

Project Successes and Failures¹

Article 4 of 6

Approaches to increasing Level 2: “Project” success

By Alan Stretton

INTRODUCTION

This is the fourth article of a series on project successes and failures. The first two articles (Stretton 2014j, 2015a) looked at levels and criteria for project successes/failures, at success/ failure rates, and at causes of project failures. There was a paucity of data available on these topics, and no agreed criteria for establishing project successes/failures. These articles concluded that there was an evident need to establish and agree on success and failure criteria for projects; to develop comprehensive success/failure data covering all significant project management types and application areas; and to develop much more comprehensive and validated data on causes of project failures.

The two most prominent cause-of-failure groups were project-initiation-related causes, and project management (PM) operational-related causes, which together comprised 70% of all causes of failure found. Their prominence invited further investigation, which is being done by linking them with the three success levels for projects introduced in the first article.

The third article (Stretton 2015b) discussed links between both cause-of-failure groups with Success Level 1: “Project management” success – “doing the project right”. It also discussed strong connections between Level 1 and Success Level 2: “Project” success – i.e. “doing the right project”. This article extends discussions of the latter. (Success Level 3: “Business” success, will be discussed in the fifth article).

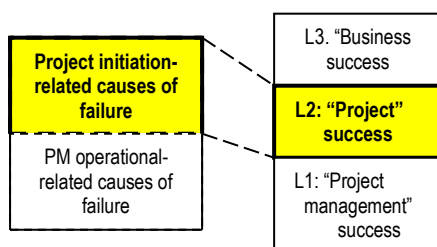


Figure 4-1. Links with Level 2: “Project” success

By far the strongest linkage with Level 2 success comes from project initiation-related causes of failure, for the rather simple reason that failure to do the right project invariably derives from certain types of failure in project initiation phases.

This linkage is illustrated in Figure 4-1, which is a copy of Figure 2-2 from the second paper of this series.

¹ This series of articles on project successes and failures is by Alan Stretton, PhD (Hon), Life Fellow of AIPM (Australia), a pioneer in the field of professional project management and one of the most widely recognized voices in the practice of program and project management. Long retired, Alan is still accepting some of the most challenging research and writing assignments; he is a frequent contributor to the *PM World Journal*. See his author profile at the end of the article.

The third article of the series began developing the case for project managers to be fully involved in project initiation activities. This case is further developed below, together with approaches to increasing such involvement in the “project” success context.

LEVEL 2: “PROJECT” SUCCESS – “Doing the right project”

The key importance of project initiation – getting the “front-end” right

Morris 2013 calls this level of success the strategic level, and says:

The importance of getting the front-end right is a major part of the strategic level.

“Getting the front-end right” involves such project initiation activities as accurate customer needs determination, project requirements determination, feasibility studies and project definition, to help ensure that the project delivers the desired capabilities/benefits. We therefore first develop models of project initiation activities, and then look at how the project initiation causes of failure identified in the second article of this series relate to these activities.

MODELS OF PROJECT INITIATION ACTIVITIES

We start with a general project life cycle model.

A six-phase project life cycle model

Archibald et al 2012 discussed a six-phase project life cycle model, which added two phases to the most widely used project life cycle, with an *Incubation/Feasibility* phase added prior to the *Project Starting* phase, and a *Post-Project Evaluation* phase after *Project Close-out*. It is noted that such additional phases have been used by many other authors previously, but here we will follow Archibald et al.

Our specific concern here will be with the first of these phases. There was widespread agreement by commentators on the paper by Archibald et al (and recorded in that paper) about the existence of a pre-*Project Starting* phase, and about its importance. As already noted, other authors have previously proposed and described such a phase. For example, Healy 1997 describes this as the Transition Phase. For our purposes in this article, we will stick with the terminology, and the figure, used by Archibald et al 2012, as follows.

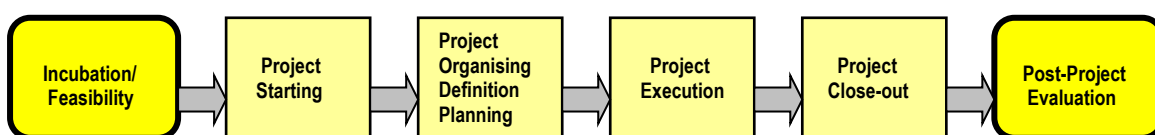


Figure 4-2: Archibald et al 2012, Figure 7: Proposed six-phase comprehensive top level project life cycle model

[It is noted here that the next article in this series will extend discussion of project origination/incubation back into organizational strategic formulation and planning].

