
Globalization of the Engineering and Construction Industry

Session 9: Delivery Systems

Alternate Delivery Systems Project Cycle

- Project Definition
- Design
- Construction

Delivery Systems

- | | |
|---------------------------------|------------------------|
| ■ Planning/Design/
Bid/Build | ■ BTO |
| ■ Fast-track | ■ BOOT |
| ■ Multiple Primes | ■ DBMO |
| ■ Design/Build | ■ Wraparound Addition |
| ■ Turnkey | ■ LDO |
| ■ BOT | ■ BOO |
| ■ Super Turnkey | ■ BBO |
| | ■ Operate and Maintain |

Strategic Planning

- Vision Statement – the Inspiration
- Strategic Plan
- Tactical Planning – the Perspiration

International Practices

The growing popularity of Design/Build practice is due to:

- Shorter schedules
- More effective solutions
- Single source responsibility
- Few legal problems
- Simplified owner administration but requires a sophisticated client or program manager

“Empresas ICA and the Mexican Road Privatization Program”

- The Business Model
- What led to the changes?
- What are the specific risks in Mexican BOTs?
- What would be your recommendations?

ICA

1. 80% of public offer, \$360 million for BOT, 22.5% of all tollways risk balance sheet lending rather than structured. Who will fund overruns?
2. Had gone through booms/busts before.
3. Was business allocated or bid?
4. NAFTA import substitution; Impact on ICA manufacturing
5. Was there a more hazard with Salinas?
6. “Sweat Equity” - now you know what it is.
7. What was ICA’s exit strategy?
8. SCT missing targets in '97 and seeks to securitize the CAPUFE
9. Some hidden subsidies from CAPUFE and PEMEX

Concerns in Pursuing International Concessions

- Inadequate Profit Return
- Toll-Rate or Off-Take Adjustments
- Currency Convertibility
- Currency Depreciation
- Lack of Full Operating Rights
- Lack of and Adequate and Transparent Regulatory Framework
- Reasonable Sharing of Risks and Costs
- Standards and Practices
- Cultural and Language Barriers

The Future International Project Delivery Systems

Increased innovation through alliances with:

- Financiers
- Operator/Owner
- Supplier/Manufacturers/Vendors
- Material Suppliers