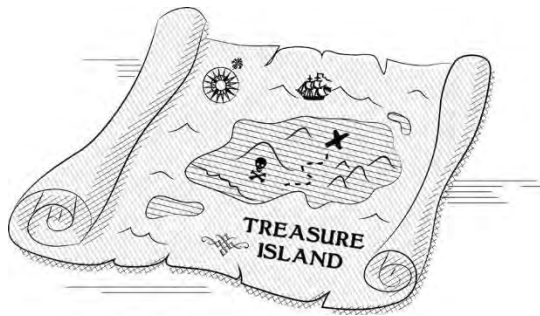


JEREMIE AVEROUS

Practical Project Control Manager Handbook



*From Back-Office Manager
To Trusted Project Strategist*



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Foreword

by Jonathan Crone

Integrated Project Controls is my passion! When I first started my career as a Quantity Surveyor I found myself in an industry that focused more on fixing the problems that had occurred than addressing the potential problems that may arise. Fortunately I worked for a company that believed there was a better way of delivering projects and was introduced to the principle of Integrated Project Controls.

Since that time I have worked in several project environments, across different sectors, in different countries and within different commercial arrangements. Whilst not all of my projects have been delivered using the Project Controls approach, I think it is safe to say that it is no coincidence that the most successful ones all applied these techniques.

On reflection, I believe that success was at least partly due to the rigour that Project Controls brings in setting up the project, developing an integrated structure and providing transparency in giving a 'Candid reflection of Reality' as to the health of the project. I have no doubt that whilst the end product may be very different in different sectors, the actual process of Project Management hardly varies and the Project Controls approach has a place in the delivery of any project.

I was first attracted to Project Controls by the trend curves, enabling the reader to quickly see the course of history and extrapolate potential outcomes. However, in starting to practice Project Controls I soon learnt that there was a lot more depth to it. In fact, my first real test of implementing Project Controls on a major project proved so difficult that at first I wondered if it was worth the extra effort! However, once all of the processes and tools were

established I soon saw the benefit of managing a Project rigorously using the principles of Project Controls. To this day I still hold that project as my benchmark for success.

Implementing successful Project Controls is as much a cultural challenge as it is a technical one. In this book, you are taken through a pragmatic practitioner's journey of how to establish and run Project Controls to give reliable management information enabling timely management intervention. As well as giving practical guide to the technical issues that need to be addressed in establishing Project Controls, such as data structures, systems and the need for 'Accurate not Precise' information, it also gives invaluable guidance to the 'softer' cultural and leadership issues that a Project Controls Manager may face, including some key 'watch-outs' in the relationships that need to be built with the Project Team.

The Project Control Manager Handbook is both informative and easy to read. It would sit comfortably in any Project Delivery professional's bookcase.

Jonathan Crone MBA, BScHons, RICS, FAPM

January 2016

*Director of the Programme Management Office,
High Speed 2 Ltd*

Formerly Global Head of Project Controls, Subsea7

Preface

This book complements our Project Control trilogy, which covered Cost Control, Project Risk and Schedule Management. It pulls all these disciplines together with Contract Management and describes the tasks of the Project Control Manager on sizeable Projects.

We believe this is the first book published that specifically addresses the tasks of the Project Control Manager during the Project execution lifecycle. Initially conceived as a short summary, it has grown to a full-blown reference handbook under the influence of many comments received on the draft versions.

Project Control Managers are a somewhat rare occurrence in the Project world. While the full-time position is only justified on sufficiently large or complex Projects, it is then essential in terms of support to the Project Manager in particular if the incumbent is able to fill the strategist role.

Unfortunately, I am still encountering too many Project Control Managers focused on data crunching and reporting, with no time for real analysis and forward thinking. Project Control Managers' duties have to include setting up the processes and systems to minimize the time spent on these mechanical tasks during Project execution. This allows more time on analysis, forecasting, scenario planning and strategy development and implementation.

This handbook gives practical advice on how to achieve this ambition, in particular with a clear roadmap for Project start-up which is the essential moment when the future capabilities of Project Control will be determined. Invest at Project start-up, and you will reap the fruits during the entire Project; if you don't, you will spend the rest of the Project miserably trying to play catch-up as some parts of the Project will spin progressively out of control.

A proper Project setup might involve, from time to time, investing in Project-specific tools and software if they are not provided by the wider organization; this minor investment (relative to the size of large Projects) will be more than offset by the gain in terms of control, visibility and forecasting ability for the Project Manager.

Moreover, the most successful Project Control Managers have a substantial Soft Power capability. Because their role is essential in assuring proper communication within the Project and with key stakeholders they need to be able to communicate and listen effectively. They also need to be able to feel the pulse of the team and raise issues related to possible dysfunctions. This softer side is often neglected or downplayed, yet it is what will ultimately make the Project Control Manager an effective strategist and irreplaceable support for the Project Manager.

I hope that this book will inspire more Project Control Managers to apprehend their role as strategists and become the trusted advisors to the Project Managers. This will in turn certainly improve the success ratio of their Projects.

Jeremie Averous

Singapore, January 2016

Introduction to Project Control

Why Project Control?



A Project is like an intercontinental sailing navigation. When executing a Project, one needs to define the goal and a plan to reach it; then, fit out a vessel with the appropriate quantities of fuel and supplies to last for the long voyage, and finally, recruit the right crew.

