%	89%	68%	92%	92%	84%
Residential building - private individual as principal	29%	29%	14%	0%	0%	14%	29%	29%	14%	29%	14%	86%
Commercial building - private sector principal	47%	49%	58%	35%	49%	72%	49%	72%	40%	84%	79%	58%
Commercial building - public sector principal	50%	44%	50%	61%	56%	61%	78%	61%	44%	78%	83%	67%
Infrastructure (roads, ports, energy etc.) - private sector principal (not mining and resources)	35%	55%	60%	35%	50%	65%	45%	60%	50%	70%	65%	65%
Infrastructure - private sector principal (mining and resources)	36%	64%	82%	45%	55%	82%	82%	82%	64%	91%	82%	64%
Infrastructure - public sector principal	41%	51%	41%	30%	49%	35%	35%	49%	46%	59%	46%	51%
Process engineering	30%	60%	70%	20%	70%	50%	60%	60%	70%	90%	70%	80%
ALL SECTORS	47%	56%	59%	41%	54%	62%	56%	68%	51%	76%	71%	65%

Percentages indicate incidence of amendment of the relevant type of clause amongst standard form-based contracts which have been amended to any extent.

51-75% 76-100%

0-25% 26-50%

Clauses amended from standard form (cont.)

	Contract administration / superintendent	Safety requirements / WHS	Environmental requirements	Inspection / testing	Limitations of liability	Variations	Completion / handover	Termination rights	Final completion	Claims	Disputes
Residential building - commercial developer as principal	65%	62%	46%	35%	51%	76%	68%	68%	54%	84%	86%
Residential building - private individual as principal	29%	0%	0%	0%	0%	29%	0%	0%	14%	14%	0%
Commercial building - private sector principal	51%	53%	33%	21%	60%	58%	49%	51%	49%	58%	51%
Commercial building - public sector principal	72%	44%	39%	33%	56%	72%	61%	44%	44%	56%	61%
Infrastructure (roads, ports, energy etc.) - private sector principal (not mining and resources)	40%	45%	40%	35%	50%	65%	40%	55%	55%	55%	45%
Infrastructure - private sector principal (mining and resources)	64%	64%	55%	36%	82%	73%	45%	64%	45%	64%	64%
Infrastructure - public sector principal	24%	54%	49%	30%	49%	54%	30%	27%	30%	54%	49%
Process engineering	80%	50%	70%	60%	50%	80%	50%	70%	60%	80%	40%
ALL SECTORS	51%	52%	42%	30%	52%	63%	48%	48%	45%	62%	56%

Percentages indicate incidence of amendment of the relevant type of clause amongst standard form-based contracts which have been amended to any extent.

0-25% 26-50% 51-75% 76-100%

11.3.2 Clauses added to standard form

	Limitations of liability	Cap on liquidated damages	Acceleration through delay	Workplace Health and Safety	Fitness for purpose warranty	GST	Security of payment / adjudication	Project- specific circumstances	ADR	Dispute Avoidance Procedures	Government policy requirements	Contract administration
Residential building - commercial developer as principal	51%	43%	51%	73%	76%	81%	84%	84%	54%	5%	22%	27%
Residential building - private individual as principal	29%	29%	14%	0%	0%	0%	14%	43%	14%	29%	0%	14%
Commercial building - private sector principal	49%	40%	35%	60%	56%	65%	65%	70%	33%	12%	21%	23%
Commercial building - public sector principal	50%	17%	39%	44%	44%	78%	61%	78%	56%	0%	61%	44%
Infrastructure (roads, ports, energy etc.) - private sector principal (not mining and resources)	45%	35%	25%	55%	40%	50%	45%	65%	30%	15%	35%	30%
Infrastructure - private sector principal (mining and resources)	73%	45%	18%	36%	55%	45%	45%	73%	27%	0%	18%	18%
Infrastructure - public sector principal	49%	46%	22%	54%	30%	59%	57%	51%	30%	8%	51%	16%
Process engineering	60%	60%	50%	60%	20%	60%	40%	90%	20%	10%	20%	30%
ALL SECTORS	48%	39%	33%	55%	48%	60%	60%	68%	36%	8%	32%	23%



12. Perceived outcomes from amendment of forms

The relevant question in the survey asked participants to indicate, on a scale ranging from 'much decreased' to 'much increased', their perceptions as to whether the relevant amendments to the standard form affected certain matters relating to project outcomes.

