

A UK AND AUSTRALIAN PERSPECTIVE OF THE SUITABILITY OF THE SCL PROTOCOLS' PROVISIONS FOR DEALING WITH FLOAT FOR ADOPTION AND USE BY THE AUSTRALIAN CONSTRUCTION INDUSTRY

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During the negotiation and resolution of delay and disruption disputes on construction projects, the use and misappropriation of float, and the question of float ownership, are considered to be a major concern to those involved. Most practitioners and authors are of the opinion that it is an issue that should clearly be defined and addressed within the provisions of the contract. However, the terms “float” or “ownership of float” are rarely mentioned (if at all) in most of the standard forms of Australian construction contracts, giving little guidance to those involved as to how this issue should be addressed. In October, 2002 the United Kingdoms Society of Construction Law (SCL) published a Delay and Disruption Protocol (the Protocol) that contains a suggested approach to the issue. The aim of this research was to obtain a comparative opinion of those involved in the drafting of the Protocol and an Australian perspective of the suitability of the Protocols suggested approach to the issue of float and float ownership for use by the Australian construction industry. Semi structured qualitative interviews were carried out with members of the SCL protocol’s drafting committee and Australian construction industry experts experienced in the administration, negotiation, and resolution of delay and disruption disputes to obtain their opinions of the suitability of the SCL’s proposed approach. An ethnographic content analysis was then undertaken of the interview transcripts in an attempt to identify any common themes in the participants’ responses. Initial results indicate no general agreement or consensus concerning the potential benefits of the SCL’s proposed approach to the ownership of float for the Australian construction industry, with the identification of a number of issues that would need to be addressed should the approach be adopted.

Keywords: claims, construction planning, dispute resolution, float ownership.

INTRODUCTION

The issue of ownership of float during delay and disruption disputes is well recognized and appreciated amongst construction industry practitioners and professionals. Typically the contract documents attempt to address the issue, either expressly or impliedly within their provisions. Industry norms have evolved in an attempt to rationalize and standardize procedures. In the US and the UK the courts have attempted to clarify and give guidance on the issue. Yet there is no single approach recognized, accepted, or applied. In Australia the standard forms of construction contracts typically impliedly allocate float ownership to the Contractor

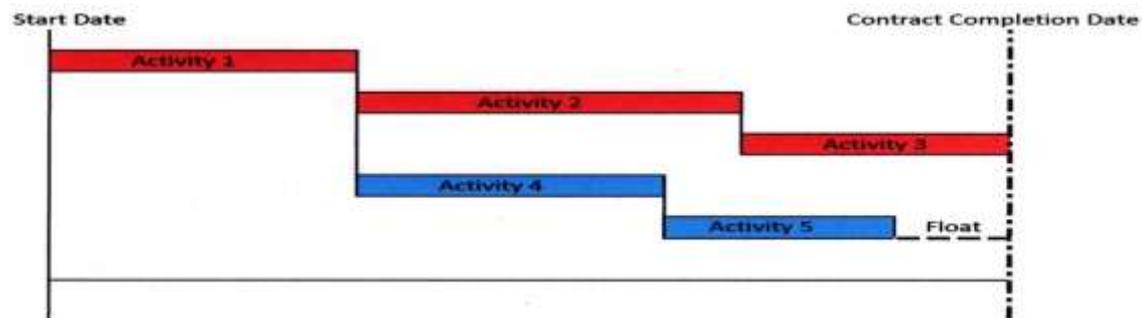
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(National Public Works Conference and National Building and Construction Council, 1990).

What is float?

De La Garza (1991) considers total float to represent “the total length of time an activity’s finish date may be delayed without it affecting the completion date of the entire project”, whilst Stephenson (2004) considers float to be the “the period by which a non-critical activity can be delayed before that activity becomes critical”, and defines it further as “the period by which non critical activity can be delayed before the delay to that activity adversely affects the planned date for completion (that is, not the contractual date for completion)”. These definitions reflect both how float is considered to be generated, as a by-product of a Critical Path Method (CPM) calculation (De la Garza, Vorster *et al.*, 1991; Pickavance, 2005; Weaver, 2006), and the perceived benefits of float, that it is, extra time available for use as a contingency to be used to cope with unanticipated conditions, and/or circumstances on non critical activities of a project (De la Garza, Vorster *et al.*, 1991; Uher, 2003; Weaver, 2006), thereby acting as a safety net against project risks (Al-Gahtani, 2009), as illustrated in Figure 1. Here, activities 4 and 5 can be moved within the float contained within the chain of activities without delaying the project completion date.