Three phases involved in initiating projects

The relevant phases proposed by Archibald et al 2012 are now developed in more detail. These authors propose a generic list of what is involved in the *Incubation/ Feasibility* phase, and these are summarized as bullet points under this heading in Figure 4-3 below.

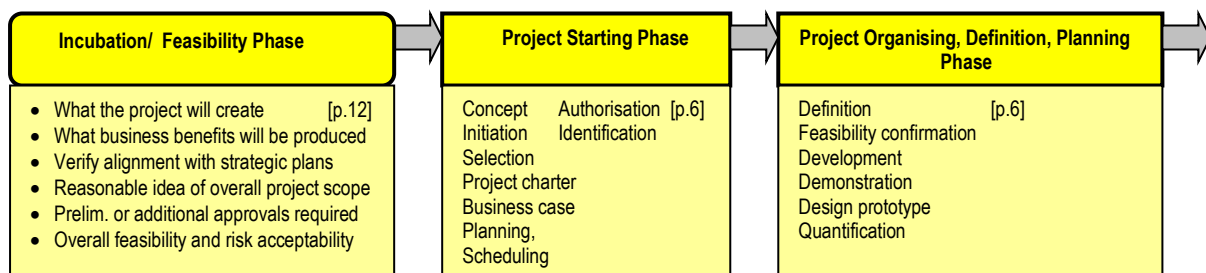


Figure 4-3: The three phases involved in project initiation – materials from Archibald et al 2012

This figure also shows the *Project Starting* phase and the *Project Organizing, Definition, Planning* phase, together with lists from Archibald et al of typical processes involved in each of these two phases.

A generic three-phase project initiation flow-sheet

In the following figure I have developed a three-phase project initiation flow-sheet which is intended to be generic, in the sense of trying to cover the different ways in which projects can originate. The main devise I have used here is to represent the *Project Starting* phase and part of the *Project Organising, Definition, Planning* phases as progressive elaborations of the materials generated in the *Incubation/Feasibility* phase. I have done the same with the feasibility analyses that accompany each elaboration.

Essentially I have used Archibald et al’s generic list of what is involved in this *Incubation/ Feasibility* phase, but have added “Determine basic client/stakeholder needs”, as a precursor to describing business benefits to be delivered, and the development of preliminary product/service requirements to deliver the benefits and satisfy needs.

As Dalcher 2014 says

....a project must take great care that it accurately defines the customers, needs and expectations, as the ultimate power about deciding on quality is given to the customers.

I have written extensively on the need to identify or verify customers’ needs before specifying product/service requirements in the project context, and processes for doing this – e.g. recently in Stretton 2013e in this journal.

However, the needs of key stakeholders also need to be determined. The processes for determining key stakeholders’ needs are similar to those for determining customers’ needs. The task of finding appropriate balances between the sometimes conflicting needs of customers and key stakeholders can be a demanding one.

Other aspects of this generic project initiation flow-sheet appear to be straight-forward.

