Chapter 11
Implementing Integrated Planning: Organizational Enablers and Capabilities

Lone S. Ramstad
MARINTEK, Norway

Kristin Halvorsen
MARINTEK, Norway

Even A. Holte
MARINTEK, Norway

ABSTRACT
Transferring the IO principles to the planning domain has led to the development of the concept of Integrated Planning (IPL). The concept represents a holistic perspective on planning, emphasizing the interplay between planning horizons, between organizational units, and among cross-organizational partners. Based on findings from three case studies, the purpose of this chapter is to present how three companies in the oil & gas industry has approached integrated planning, illustrating some of the challenges they have experienced in the planning domain. With the findings as a starting point, the authors identified three enabling factors that need a particular focus when implementing IPL: ICT tools, roles & processes, and arenas for plan coordination. In addition, the authors argue that in order to succeed in implementing integrated planning practices, as well as continuously improving these, human and organizational capabilities need to be cultivated, and focus here on four salient features of an integrated planning practice: competence, commitment, collaboration, and continuous learning.

DOI: 10.4018/978-1-4666-2002-5.ch011
INTRODUCTION

“Planning” is an imaginative and discursive practice (now underwritten by a wide range of more or less effective technologies) through which actors project what they might do and where they might go, as well as reflect on where they are in relation to where they imagined that they might be. (Suchman 2007:13)

With the prospect of increasing oil production, lowering operating costs, and prolonging field lifetimes, the petroleum industry is actively working to improve its ability to operate in an integrated and efficient manner across geographical, organizational, and professional boundaries. This effort is labelled Integrated Operations (IO) and it focuses on new technologies and enhanced work processes for improved decision making and safer, more efficient production.

As such, it can be said that IO is closely connected to Process, People, Technology and Organisation/ Governance (PPTO). and where the complex interaction among these four dimensions must be addressed for successful business transformation (Edwards T. & Mydland Ø., (2010), Using the concept of a capability platform (as described by Henderson et al. Chapter N) emphasizes the synthesis of people, process, technology and governance, where no single dimension is more important than other. layers.)

Transferring the IO principles to the planning domain has lead to the development of the concept of Integrated Planning. Traditionally, the various domains of an asset, such as reservoir management, drilling, operations and maintenance, all have their separate activity and resource plans specific for their domain. These plans enable them to prepare for and follow up on their various operations and ensure that appropriate material and human resources are available for the specific tasks. Unfortunately, the different domains more often than not function as separate “silos” with little or ad hoc collaboration between them, and this way of planning and organizing of activities leads to an atomistic operational picture and inefficient resource management for the asset as a whole. The concept of Integrated Planning addresses these issues and lifts the goals of IO into the field of planning and deviation management. As such, Integrated Planning constitutes a holistic planning philosophy, and for some organizations perhaps a new organizational function, enabling the organization to manage operational plans across domains and handle continuous deviations in an optimal manner for the asset as a whole.

The IPL concept represents a real-time, holistic perspective on planning emphasizing:

- The interplay between different planning levels: strategic, tactical, and operational;
- The interplay between organizations, units, professions and groups that are involved in planning and execution;
- The critical interdependencies that have significant consequences for operational performance; and
- Feedback loops for continuous improvement of integrated planning processes.

The purpose of this chapter is to present findings from three case studies on integrated planning in the oil & gas industry and illustrate some of the challenges these companies experience in the planning domain. Based on the studies, we identify three enabling factors that prove to be significant for implementing IPL: ICT tools for aggregating and visualizing plan information; Roles and Processes for describing best practice; and Arenas for Plan Coordination. Designing and implementing such enablers, however, does not alone allow for a realization of the potentials inherent in IPL. Our studies illustrate clearly that IPL practices need to be fostered through human and organizational capabilities at the level of mindset and culture. We therefore discuss four salient features of organizational culture that need to be cultivated in order to continuously improve integrated planning practices: Competence, Commitment, Collaboration, and Continuous Learning.