Figure 1. Illustration of Float



Weaver (1987, 1987) states that the problems associated with float can be classified under the three broad categories of technical, philosophical, and legal. He suggests that the technical problems associated with float concern:

1. Defining how much float is really available to be used when the uncertainties of the network process are considered;
2. The fact that project managers invariably change the programme, and/or the planners assumptions to suit the actual resources available; and
3. The difficulty in knowing at any point in time how much reliance to place on the information being supplied by the network.

The philosophical problems associated with float concerns the misunderstanding of, and abuse of float, by all parties associated with the Project, due to the incorrectly widely held view that float is “spare time” and therefore “unimportant”, a view that Weaver (1987) states is “detrimental to the timely completion of the Project”.

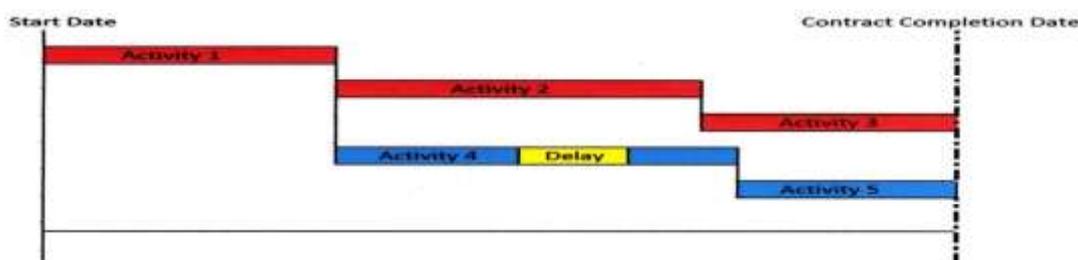
The legal problems associated with float result from the conflict between the Construction Managers desire to have as much float as possible present in the network, thereby benefitting from maximum flexibility in the allocation of resources and completing the project within time, and the contractual needs to minimise float and show as many activities to be as critical as possible.

Ownership of Float – The Issue

The issue of ownership of float is concerned with who has the right to use the perceived spare time present in a non critical or chain of non critical activities in a CPM network. Its use by either party may be to increase the efficacy of their operations, or to alleviate the effects of an individual party's unexpected risk event, resulting in the possible appropriation of the float.

The consequence of the misappropriation of such float or contingency by a party not perceived to be entitled to its use may result in a claim for some form of compensation from the party who is considered to “own” the float, or as a result of its use, non critical activities becoming critical as illustrated in Figure 2, or even extending or delaying the project completion date, as illustrated in Figure 3.

Figure 2. Illustration of delay appropriating project float



This introduces two issues into the scenario:

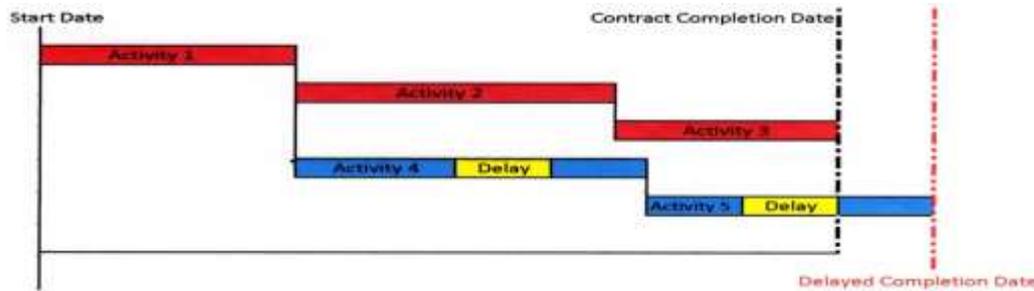
1. If float or ‘contingency’ that has deliberately been included in an activity by one of the party’s to cater for risk and uncertainty within that activity is misappropriated by another party, as illustrated in Figure 2, should the first party be entitled to any form of compensation, regardless of any project delay or not?
2. Where there are a number of delay events, as illustrated in Figure 3, that cause the project completion date to be delayed, who should be held accountable?

For example, in Figure 3, if both delay events are contractor responsible, depending on the contract provisions, the client may be entitled to liquidated damages equivalent to the delay to the project completion at the agreed rate. Whereas, if both delaying events were the responsibility of the client, depending upon the contract provisions, the contractor may not be entitled to a claim for loss and expense in relation to the first delay as there has been no delay to the project completion date, but may be entitled to an extension of time and a claim for loss and expense equivalent to the period of delay to the contract completion date as a result of the second delay.