When the vessel has finally left the shore to begin the uncertain voyage towards a new continent, left to the forces of the sea, the currents and the winds, there are three fundamental navigation questions that require an accurate response, on a regular basis:

- What is our current situation compared to the baseline?
- Where are we heading to (if we continue according to the present trend)?
- What adjustments do we need to do to come back on course (baseline) if we find we deviate?

The outcome of these three questions leads to a decision that needs to be taken consciously - in the present circumstances, whether or not to amend the current course of the vessel, or the sails' configuration.

In our previous handbooks on Cost, Schedule and Risk we have examined how to answer to the three fundamental navigation questions in those respective areas:

- Where are we? What is the level of the resources? What is the actual progress?
- Where are we heading to with the current trend? Will we reach before we exhaust our resources? Do we have enough contingency reserves remaining for uncertainties?
- What adjustments do we need to do to reach our goal in a reasonable time and not starve before we arrive? Can we recover to the baseline or do we need to figure out a new plan?

In this handbook we explore how to bring all these aspects consistently together to inform the decision of the Captain.

Project Control as a discipline is about bringing together in a consistent manner the actual and forecast information from Cost, Schedule, Risk and Contract Management so as to inform the decisions of the Project Manager. On Large, Complex Projects this warrants a full time senior position on the Project Management Team.

This role is quite similar to the particular position of the onshore routing team in modern high seas racing, which serves to advise the Skipper on the best trajectory, taking into account available weather and sea-state information.

Project Control should not just be seen as an under-deck or onshore back-office position. It needs to be in the midst of the action, and become the strategist of the team. In reality the Project Control Manager might be the only member of the Project's senior management outside the Project Manager that is able to Project himself in six months to one year time while most of the others concentrate on the immediate tasks at hand.

The ambition of this handbook is thus to formalize the role of Project Control in Projects, as no other specific book dedicated to that topic seems to exist. It intends also to highlight the need for Project Control Managers to grow into their strategy and long-term guidance role to become an

effective trusted advisor to the Project Manager on these long distance expeditions.

A practical handbook

This handbook has been specifically written in the particular context of Large and Complex construction Projects.

Contrary to the previous handbooks on Cost, Schedule and Risk, this handbook intends in a way to be a ‘starters’ guide to Project Control, due to the lack of existing literature on the subject. At the same time it tackles also relatively advanced topics, consistently with the experience level of Project Control Managers.

We will not repeat here the specifics of Cost, Schedule and Risk Management and refer to our other handbooks as necessary for the specifics in those fields. This explains why this book is less thick than might have been expected, as it only focuses on the added value of the Project Control Manager.

Because we recognize that readers might want to refer directly to specific Chapters depending on the issues they are facing, the Chapters have been written in a self-contained manner with reference to other relevant Chapters and our other specialized Handbooks for the details. This creates some concept repeat and cross-referencing which are done on purpose.

Our expectation is that well worn-out copies of this handbook will be found on every Project Control Manager’s, Project Manager’s and Project Sponsor’s desk.

The handbook’s structure

Chapter 1 introduces and defines Project Control, describes its scope and its fundamental principles. Keeping with the structure of our other handbooks, Chapter 2 then exposes overall key Golden Rules for Project Control which will be detailed in further Chapters.

Chapters 3 and 4 cover the essential moment of Project start-up. Chapter 3 discusses the general challenges and describes the Project start-up process in general. The specific role of Project Control, what we call the 'builder' role is described in Chapter 4: setting up the required processes and structures to properly keep the Project under control during its execution. It is absolutely essential to build tension in that area from the first day of the Project.

Chapter 5 to 8 cover the 'conventional' roles of Project Control during Project execution. Chapter 5 covers data collection and processing, where the Project Control Manager plays the role of data assurance manager. Chapter 6 deals with assuring proper internal communication during Project execution. Chapter 7 covers essential transverse processes for Project success, in particular Management of Change, external Interface Management and post-award supplier and contractor control. Finally, Chapter 8 elaborates on the need and the means to maintain consistency between Cost, Schedule, Risk and Contract Management at all times.

Chapter 9 describes how independent Project reviews and data checks should be used to the benefit of the Project, as an independent line of defence.

Chapter 10 tackles a recent advance in team coordination, sometimes called 'visual management'. Providing the team with relevant, real-time, visually expressive dashboards that can be shared is a very effective manner to contribute to proper decision-making and team alignment.

Chapter 11 then exposes the strategist role of the Project Control Manager and how this role should develop in the Project. This is where the Project Control Manager really becomes the trusted advisor to the Project Manager.

Keeping with our Project Soft Power approach to Project leadership, Chapter 12 delves into the softer aspects of Project Control. It is not possible to properly control a Project while ignoring these aspects which greatly influence Project team effectiveness and ultimately, Project success.

Finally, a short Chapter 13 explains the few steps that need to be taken from the onset of the Project for a successful Project close-out: contrary to common understanding, Project close-out is a process, not just a moment in the Project.

As in our other handbooks, Chapter 14 summarizes how to assess effectively the quality of the Project Control process. The Chapter contains a number of easy-to-use reference checklists for Project reviews. They are complemented by useful checklists for Project tender/feasibility study, start-up, close-out and monthly Project Control reviews in the appendices.

Who is this handbook for?

This handbook is explicitly for Senior Executives of Project-driven organizations, Project Sponsors and Directors of Projects, Project Managers, Project Control personnel and all those that aspire to become Project Managers or Project Control Managers.

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