Overall, amendments to the standard forms were seen as leading to (beneficial) increases in: 77

- understanding between the parties (greatest increase);
- efficiency in project administration,

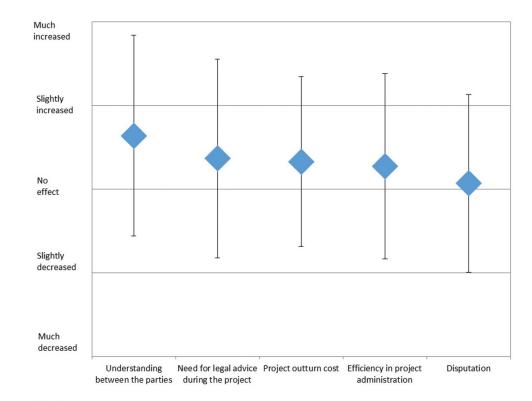
but also to (detrimental) increases in:

- need for legal advice during the project;
- project outturn cost;
- disputation (least increase).

There was, however a wide spread of responses on these points. As was the case in *sections 8* and *10*, therefore, the standard deviations for each factor are also relevant: 'understanding between the parties' was 1.2, 'need for legal advice during the project' 1.1, 'project outturn cost' 1.0, 'efficiency in project administration' 1.2, and 'disputation' 1.0.

Interviewees offered a range of observations relevant to these perceived outcomes. Consistent with the discussion in *section 10*, there seemed to be a division in perceptions as between industry professionals and lawyers (especially, lawyers who themselves are involved in amending the contracts).

A number of contractors and project managers commented that transaction costs are increased where contracts are amended without good reason and that contractors will include a contingency in their tendered prices for such amendments where it is possible to do so (a number of comments were received along the lines that, when work is scarce, contractors need to accept contracts on any terms). Other comments received included that too much reliance is put on the contract as a risk management tool, neglecting contract management techniques which can lead to more favourable project outcomes.



- * blue diamonds denote mean
- * bars denote +/- 1 standard deviation

On the other hand, lawyers involved in drafting amendments tended to point out that the amendments they were making were generally necessary, and would be seen to be so when explained to the parties. Indeed, some lawyers and contract administrators noted that disputation is increased where contract forms which do not reflect the parties' agreement are used. In other words, it was their view that it is more efficient in the long run to spend time amending the form to reflect the 'deal' rather than proceeding with an inadequately tailored contract document.

⁷⁷ Section 12.

Appendix 1 – Survey questions

- 1. Have you worked on or otherwise been engaged in connection with any construction projects in Australia during the past five years, either as a project participant or adviser?
 - Yes
 - No

We are now going to ask you a series of questions in relation to projects in which you have been involved. When you come to the end of these questions, you will be prompted to answer the same questions in relation to up to two further projects.

2. In what year did the project commence?

How would you describe the following aspects of the project?

- 3. Procurement method. (Please choose the option which best describes the primary contract.)
 - Construct only
 - Design & Construct
 - Construction Management
 - Managing Contractor / ECI
 - Alliance
 - Partnering arrangement
 - Other (please specify)
- 4. Payment method. (Please choose the option which best describes the primary contract.)
 - Lump sum
 - Reimbursement / remeasurement (eg on a schedule of rates basis)
 - Other (please specify)

- 5. Sector.
 - Residential building commercial developer as principal
 - Residential building private individual as principal
 - Commercial building private sector principal
 - Commercial building public sector principal
 - Infrastructure (roads, ports, energy etc) private sector principal (not mining and resources)
 - Infrastructure private sector principal (mining and resources)
 - Infrastructure public sector principal
 - Process engineering
 - Other (please specify)
- 6. Where was the project primarily undertaken?
 - Australian Capital Territory
 - New South Wales
 - Northern Territory
 - Queensland
 - South Australia
 - Tasmania
 - Victoria
 - Western Australia
 - Other including external territories and foreign aid projects (please specify)
- 7. What was the total project value?
 - Less than \$100,000
 - \$100,000 \$1 million
 - \$1 million \$5 million
 - \$5 million \$20 million
 - \$20 million \$50 million
 - \$50 million \$100 million
 - \$100 million \$500 million
 - Greater than \$500 million

- 8. Which of the following roles describes your own involvement in the project? (Please choose as many as apply.)
 - Overview commercial decision-maker
 - Superintendent / contract administrator
 - Independent reviewer
 - Contractor / subcontractor / supplier
 - Consultant not a party to the contract (other than superintendent / lawver)
 - Financier
 - · Legal adviser external solicitor
 - Legal adviser barrister
 - Legal adviser inhouse
 - Dispute resolution (adjudicator, arbitrator, mediator, etc)
 - Other (please specify)

Thinking now about the contract with which you were primarily involved on the project...