Problems occur where the responsibility for each delay is accredited to more than one party. For example, in Figure 3, if the first delay was a contractor responsible delay, and the second delay was a client responsible delay, the contractor would be entitled to an extension of time and loss and expense equivalent to the period of the delay, whilst the employer would not be entitled to any compensation for the first delay, as the contractor would be perceived to have gained the benefit of the float or ‘contingency’ that they had included within their programme to cater for such eventualities. However, if the first delay was an employer responsible delay, and the second delay was a contractor responsible delay, depending upon the contract provisions, the contractor may not be entitled to any form of compensation for the loss of the benefit of their float or ‘contingency’ that had been appropriated by the client by the first delay, but would also be likely to be liable for liquidated damages at the

agreed rate for the period of the delay, simply as a result of the loss of the benefit of their float or ‘contingency’ resulting from its appropriation by the earlier client delay. This results in a situation where whoever uses the float first is perceived to obtain the benefit of it.

Figure 3. Illustration of delays extending project completion date



THE SOCIETY OF CONSTRUCTION LAW

In October, 2002 the Society of Construction Law published a Delay and Disruption Protocol that contained a proposed approach to the issue of float and float ownership that they hoped would be adopted and applied on construction projects in the UK that is contrary to the position of float ownership in Australia. The Protocol's objective is “to provide useful guidance on some of the common issues that arise in construction contracts, where one party wishes to recover from the other an extension of time and/or compensation for the additional time spent and the resources used to complete the project” (Knowles, 2002; Society of Construction Law, 2002; Pickavance, 2005; Ndekugri and Russell, 2006), whilst its purpose “is to provide a means by which the parties can resolve those matters and avoid unnecessary dispute” (Russell, 2002; Society of Construction Law, 2002; Pickavance, 2005).

With regard to float in relation to an extension of time, the Protocol states: “Unless there is express provision to the contrary in the contract, where there is remaining float in the programme at the time of the Employer risk event, an extension of time should only be granted to the extent that the Employer Delay is predicted to reduce below zero the total float on the activity paths affected by the Employer delay” (Society of Construction Law, 2002).

METHODOLOGY

The research was conducted in accordance with the Commonwealth of Australia's National Statement on Ethical Conduct in Research Involving Humans (1999), following procedures approved by the University of Newcastle's Research Ethics Committee.

A literature review to determine current Australian industry practice and position on the issue was undertaken, together with semi-structured qualitative interviews with eight members of the SCL Protocol drafting committee and seventeen Australian construction industry practitioners specialising in the negotiation and resolution of construction delay and disruption disputes, to obtain their opinions of the suitability of the Protocol's approach to the issue of float and float ownership, for adoption and use by the Australian construction industry (background details of those who were interviewed are contained in Tables 1 and 2 respectively).

Participants were given a clarifying statement and then asked for their opinion of the statement.

Clarifying statement: Ownership of float concerns 'who' is entitled to the use of project float, the client or the contractor? The guidance section of the protocol recommends that the parties address this issue in the wording of the contract. Where they have failed to do so, the protocol recommends that the float is not for the exclusive benefit of either the employer or the contractor, but is available for use by those who need it first, and that an extension of time should only be "... granted to the extent that the Employer Delay is predicted to reduce to below zero the total float on the activity paths affected by the Employer delay."

Question: What is your opinion of how the protocol deals with this issue?

An ethnographic content analysis (Mason, 1994; Altheide, 1996; Bryman, 2004) based on the categories contained in table 3 was then undertaken of the interview transcripts to identify and quantify respondents comments concerning their perceived levels of agreement or disagreement with the protocols approach to the ownership of float, as well as an attempt to corroborate Weavers (1987; 1987) philosophical, technical, and legal issues, as illustrated in table 4.

RESULTS AND DISCUSSION

Overall the participants' responses gave no clear indication either in favour of, or against the Protocols position on float. Approximately 40% of the participants' responses expressed or indicated agreement with the Protocols approach, and 36% of all comments being in favour of the approach, whilst approximately 48% of the participants' responses expressed or indicated disagreement with the Protocol's approach, and 64% of all comments expressing or indicating disagreement with the approach. Twelve percent of participants gave no clear indication of agreement or disagreement with the approach.