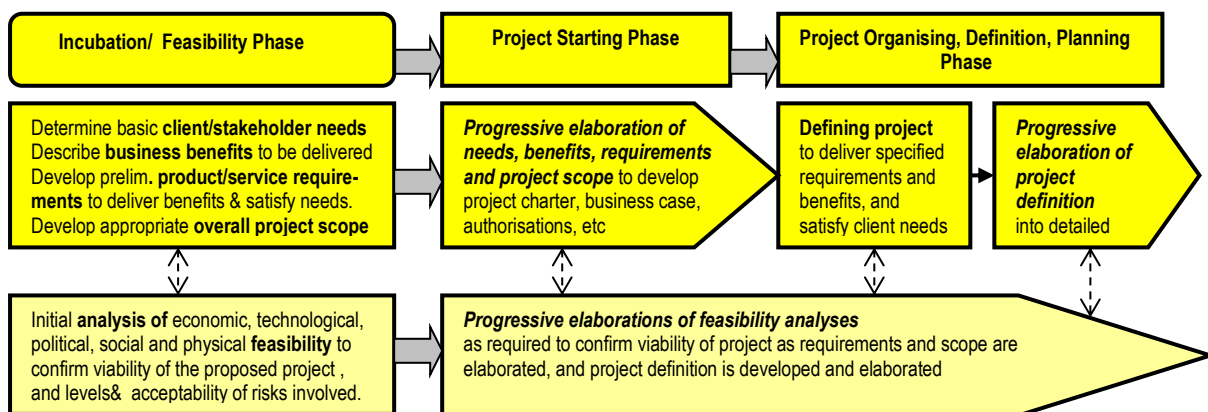


Figure 4-4: A proposed generic project initiation flow-sheet

RELATING THE PROJECT INITIATION-RELATED CAUSES OF FAILURE WITH THE GENERIC PROJECT INITIATION FLOW-SHEET

Project initiation-related causes of project failure

Fifteen project initiation-related causes of failure were identified in the second article of this series. In the third article these were divided into three sub-groups, namely

- Needs-&-requirements-related causes
- Feasibility-related causes
- Project definition-related causes

These were shown in the following figure (adapted from Figure 3-2), with notes about their main attributes, as follows.

PROJECT INITIATION-RELATED causes of failure	Notes on the main attributes of each of the three sub-groups
Needs-&-requirements-related causes No owner/user involvement (3) Unrealistic expectations (3) Overzealous advocacy Poor sales/marketing links Incomplete requirements (4)	<ul style="list-style-type: none"> • These are first concerned with determining and/or confirming the business (or equivalent) needs of the client • When this has been done, the requirements of a project (or projects) to best help satisfy these needs can then be properly specified.
Feasibility-related causes Problems re technology (3) Poor systems engineering Funding difficulties Inadequate estimating (2) No value engineering	<ul style="list-style-type: none"> • These are primarily technical-related activities to help establish the feasibility of the project, & accurately define it. • These are primarily financial-related activities to help establish the feasibility of the project, & accurately define it.
Project definition-related causes Unclear success criteria Unrealistic project baselines Poor project definition (3) Changing sponsor strategy Commitment escalation	<ul style="list-style-type: none"> • Generally speaking, these project-definition related causes come about through inadequacies in one or more of the previous sub-groups of causes • These could happen at any time, but are essentially initiation-related, even if occurring in later phases

Figure 4-5: Three sub-groupings of the fifteen project initiation-related causes of failure

We now look at how these three types of initiation-related causes relate to the generic project initiation flow-sheet proposed in Figure 4-4.

Relating the three sub-groups of project initiation-related causes of failure with the generic project initiation flow-sheet

The three sub-groups are shown in abbreviated format in the following Figure 4-6.

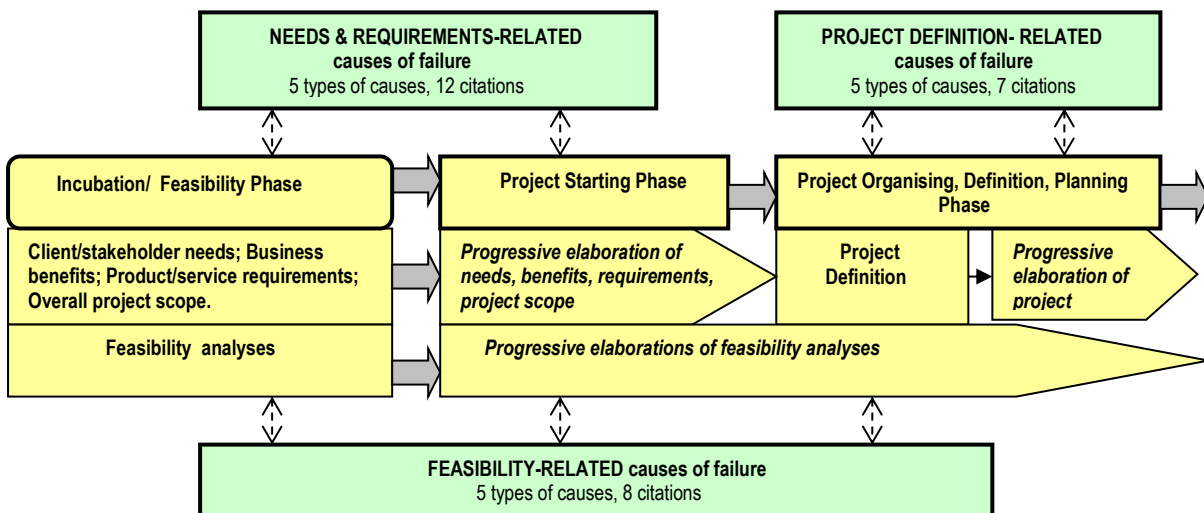


Figure 4-6: Relating the project initiation-related causes of failure with the generic project initiation flow-sheet

Figure 4-6 clearly indicates that many, if not most, of the project-initiation causes of failure are concerned with lack of appropriate project management-related inputs into all three phases of project initiation processes. We will look at these in the contexts of project-based organizations, and then production-based organizations.