- 9. What was the initial contract value?
 - Less than \$100,000
 - \$100,000 \$1 million
 - \$1 million \$5 million
 - \$5 million \$20 million
 - \$20 million \$50 million
 - \$50 million \$100 million
 - \$100 million \$500 million
 - Greater than \$500 million
- 10. Where did that contract sit within the 'contracting chain'? (Please choose the option which best describes the contract.)
 - 'Head contract' (entered into by principal with a contractor)
 - Subcontract / Trade contract
 - Supply agreement
 - Other (please specify)

- 11. Was that contract based upon a standard form?
 - Yes
 - No
- 12. Upon which of the following standard forms was that contract based?
 - AS21241992
 - AS40001997
 - AS43001995
 - AS49022000
 - JCC
 - ABIC MW
 - FIDIC forms
 - NEC 3
 - GC21
 - PC1 1998
 - Other (please specify)
- 13. Which party made the decision to use the form?
 - Your organization (or the organization which you advise)
 - Another party
 - Don't know

If another party, please identify the decision maker by role (i.e. banker, lawyer for the principal, designer, etc)

- 14. Please indicate [using a scale from 1-5 where 1 was 'not important' and 5 'very important'; 'don't know also available] how important each of the following reasons was for that form being chosen.
 - Familiarity with the form of the party choosing it
 - Form recommended / mandated by party's organization (eg government tendering requirements / peak body recommendation)
 - · Best 'reflects the deal'
 - 'Suitability of the risk profile'

- Gaining a commercial advantage for the party procuring the work
- Form welldrafted
- Ease of contract administration through use of the form
- Minimising transaction / legal costs
- Other (please specify)
- 15. Were the general conditions (i.e. the standard terms, not projectspecific information set out in, eg, Annexure Part A to AS2124) of the standard form you used amended from the published standard form?
 - Yes (amended)
 - No (not amended)
- 16. Please indicate [using a scale from 1-5 where 1 was 'not important' and 5 'very important'; 'don't know also available] how important you understand each of the following factors was in driving amendments to the standard form.
 - Need to shift risk to another party
- 17. Which party was the risk shifted to (contractor, consultant, subcontractor etc)? [question only asked where answer to question 16 was 3, 4 or 5]
- 18. Please indicate [using a scale from 1-5 where 1 was 'not important' and 5 'very important'; 'don't know also available] how important you understand each of the following factors was in driving amendments to the standard form.
 - Need to amend to reflect regulatory requirements (eg GST, residential building legislation)
 - Form perceived to be poorlydrafted
 - Increased ease of contract administration through modification of the form
 - Other (please specify)
- 19. As best you can recall, which of the following types of clauses in the standard form were *amended*? (Please select as many as apply.)
 - Preliminary matters (including regulatory approvals)
 - Access to the site
 - Performance security (retention / bank guarantees etc)
 - Change in law
 - General risk assumption and insurance
 - Warranties as to quality
 - Design

- Site conditions
- Programming
- Extensions of time
- Delay damages (includes liquidated damages)
- Payment
- · Contract administration / superintendent
- Safety requirements / Workplace Health and Safety
- Environmental requirements
- Inspection / testing
- Limitations on liability
- Variations
- Completion / handover
- Termination rights
- Final completion (including releases of claims)
- Claims (including time bars)
- Disputes
- 20. As best you can recall, which of the following types of clauses were *added to* the standard form? (Please select as many as apply.)
 - Limitations of liability
 - Cap on liquidated damages
 - Acceleration through delay
 - Workplace Health and Safety
 - Fitness for purpose warranty
 - GST
 - Security of payment / adjudication
 - Projectspecific circumstances
 - Alternative / appropriate dispute resolutions
 - Dispute Avoidance Procedures (eg DRBs)
 - Government policy requirements (eg industrial relations codes)
 - Contract administration (eg independent reviewer)
- 21. For each of the following, please indicate [using a scale from 1-5 where 1 was 'not important' and 5 'very important'] your view as to whether, compared to the form unamended, the amendments to the form increased or decreased the:
 - Understanding between the parties
 - Efficiency in project administration

- Project outturn cost
- Need for legal advice during the project
- Disputation

Please provide any further detail to assist us to understand your answers to this question: for example, as to the extent of increased / decreased project cost.

