

Marmaray Project: Project Management, the Marmaray Project

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ABSTRACT: The Bosphorus Crossing and the Commuter Rail upgrading project is one of the most complex major infrastructure projects being implemented in the world. The complexity does not only include major challenges of a technical nature but also challenges of more indefinable character like the funding set-up of a 3 billion US\$ project originating from different sources, the complex nature of the necessary permissions and approvals from the relevant authorities, the cultural differences in a region where Europe meets Asia and the complexity of the organizations of the stakeholders.

This paper will describe the processes and the main philosophies used for managing the Project seen from the perspective of the Employer's representative, Avrasyaconsult. The paper will furthermore describe the challenges that have to be addressed establishing new organizations and effective procedures when senior staff with many different nationalities and backgrounds have to be brought together in a very limited time period and with limited resources for the purpose of producing top quality Enquiry Documents for the Project.

The paper will address the managerial challenges we have been facing because the contract concept is based on the Conditions of Contract for the FIDIC EPC/Turnkey Projects or better known as the "Silver Book". The paper will describe the inherent problems all organizations of this nature will face during the coming 5 to 10 years if they use the "Silver Book concept" simply because it takes decades to change the mindset of managers and engineers from an Employer's-design type of concept to a design-build concept.

The paper will as conclusions outline the lessons learned so far and what can be done better next time a similar challenge lies ahead of us.

1 INTRODUCTION

The management of modern mega-projects is usually based on the ideas and principles of the ISO9001 and related standards. The problem with this set of standards is that the principles may be clear but they are very general, and the principles, terms and definitions are – in the opinion of the author – focusing on and adopted to organizations of a "going concern" where cultures, business principles and attitudes are developed during generations. Furthermore, the ISO standards are written by Quality Managers for Quality Managers and not by Project Managers for Project Managers. Therefore, it takes effort and time to develop management systems suitable for a project and on these types

of project time, in the early days of the project, is a very limited resource.

A project organization is established and based on senior managers and engineers being brought together in a very short time period and as these engineers and managers invariably have different backgrounds, experience, cultures and nationalities they cannot by their nature form a homogeneous project team in the early days of a project.

The engineering and management services that must be provided by Avrasyaconsult the Employer's Representative on the Marmaray Project – were procured through a competitive bidding process that started in 1999, however, the contract was not awarded until February 2002 with work starting a month later.