

JEREMIE AVEROUS

# **Practical Cost Control Handbook for Project Managers**



A Practical Guide to Enable Consistent  
and Predictable Forecasting  
for Large, Complex Projects





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We have found that organizations find great value to have their own internal handbooks to cover project controls issues. These full-color, custom-branded handbooks can be spread to a wide population.

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# **Foreword by Bruno Chabas, CEO, SBM Offshore**

*“Prediction is very difficult, especially if it's about the future”*  
– Niels Bohr

This truism is particularly relevant for project based organizations where success can only be achieved by anticipating the potential outcomes at completion of a project and taking the right stewardship decision when one can still influence the outcome. As such, having a sound process for controlling and forecasting project costs is a fundamental component of project-driven organizations and a necessary complement to competent personnel and relevant systems. Still, the importance and specifics of this discipline are too often misunderstood and underestimated, with the risk to create difficult situations where organizations must publicly admit that their projects have not been properly controlled and forecast in a context of unexpected financial results.

Project Managers and their management must be in a position to take the right decisions. Projects are specific, non-repeatable, risky ventures that require special approaches in terms of forecast and financial reporting. The Cost Control function is there to establish the best possible project forecast based both on a good understanding of the business and a sound application of fundamental financial principles.

Senior Management of project based organizations and their Project Managers must hence understand what it takes to implement proper Cost Control. They need to be able to challenge their teams and understand whether they are producing the right data. This Practical Cost Control Handbook is, to my knowledge, the first book that puts together, in an easily readable format, the fundamental best practices in the field of Cost Control, forecasting and financial reporting for large and complex projects. It should

be a must-read for all project management professionals involved in large, international, multi-year projects.

Notwithstanding process issues, both a culture of openness and the principle of candidness, as well as the willingness to deal with reality rather than hope, are essential. Cost Control will often be amongst the first project contributors in the difficult situation of challenging management to accept a different view of the project outcome. At the end of the day, the ability of the organization to take onboard and examine this challenge without ‘shooting the messenger’ is essential to sustainable success.

Cost Control is a very serious matter. Sufficient focus needs to be provided from senior management, and it needs to be manned with high quality resources. From my experience, the investment in a very strong Cost Control function is always worthwhile for the sustainable development of project-driven organizations. I certainly hope that with this book, this need will be recognized and understood more widely.

Bruno Chabas

Monaco, June 2014

# Introduction to Project Cost Control

## What is the Issue?



A project is similar to an intercontinental sailing expedition. 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.

The days are long gone of the adventurers that cast off without any idea of goal or direction; but it still happens too often that they do not load the right amount of fuel, money or provisions before casting off.

Historically, purveying ships and then managing supplies and money was so important on seagoing vessels that a specific licensed position was created as early as the 14<sup>th</sup> century in the Royal Navy: the 'purser'. This position continues to exist nowadays. The 'purser' is an officer in charge of the accounts and documents of the ship and he also kept money and valuables for crew and passengers.

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, three fundamental purveying questions need to be responded accurately on a regular basis:

- What did we spend and how does it compare to the budget/forecast?

- What is our analysis of the causes of variance? How much more will be spent if we continue the current trends? Will we then be able to finish the voyage before we exhaust our supplies?
- What needs to be done to finish the voyage in good conditions and according to our original objective?

## **Keeping the eye on the Cost Control basics**

Even in leading and mature project-driven organizations, we still observe remarkable project reporting failures that occur due to the lack of understanding and application of basic principles of project Cost Control.

These failures or inadequacies lead to difficult situations for management and for the organization as a whole. At company level, the revelation of unanticipated degradation of large individual projects' results can have very significant consequences on the company's reputation. The trust of the investors on the ability of company management to maintain control of their business can be deeply eroded, often propelling the share price into a long and painful downward slippage.

Project Value Delivery has decided to produce this handbook as a way to disseminate basic project Cost Control principles in a very practical and applied way.

This handbook thus aims to reinforce, and spread to all relevant project management personnel the knowledge and understanding of practical Cost Control for projects.

It does not intend to be a 'starters' guide to Cost Control. Nevertheless, because it is often worth revisiting basic principles, it does so in the context of large, complex projects.

## **A practical handbook**

This handbook has been specifically written in the particular context of large, complex construction projects, having in mind the most complicated Cost Control application: the Cost Control from the Contractor's perspective — and not so much from the Owner's perspective. In the handbook, "Client" will be used to

designate the contractor's client or, in the case of Owners, the facility budget holder.

The handbook is designed to outline educational and practical step-by-step explanation of the most important Cost Control principles.



We will use the historical ship drawing on the left to highlight those sections that refer to the principles of navigation.

Those sections will form a thread running throughout our Project Controls books (Cost Control, Schedule and Risk), where traditional navigation tools and processes are quoted as an image that put the concepts in perspective.

Our intent is that well worn-out copies of this handbook will be found on every Cost Controller's, Project Control Manager's and Project Manager's desk.

## The Handbook's Structure

Chapter 1 describes in detail what Cost Control is in projects, how it is different and how it should interface with Finance/ Accounting.

Chapter 2 covers a number of Cost Control Golden Rules that summarize key principles that are essential to follow.

Chapter 3 and 4 explain where the emphasis needs to be placed to respond best to the project needs for each project stage. Chapter 3 covers the necessary setup activities at project start-up, and Chapter 4 covers the subsequent stages of project execution.

Chapter 5, 6 and 7 focus on Forecasting and related reporting. Chapter 5 describes the fundamentals of cost Forecasting and how to apply them in large projects. Chapter 6 exposes how to forecast each type of cost and



revenue in the project. Then, Chapter 7 explains how to reflect those Forecasts in the Monthly Project Reports - including reporting on sensitivities.

Chapter 8 and 9 cover the relationship between Cost Control and financial performance, Chapter 8 covers the advanced topic of time-phasing of cost estimates, including the relationship with Percentage of Completion (POC) accounting and financial performance. Chapter 9 covers the case of multi-entity and multi-currency cost control, issues which are common in most large international projects. These Chapters have been included because Project Managers need to be aware of these subjects without being specialists.

Finally, Chapter 10 cover forensic analysis of Cost Control issues on projects and serves as a wrap-up chapter by covering most shortcomings and issues that can be observed in real-life project Cost Control.

Appendices cover various checklists for Cost Control (monthly and by project phase), and a short reminder on the principles of Earned Value Management.

## Topics not covered in this handbook

This handbook is aimed at the practice of project Cost Control. While it covers extensively the input from Cost Control to Finance, in particular regarding the establishment and maintenance of an exhaustive *project cost model* for the project (in source currency and time-phased), the following topics are not covered in this handbook:

- Details of accounting for variable exchange rates and currency hedging,
- Contractual and tax strategies that lead to split a Main Contract in several contracts involving several entities,
- Strategic management of project bottom line beyond the remit of the Project Manager, when applicable,
- Legal entity income tax and related optimizations.

The handbook also does not cover estimating stages prior to project execution kick-off, or feedback on

estimating accuracy after the start of project execution. It assumes that project estimating during the proposal phase has been robust enough to allow proper project budgeting.

## **Who is this handbook for?**

This handbook is explicitly for Project Sponsors, Project Managers, Project Controls personnel and all those who aspire to become Project Managers; budget owners within projects (package delivery managers, etc.) as well as functional managers that are involved in Cost Control.

Finance personnel involved in project-driven organizations will also find this book useful to understand some of the reasons driving financial results recognition in the context of projects' execution. Financial analysts involved in the valuation of project-driven companies will also find useful concepts to understand the reality of project performance reporting.