TWO DIFFERENT TYPES OF ORGANIZATIONS THAT UNDERTAKE PROJECTS

I now re-introduce two quite different types of organizations that plan and execute projects, first discussed in the third article of this series. I follow Cooke-Davies 2002 in describing them as project-based and production-based organizations, and borrow from Archibald et al 2012 (who use different descriptors) in defining them:

- **Project-based organizations** derive most (if not all) of their revenue and/or other benefits from creating and delivering projects.
- **Production-based organizations** derive most (if not all) of their revenue and/or benefits from producing and selling products and services. They utilize projects to create or improve new products and services, enter new markets, or otherwise improve or change their organizations.

Project initiation-related causes of failure in project-based organizations

In my experience in several project-based organizations, a project manager is normally involved right from the start in the Incubation/ Feasibility phase. It was a natural consequence of how such organizations work.

If circumstances happen to be such that the project manager is not appointed until later on in the project initiation phases, then the project manager and/or the project-based organization has/have a lot of work to do. No empowered project manager, or respectable project-based organization, would (or should) dream of taking responsibility for a project until fully satisfied that all preceding project initiation activities had been done in detail, and to an acceptable standard. Failure to do so would be absolutely inexcusable, for rather obvious reasons.

Project-based organizations are not necessarily immune from over-zealous advocacy, over-enthusiasm to start and "get some runs on the board", and the like. However, they normally have checks-and-balances mechanisms to counter such tendencies, so that they should generally not get out of hand.

Project initiation-related causes of failure in production-based organizations

As Archibald et al 2012 indicate, in production-based organizations, the roles associated with executive sponsor and project manager work in the Incubation/ Feasibility phase are generally scattered between various people within the Business Development, Marketing and Strategic Planning departments.

However, judging by the variety and frequency of project initiation-related causes of failure in Figure 4-6 above, much the same appears to also apply in both the Project Starting and the Organising, Definition, Planning phases in many production-based organizations. Evidently, project management is seen as an execution-only discipline in such organizations, and is accorded little, if any, involvement in the project initiation phases.

In the context of mega-projects, Klaver 2012 reported an observation by Ed Merrow, President of the research firm Independent Project Analysis (IPA) as follows:

It's interesting to note that project management professionals are rarely the actual source of the failures – most are caused by business professionals who too often do not understand the basics of the projects they put off the rails, Merrow said.

If Merrow is right – and he has abundant research materials to support such a statement – then a major problem to be overcome is the ignorance of general managers in such organizations about the nature of projects, and of the benefits of, and necessity for, early involvement by project managers in initiating projects in their organizations.

This suggests that the following types of processes could be put in place to progressively inform and educate general managers of such organizations about the types of contributions project management could, and should, make to project initiation processes.

INCREASING “PROJECT” SUCCESS BY INCREASED PROJECT MANAGEMENT INVOLVEMENT IN PROJECT INITIATION PROCESSES

A progressive persuading / educating approach to general management

Essentially the following approach involves progressive steps in persuading general management to increase involvement by project managers in project initiation processes. It starts at the project definition phase, by advocating increased involvement in checking its adequacy, and hopefully then in developing it. If successful, this would logically lead to increased involvement in earlier phases, ultimately leading to involvement from the outset.

This, in turn, could be facilitated if the project managers involved could demonstrate substantial general business know-how in addition to their project management know-how. This is reflected in Merrow's recommendation for “More business education for project professionals” (Klaver 2012)

Figure 4-7 relates these approaches to increased project management involvement with the basic project initiation flow-chart of Figure 4-4.

