

INTISARI

Berbagai macam kontrak yang dikenal dalam dunia konstruksi. Jenis kontrak dapat ditinjau dari pembagian tugas. Salah satu jenis kontrak berdasarkan pembagian tugas adalah kontrak konvensional, di mana kontraktor ditugaskan sebagai pelaksana saja. Konflik antara pelaksana dengan perencana akibat pelaksanaan yang tidak sesuai dengan perencanaan sering dijumpai. Kontrak *Engineering, Procurement, dan Construction* (EPC) dapat menjadi pemecah permasalahan tersebut. Kontraktor ditugaskan dari tahap perencanaan hingga pelaksanaan. Kontrak EPC diharapkan dapat mempersingkat waktu perencanaan hingga pelaksanaan. Meskipun demikian jenis kontrak ini belum banyak digunakan dalam proyek konstruksi, namun pada proyek-proyek bangunan industri lainnya kontrak EPC telah banyak digunakan. Penelitian ini bertujuan untuk mengkaji bagaimana proses penyelenggaraan proyek EPC.

Studi kasus yang digunakan dalam penelitian ini adalah proyek pembangunan *Water Treatment Plant* (WTP) yang menggunakan kontrak EPC. Data berupa dokumen kontrak EPC dan hasil wawancara dengan orang yang terlibat dalam proyek EPC kemudian dianalisis dan dibandingkan dengan kontrak konvensional.

Hasil analisis menunjukkan proses penyelenggaraan proyek EPC dimulai dari perencanaan hingga pelaksanaan. Perbedaan antara kontrak konvensional dengan kontrak EPC; diantaranya adalah biaya perencanaan proyek EPC sangat rendah (0,97%) jika dibandingkan estimasi standar biaya proyek pemerintah (2,5–2,7%), selain itu penentuan Harga Perkiraan Sendiri (HPS), proses pelelangan, struktur organisasi, dan proses pengadaan material yang lebih kompleks. Permasalahan dalam proyek EPC antara lain sering terjadinya perubahan pekerjaan sehingga terdapat risiko pembengkakan biaya dan keterlambatan proyek.

Kata kunci: kontrak, EPC, *engineering, procurement, construction, commissioning*

ABSTRACT

There are many kind of project contracts. It is divided by the task, payment method, calculation of service and calculation of fee. The type of contract based on the task, arranged task of every element involved. In conventional contract, the task of a contractor is as executor for construction and the task of a consultant is as planner or supervisor. But, conflict between contractor and consultant often occurs in conventional contract. The existence of Engineering, Procurement, and Construction (EPC) can be a solver for this conflict. The task of contractor in EPC project is executing engineering phase until construction phase. Expected by the EPC contract would decrease the time of project. This research was done for knowing how to organize a project with EPC contract.

Water Treatment Plant (WTP) development project was used as the case study which would be compared with conventional contract. Data of research obtained from all EPC project documents. The project documents were used to analyze and compare between conventional contract and EPC contract. All datas that had been collected from EPC project documents were analyze descriptively and compared with conventional contract

The result of the analysis showed how the process of EPC project could be done from the planning until implementation. There are some similarities and differences between a conventional contract and an EPC contract; such as the cost of EPC project planning is very low (0.97%) when compared to estimated planning (2.5-2.7%), other than the determination of Owner Estimate (OE), auction process, organizational structure, and material procurement process which more complex. Furthermore, from the all phases of EPC project, some problems in implementation of EPC project, such as change order due to defining scope of work were not clear and the risk of construction postponement due to retardment in shipment would be faced.

Keywords: *contract, EPC, engineering, procurement, construction, commissioning*