

## Case Study | Involving Stakeholders in Project Control

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### A. Project Characteristics

- Megaproject: the approved budget was about (~) \$700 million US (early 1990's).
- This megaproject had two main sub-projects:
  - One sub-project was modifications to an existing refinery (~\$100 million), and
  - The second sub-project (~\$600 million) was new facilities (grassroots/greenfield).
- The project was on an island, in a country where there were limited labor and technicians.

### B. The Project Owner

- The Project Owner was a joint venture consisting of three companies:
  - 50% (N. America),
  - 40% (N. America),
  - 10% (Asia).
- The 10% company was a joint venture between the 40% company and a government of an Asian country.

### C. The Service Providers

- Project Owner awarded a global contractor (main contractor) an Engineering, Procurement, and Construction (EPC) contract.
- The contract was reimbursable (cost plus), incentive contract.
- The main contractor was ultimately responsible for engineering, procurement, and construction management (UK); construction was awarded to a general contractor.
- The construction's general contractor ended up being a joint venture between three companies (Europeans – mostly Germans).
- Construction labor came from Asian countries, senior construction staff was mostly European and Asian.

### D. Project Management

- The Project Owner was responsible for the overall management of the project (program).
- Most project management team members came from the leading partner but with a few other partners' resources.
- The Owner project management team was split between Europe (UK) and S.E. Asia.

- The owner's project management team members came mostly from North America but also had European and Asian members.
- **The project owner delegated some of the project management activities to the main contractor because of the cost plus-incentive contract.**

## E. Nature of the Contract (Challenges)

- Cost-plus – incentive; means:
  - The primary contractor will be reimbursed for all actual costs.
  - Contractor profit is the incentive amount that they will have to earn.
- The incentive was in three parts:
  - Safety,
  - Time – schedule, and
  - Cost.

The first two incentives were mostly under the control of the contractor. However, the cost incentive was a challenge since the budget was the project owner's budget.

- Contractor cost risks
  - The opportunity: for every dollar contractor save the owner, a percent of savings increased the contractor profit,
  - The threat: over expenditures would lead to a reduction in the contractor profit; possibly going to zero on the cost incentive, and
  - The owner protected the contractor from owner-driven project changes and currency fluctuations.

## F. Dealing with the Challenge (Involving the Stakeholders)

- Owner project control team was limited to 2 resources; mostly one,
- The primary contractor control team had numerous resources,
- As a result, we **unofficially** integrated the project control team as the first step,
- Next step, we identified the main control accounts,
- Each control account had an owner (resident engineer, contract manager, etc.),
- Project control identified the budget for each control accounts,
- Analyzed the accounts for possible cost savings (from project control perspectives),
- Next, we met with each control account owner and shared with them project control perspective,

- Then, we invited the accounts' owners to be proactively involved in the control aspects (they usually focus on implementation) and work with us on identifying more opportunities,
- Once we agreed on the approach, project control provided the accounts manager with management reports and weekly or monthly meetings to discuss status and opportunities.

## G. Results

- Mixed results since not all control accounts owners worked with us closely,
- For most of the cases, the stakeholders' involvement worked well with building relations, which led to cost savings,
- The key to success was: cost-effectiveness reduced the owner costs, which in turn increased the contractor's profit, and led to bonuses for contractor's managers, plus good performance reviews. In other words, it was a win-win-win situation (owner-contractor-people).

## H. Project's Results

- The contractor earned the maximum on safety and schedule incentives and close to the max on cost performance.
- Of course, the above case was not the only reason for this success; other practices played a significant role, such as the innovation in megaprojects, which we shared in another case study.

## End of Case Study