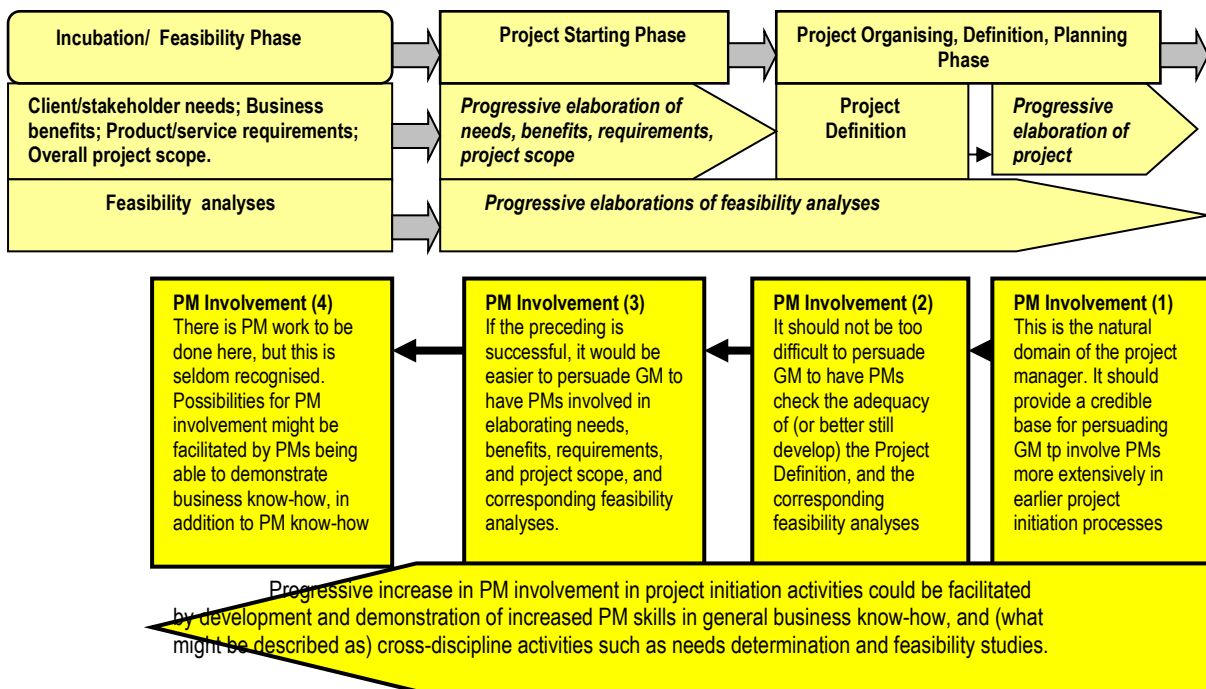


Figure 4-7: Possibilities for increasing “project” success by involving project managers in initiation processes

The four *PM Involvement* boxes are essentially a progressive elaboration of the persuading / educating approach to increasing project management involvement in project initiation processes. The block arrow below repeats the desirability for project managers to be seen as having substantial business know-how, and adds what may seem to general managers as cross-disciplinary skills, such as know-how in needs determination and feasibility analyses.

Finally, it is also recognized that many production-based organizations do, in fact, involve project managers in project initiation phases, but to varying extents. However, there is substantial evidence that this arrangement does not always work out as well as it should, and that partial involvement needs to be extended to full involvement in all project initiation activities.

The desirability of having all PM bodies of knowledge, educational programs, etc., specify all project initiation activities as integral phases of the PLC

There are two main reasons for having all PM bodies of knowledge, educational programs, etc., specify all project initiation activities as integral phases of the project life cycle (as already outlined in the third article of this series):

- As an essential element in helping support claims of project management “ownership” of all project initiation activities;
- As active guidelines for people actually undertaking such activities.

RELATING OTHER CAUSES OF FAILURE WITH SUCCESS LEVEL 2

Lack of organizational support causes of failure

Lack of organizational support causes

Lack of top mgt support (3)
Inadequate governance
Lack of training
Lack of PM focus
Lack of PM culture
Resource mgt. problems (2)
No leadership stability

These lack of organizational support causes of failure, identified in the second article of this series, are not likely to be relevant in project-based organizations. They would be most likely to have come from production-based organisations, particular of the type discussed above, where general management does not understand project management.

If the above strategies for increasing project management involvement in project initiation activities succeed, then at least some of these causes of failure would likely be ameliorated, or even eliminated.

Other external causes of failure

Other external causes of failure

Inflation
Adverse geophysical conditions
Unsupportive political environment (2)

These other external causes of project failure are often discussed in the literature in the context of overall risk management.