SCL Participant Responses

Surprisingly, the SCL participants responses gave no conclusive indication as to whether they agreed or disagreed with the protocols approach, with 37.5% expressing or indicating agreement with the approach, and 53% of all comments made expressing or indicating agreement with the approach, whilst 37.5% of the SCL participants expressed or indicated disagreement with the protocols approach, and 47% of all comments expressing or indicating disagreement with the approach. Twenty five percent of SCL participants gave no clear indication of agreement or disagreement with the approach. These results reflected some of the comments made by some of the SCL participants in that the Protocols overall approach was one perceived to be of an agreed compromise between the Protocol drafters.

Some 75% of the SCL participants made a clear distinction between float and contingency, with a further 87.5% of the SCL participants expressing or indicating that the issue of float and float ownership should be clearly addressed in the contract or contract documentation. In terms of float being a contractors' resource, 62.5% of the SCL participants expressed or indicated an opinion that float was a resource for the use of the contractor. A further 50% of the SCL participants either expressed or indicated that the reliability of the information obtainable from the network may have been questionable due to inaccuracies in the estimation of the activity durations.

Table 1. SCL Participant Profiles

Participant	Profile
SCL1	An independent claims consultant with over twenty years experience of working in the construction and civil engineering industry.
SCL2	A solicitor and Partner with a leading UK law firm with over twenty years experience of resolving national and international construction and disputes.
SCL3	Managing Director of a specialist risk, programming and dispute resolution organisation with over fourteen years experience of civil engineering and building disputes.
SCL4	Head of a large UK organisations forensic engineering and construction disputes team with over twenty years experience as a chartered quantity surveyor and over fourteen years experience as an arbitrator and adjudicator.
SCL5	Director and Senior Vice President of a leading international consulting organization, international arbitrator, adjudicator and expert in delay related disputes.
SCL6	A partner in a London based legal practice who is a dual qualified English solicitor and U.S. attorney, with over 10 years of contentious and non contentious construction experience, adjudications, and national and international arbitrations.
SCL7	A construction planning professional with over 30 years of experience in the industry who provides construction planning and programming advice to clients, contractors, and subcontractors on new build and refurbishment projects.
SCL8	A quantity surveyor who is a non executive, executive, and chief executive officer for a number of claims consultant organizations who has also acted as a qualified mediator, arbitrator and adjudicator.

Australian Participant Responses

The Australian participants responses gave no conclusive indication as to whether they agreed or disagreed with the protocols approach, with 53% of their responses expressing or indicating disagreement with the approach, and 70% of all comments expressing or indicating disagreement with the approach, whilst 41% of the Australian participants expressed or indicated agreement with the approach, and 30% of all comments expressing or indicating agreement with the approach.

Six percent of the Australian participants gave no clear indication of agreement or disagreement with the approach.

Some 23.5% of the Australian participants made a clear distinction between float and contingency, with a further 76% of the Australian participants expressing or indicating that the issue of float and float ownership should be clearly addressed in the contract or contract documentation. In terms of float being a contractors' resource, 29% of the Australian participants expressed or indicated an opinion that float was a resource for the use of the contractor. A further 12% of the Australian participants either expressed or indicated that the reliability of the information obtainable from the network may have been questionable due to inaccuracies in the estimation of the activity durations.

Table 2. Australian Participant Profiles

Participant	Profile
Part 1	A lawyer and arbitrator who is a Partner in a leading Australian law firm whose areas of expertise are Construction, Dispute Resolution, and Litigation.
Part 2	A lawyer and Partner in a leading Australian law firm with over seventeen years legal experience specialising in construction law.
Part 3	A director and co-founder of a specialist Australian construction and asset cost consulting Quantity Surveying Practice with expertise in commercial construction, procurement, and dispute resolution.
Part 4	An assistant contracts manager in the Legal and Contractual Department of one of the Australian States Department of Public Works.
Part 5	A lawyer and arbitrator with a leading Australian law firm, a Fellow of the Institute of Arbitrators Australia, and a Member of the Australian Institute of Judicial Administration, whose areas of practice include construction law and ADR.
Part 6	A director of an Australian Quantity Surveying Practice representing clients and contractors, with over fifteen years construction industry experience.
Part 7	A claims consultant with 5 years experience working in engineering and contract management, and 9 years experience involved in construction claims, with the last 6 years specialising in time related claims.
Part 8	A solicitor and partner of a NSW law firm who has been practising and specialising in construction law for twelve years
Part 9	A partner in a leading Australian law firm with over, 20 years of experience, specialising in major projects work and construction and engineering law.
Part 10	A chartered quantity surveyor, contractual claims consultant, and arbitrator, with over forty years of experience of working in the construction industry.
Part 11	A delay analyst with over twenty years experience of working on heavy civil engineering projects who has been involved in dispute resolution for over ten years.
Part 12	A Barrister and Solicitor of the Supreme Court of Western Australia experienced in the negotiation of construction contracts, and the resolution of construction disputes in Australia, the UK, Hong Kong, and the Middle East.
Part 13	The founding Managing Director of an Australian claims consultancy specialising in construction delay disputes.
Part 14	A construction lawyer with a leading Australian construction law firm with over nine years experience of all forms of dispute resolution, who specialises in the practice of building and construction law, and dispute resolution.
Part 15	The manager of a leading International Planning, Programming, and Claims Consultancy, with over 17 years experience of forensic planning and delay analysis of time-related construction claims.
Part 16	A Barrister and Grade 1 Arbitrator specialising in construction disputes and engineering claims, with over twenty five years experience of practising law, and a further ten years experience as a practising Architect involved in the design and construction of commercial and industrial buildings.
Part 17	A Chartered Engineer with one of Australia's leading construction consultancy firms with over thirty years of experience involved in the managing, planning, and programming of construction projects in Australia and Internationally, specializing in the analysis and resolution of construction claims.