- 22. Please indicate [using a scale from 1-5 where 1 was 'not important' and 5 'very important'] how important you understand each of the following factors to be in the standard form being used unamended.
 - One party was in a position to 'dictate the deal'
- 23. Which party was that (principal, contractor, financiers etc)? [question only asked where answer to question 22 was 3, 4 or 5]
- 24. Please indicate [using a scale from 1-5 where 1 was 'not important' and 5 'very important'] how important you understand each of the following factors to be in the standard form being used unamended.
 - Familiarity with the form of the party choosing it
 - Satisfactory risk profile
 - Increased ease of contract administration through use of the form
 - Other (please specify)

[Survey respondents were then given an opportunity to respond to questions 2-24 in respect of up to two additional projects.]

73. To what extent [using a scale from 1-5 where 1 was 'strongly disagree' and 5 'strongly disagree'; 'don't know' also available] do you agree with the following statement?

'The Australian construction industry needs to have available to it standard forms of contract which are capable of being used without substantial amendment.'

- 74. In your view, is there any current standard form of contract which is capable of being used without substantial amendment in the Australian construction industry?
 - Yes
 - No

[questions 75-76 only asked where answer to question 74 was 'yes']

- 75. Which form?
- 76. For which type of project/s is the form capable of being used without substantial amendment?
- 77. Would you be willing to be interviewed (by phone or in person) by a member of the research team for this project in order to obtain more detailed views from you?
 - Yes [prompts participant to enter contact details]
 - No

Appendix 2 – Specific feedback on Australian Standards forms

As was foreshadowed in section 1.1.2, we reproduce here – without further comment or, necessarily, endorsement – feedback noted by the project team received during interviews for this project. This listing does not purport to be comprehensive (bearing in mind, as noted in section 3.2, that we conducted 47 interviews and each covered different specific subject matter), nor representative of any particular interest group. It is also presented in the awareness that Standards Australia is engaged in an ongoing process of industry consultation, so many of these issues may already have been received and considered.

General – formatting

- Forms should be **based upon sectors** (commercial building, infrastructure etc) rather than delivery methodologies (construct only/ design and construct, etc as at present)
- Sub-clauses should be **more easily referable** rather than their current un-numbered format
- AS copyright and licensing requirements make it difficult to adapt AS contracts as required (AS4122-2010 was specifically mentioned in this context)
- Need greater guidance/ default positions for the contract-specific information in the Annexure Part A, so as to minimise taking of unreasonable positions
- Where contractors/ subcontractors 'vulnerable', should be a checklist indicating clearly how the standard risk allocation has been amended⁷⁸
- Delete **Annexure Part B** (changes to the standard form) does not reflect current reality of marked-up documents
- Consider inclusion of optional risk profiles

Specific risk matters

- Should be an exclusion of consequential loss and general limitation of liability (10 respondents)
- Should be an overall cap on **liquidated damages** (3 respondents), make clear that LDs are the sole remedy in respect of the relevant delay, and clarify effect of entering 'nil', etc, in Annexure Part A
- Principal should not be able to **set off** across multiple contracts (see, eg, cl 37.6 of AS4000)
- Principal should have a right to suspend works (and pay costs accordingly)
- The consultancy contracts should dovetail better with the typical **novation** process, including back-to-back limitations of liability (or lack thereof)
- Greater clarity and rigour required around programming (eg whether contractor retains 'float'); consider adoption of SCL UK delay and disruption protocol or separate annexure for programming requirements

- Latent conditions: needs to be greater clarity as to what is (and is not) a 'latent condition' and a more structured process than the current 'deemed variation' approach the latter means that many general/ non-specific claims are being funnelled through the variations process as alleged latent conditions
- Contamination caused by the contractor should be specifically addressed
- Remove the requirement for provision of notices before having access to
 performance security (2 contract administrator respondents and one lawyer
 in private practice) means, in effect, that principal unable to access security as
 required when contractor becomes insolvent
- **Qualifying cause of delay** definition (AS4000/AS4902) confusing and should revert to traditional 'shopping list' of events (AS2124/AS4300) (4 respondents)
- Should be greater clarity around **ambiguities and discrepancies**, eg, by including a severability clause and having the contractor bear some risk for discrepancies
- Dual roles of superintendent should be better addressed
- Should include a concept of key personnel
- References to **bankruptcy** should be removed from major works forms since so few individuals are party to these contracts
- **Insurance** requirements require review (eg, it may not be possible to have the principal as a named insured)

⁷⁸ The approach of information provision as a means of addressing inequality of bargaining position is a feature of residential building contracting by reason of statutory intervention – see, eq. Domestic Building Contracts Act 1995 (Vic).





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