

ABSTRACT

In order to achieve these targets, large-scale investment is needed, especially in the upstream oil and gas sector which is fast and aggressive and fulfilled from the aspects of cost, quality and time. The crucial part of the project cycle is the execution phase, because it requires large costs, requires good planning and control to achieve project goals. The execution phase in the upstream oil and gas industry is generally in the form of the Engineering-Procurement-Construction (EPC) project.

The EPC project is a more complex type of project than a construction project. The character of this type of project is different from ordinary construction projects. In achieving the success of the EPC project, it is necessary to know the processes that occur in it. The EPC project itself has a very high challenge, starting from the interdependence between existing activities, the overlaps phase between each of these activities, solving activities, into more detailed work activities, the complexity of the organizational structure, and uncertainty in the accuracy of predictions that arise during implementation.

The EPC construction project is in principle the same as Design and Build. The difference is that the projects carried out with EPC construction are large-scale projects. EPC construction projects prioritize Engineering discipline, starting from Engineering, Mechanical Engineering, Piping Engineering, Electrical & Instrumentation Engineering, Civil Engineering. Sometimes in each discipline is broken down again, for example as in the Civil Engineering section is divided into Civil, Structure, Architecture, Underground, HVAC, etc.

Kata kunci: EPC Project, Engineering-Procurement-Construction (EPC) Project, Construction Project.

ABSTRAK

Dalam rangka mencapai target tersebut, dibutuhkan investasi skala besar khusunya di bidang hulu Migas yang cepat dan agresif dan terpenuhi dari aspek biaya, kualitas, dan waktu. Bagian siklus proyek yang krusial adalah tahap eksekusi, karena memerlukan biaya besar, memerlukan perencanaan dan kontrol yang baik untuk mencapai tujuan proyek. Tahap eksekusi di dalam Industri hulu migas pada umumnya dalam bentuk proyek *Engineering-Procurement-Construction* (EPC).

Proyek EPC merupakan merupakan jenis proyek yang lebih kompleks dari proyek konstruksi. Karakter jenis proyek ini memiliki perbedaan dengan proyek konstruksi biasa. Dalam mencapai kesuksesan proyek EPC perlu diketahui proses yang terjadi didalamnya. Proyek EPC sendiri memiliki tantangan yang sangat tinggi, mulai dari saling ketergantungan antar aktifitas yang ada, fase overlaps antar masing-masing aktifitas tersebut, pemecahan aktifitas, menjadi aktifitas-aktifitas pekerjaan yang lebih detail, kompleksitas struktur organisasi, dan ketidakpastian dalam akurasi prediksi yang timbul selama pelaksanaan.

Proyek konstruksi EPC itu pada prinsipnya sama dengan Design and Build. Bedanya, proyek yang dikerjakan dengan konstruksi EPC adalah proyek yang berskala besar. Proyek konstruksi EPC lebih banyak mengedepankan disiplin *Engineering*, mulai dari tahapan *Engineering, Mechanical Engineering, Piping Engineering, Electrical & Instrumentation Engineering, Civil Engineering*. Kadang di tiap disiplin dipecah lagi, misalnya seperti pada bagian *Civil Engineering* dibagi menjadi *Civil, Structure, Architecture, Underground, HVAC*, dll.

Kata kunci: Proyek EPC, *Engineering-Procurement-Construction* (EPC), Proyek Konstruksi,,