Table 3. Ethnographic coding manual

Category	Coding
Agreement	Whether the respondent expressed or indicated agreement, neutral, or disagreement with the protocols proposed position on float and float ownership.
+/- Comments	The number of positive and/or negative comments expressed/indicated in relation to the protocols position on the issue of float and float ownership.
Contingency	The number of times a respondent distinguished float from contingency.
Float as a Commodity	The number of times a respondent referred to float as a commodity or tradable commodity.
Compromise	The number of times a respondent referred to the protocols approach to float and float ownership as a compromise.
Contractors resource	The number of times a respondent referred to float as a contractors' resource.
Contract documentation	The number of times a respondent indicated/suggested that the issue of float and/or ownership of float should be addressed in the contract or contract documents.
Defining how much float available	The number of times a respondent expressed or indicated a questioning/querying of the accuracy of the information obtainable from the programme as a result of errors built into the estimation of activity durations.
Changing programme	The number of times a respondent suggested that a programme would be changed/amended over the life of the project.
How reliable is the network	The number of times a respondent indicated a questioning/querying of the reliability of the network in relation to it being an accurate indication/record of the projects plan of work.
Float as spare time	The number of times a respondent referred to float being available as spare time within an activity/chain of activities.
Biasing to minimise float	The number of times a respondent indicated/suggested that the contractor may have manipulated the programme to hide the presence of float in their favour.

Table 4. Results of ethnographic content analysis

Participant Group	Agreement	Neutral indication	Disagree	+ comments	- comments	Contingency	Float as commodity	Compromise	Contractors resource	Contract documentation	Defining how much float available?	Changing programme	How reliable is the network	Float as spare time	Biasing to minimize float
SCL UK Participants	3	2	3	8	7	6	1	3	5	7	4	1	1	1	1
Australian Participants	7	1	9	13	30	4	0	2	5	13	2	2	2	1	3
Totals	10	3	12	21	37	10	1	5	10	20	6	3	3	1	4

CONCLUSIONS

Overall the issue of ownership of float still causes confusion and uncertainty as to how it should be addressed.

The individual participant groups gave no clear indication of their acceptance or rejection of the Protocols approach to float and float ownership.

The SCL's suggested approach to the issue of float and float ownership is considered to be at odds with the contractual provisions of the Australian standard forms of contract, and the Australian construction industry norms, however, it was acknowledged that attempts to change the Australian position in an attempt to clarify the parties' contractual position were often made.

The SCL's approach to float and float ownership was considered to be reasonable, balanced, and fair, but the concept was generally considered to be difficult to implement in practice in the Australian construction industry environment.

The issue of float ownership was considered to be closely related to who had prepared/dictated the contract programme.

Overall there was general uncertainty as to the Protocols' approach, with suspicion of the reasoning behind the first come first served theory, and general disagreement over whether the issue should be expressly dealt with in the contract documents.

Both the SCL participants and the Australian participants indicated that they considered it important to distinguish between contingency and float when constructing a network programme.

All participants considered that the issue of float and float ownership should be clearly defined and addressed in the contract documents.

Contradictory to the protocols approach to the issue of float and float ownership, all participants (to varying degrees) indicated that float should be considered to be a contractor resource.

The technical, philosophical, and legal issues related to float (Weaver, 1987) were all recognised and acknowledged (to varying degrees) within the comments made in the interviews undertaken by all of the participant groups.

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