Under appropriate circumstances any of these could be relevant to “doing the right project”.

Project management leadership-related causes of failure

PM leadership-related causes of failure

Relationships management
Lack of trust
Poor delegation
Lack of focus
Lack of commitment
No clear team objectives

The most relevant of these six causes at Success Level 2 appears to be relationships management. Clearly the art of persuading general management to involve project management more intimately in project initiation processes calls for superior skills in relationships management. Therefore this leadership skill is very relevant. The relevance of the other causes listed would probably vary with the nature of each organization.

Project management operational causes of failure

These can, of course, strongly affect the project outputs and outcomes. However, these types of causes have already been discussed in some detail in the third article of this series, and will not be expanded on here.

That concludes this brief coverage of relating other causes of failure with Success Level 2.

SUMMARY/CONCLUSIONS

The causes of failure that are most relevant to Level 2: “Project” success – “doing the right project” – are project initiation-related – i.e. getting the “front-end” right.

A model of project initiation activities was developed, to facilitate a more detailed examination of this relevance. Initially this utilized a six-phase project life cycle, which included three project initiation phases. A generic project initiation flow-sheet was then developed from this model.

The three groups of project initiation-related causes of failure which had been previously identified were arrayed against the generic project initiation flow-sheet. This showed clearly that these causes of failure are concerned with lack of appropriate project management-related inputs into all three phases of project initiation processes. These were then broadly reviewed in the contexts of project-based and production-based organizations.

- ***In project-based organizations***, project managers are usually appointed straight away, and are immediately involved in project initiation processes.
- ***In production-based organizations***, all too often the work associated with all three project initiation phases is done by non-project people. This appears to account for many of the project initiation-related causes of failure. Evidently, project management is seen as an execution-only discipline in such organizations, and is accorded little, if any, involvement in project initiation.

A progressive persuading / educating approach to general management for increasing involvement by project management was then developed, as follows:

The recommended approach is to first press for project management involvement in the project organizing/definition/planning phase, to demonstrate its utility. Then to press for involvement in earlier phases of project initiation, and thence progressively convince/ persuade/ educate general management about the benefits of involving project management in all project initiation phases.

This also reinforces an earlier recommendation from the third article that it is highly desirable to have all project management bodies of knowledge, competency standards, educational programs, etc., specify all project initiation phases and activities as integral phases of the project life cycle.

The next article in this series

The next article is concerned with Level 3: “Business” success (“doing the right projects right, time after time”). This extends consideration of project origination back into organizational strategic formulation and planning, and the development of strategic portfolios of program and/or projects to implement strategies, with a focus on how to increase project management involvement in these processes.

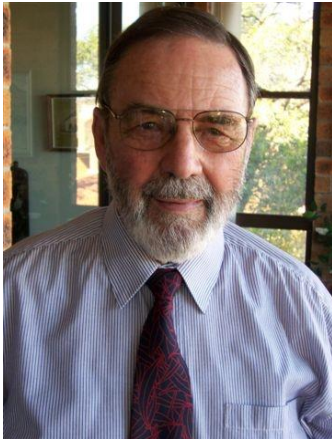
ACKNOWLEDGEMENT

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Alan Stretton is one of the pioneers of modern project management. He is currently a member of the Faculty Corps for the University of Management & Technology (UMT), USA. In 2006 he retired from a position as Adjunct Professor of Project Management in the Faculty of Design, Architecture and Building at the University of Technology, Sydney (UTS), Australia, which he joined in 1988 to develop and deliver a Master of Project Management program. Prior to joining UTS, Mr. Stretton worked in the building and construction industries in Australia, New Zealand and the USA for some 38 years, which included the project management of construction, R&D, introduction of information and control systems, internal management education programs and organizational change projects. He has degrees in Civil Engineering (BE, Tasmania) and Mathematics (MA, Oxford), and an honorary PhD in strategy, programme and project management (ESC, Lille, France). Alan was Chairman of the Standards (PMBOK) Committee of the Project Management Institute (PMI®) from late 1989 to early 1992. He held a similar position with the Australian Institute of Project Management (AIPM), and was elected a Life Fellow of AIPM in 1996. He was a member of the Core Working Group in the development of the Australian National Competency Standards for Project Management. He has published over 140 professional articles and papers. Alan can be contacted at alanailene@bigpond.com.au.

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