

Engineering & Construction Risk Institute Education & Training Webinar Programme



ENGINEERING & CONSTRUCTION RISK COURSE – Module #2



E&C Risk Course Structure



Webinar #	Title	Duration
#1	E&C Risk – Setting the Scene: Introduction to Risk Management	90 mins
#2	Key Risk Area – The Front End: Invitation to Bid, Bid Submission, Contract Negotiation and Award	90 mins
#3	Elements of Best Risk Practices: EPC Project Implementation through to 'Mechanical Completion'	90 mins
#4	Key Risk Area – The Back End: Project Completion through to Project Close-Out	45 mins
#5	Key Risk Area – Inadequate Handling of Change: Change Management Throughout the Project Life-Cycle	45 mins
#6	Key Risk Area – Inadequate Handling of Change: Secondary Impact / Consequences of Change	90 mins
#7	Key Risk Area – Working with Others: Collaborative Working Arrangements in the E&C Industry	90 mins
#8	Enterprise Risk Management: Introduction to ERM	60 mins

Key “Takeaways” from Module #1:

- Cultural Differences, Behaviour and Attitude - Thierry Pilenko’s words
- Risk Management is not easy!
- Important Words – Formalised, Structured, Disciplined, Consistently and Systematically Applied, Common Language
- How to organise for a Well-Managed Company
- Risk Management is now a Career Path
- The Risk Hierarchy – Enterprise, Portfolio/Programme, Project
- Importance of R-B-S
- Classification of Risk and the Uncertainty Spectrum
- Generic Risk and Opportunity Strategies



Source: projectsmart.co.uk

Engineering & Construction Risk Institute

E&C Risk Course – Module #2



KEY RISK AREA - THE FRONT END



Prospect Identification / Screening Process Prior to Decision to “Bid” or “No Bid”



Source: chucksblog.typepad.com

Screening / Early Identification of Risk



- Justifiably, the identification of Risk at Screening / Proposal stage seen as a real area of concern by ECRI Sponsors
- It should, because 70% of issues arising during Project execution can be sourced as not being adequately dealt with at the Prospect Identification / Bid / Proposal stage
- Feedback also indicates a good percentage of Project Risk is due to under-estimating impact of identified Risks during Proposal stage
- So, are the Basic Questions being properly asked and examined:
 - Were we aware of the opportunity before it floated in through the door? If not, somebody else would have been!
 - Is the Prospect aligned with Corporate Risk Appetite and Strategy?
 - Is this Prospect suitable to our capabilities and do we have a high probability of winning? (50%+ in aggregate?)
 - Go / Get



As a First “Acid Test”, Apply the three (3) Deadly Sins Test i.e.
Wrong Client – Wrong Place – Wrong People

Wrong Client

“We hadn’t worked with this particular Client – *or worse* – Developer before!! We didn’t know Client’s reputation for dealing with Contractors!! We didn’t check Client’s ethics reputation!! We were unable to check Client’s financial standing due to Cayman Island Company!! Didn’t know the Client’s likely Key Buying Factors!!”

Wrong People

“We didn’t have the lead people so we recruited from the street and promoted people because we need to develop them!!”

Wrong Place

“We took a LSTK airport expansion Project at La Guardia but had never worked in New York before !! Or, this was our first time in Indonesia!!”

Could be “Corporate Tombstone” Stuff



Source: goodreads.com

Some other Basic Questions need to be examined:

How many, and who are the (likely) other bidders?
Level playing field? Is there a high probability of winning?

What is the Scope of Work / Facilities (the Project) and the Scope of Services (EPC/EPCM) being bid?

Is the Prospect a First-Of-A-Kind (“FOAK”) or a replicate plant?

1. Client (see “Wrong Client”?)
2. Country (worked there before?)
3. Technology / Project Type?
4. New Partner?
5. Not Previously Commercialized etc.



Source: craigmcbreen.com



Source: forum.rice.edu

- Availability of suitably qualified resources to successfully execute the scope of services?
- Is there a need for formation of JV or Consortium due to (lack of expert / experienced resources), sharing of Risk, need to meet local content requirements, required by Law?
- Compensation regime - fixed price or cost-reimbursable? (What's the Corporate Risk Appetite?)
- Are there "Lump Sum" risks hiding in Reimbursable Cost clothing?
- Failure to detect when an apparent "harmless" Target Price actually is, or becomes, a Gmax!
- Always refer to Lessons Learned from Similar Projects / Location / Client plus Tribal Knowledge

Internally, strict compliance with Inquiry Review Process
– No, or late compliance -> No Bid

Difficult to do in tough times but always better to “Decline / No Bid”

No Deal is better than a poorly thought out approach, or a Bad Deal / Contract

Client will probably respect this response or even cause a change in approach on its part
– If Not, could be Wrong Client?

Are the Client’s contract terms and conditions and the likely governing law generally acceptable?

Is a “Standard” Contract format being proposed?
Examine previous history / pitfalls

Local content, bonding requirements (Bid, Down Payment, Retention, Performance), probability of achieving priority provisions / minimum contract requirements?

Invitation To Bid (ITB) and Proposal Preparation / Submission



Source: research.ucr.edu



Select or Pre-qualify the correct entity for the applicable jurisdiction. Consult tax and legal



Upon receipt of ITB, convene kick-off and alignment meeting



Who should attend kick-off meeting?



Primary purpose of kick-off meeting?



Ensure there is ample time to secure applicable management approvals before the bid is submitted



Manage the bid/proposal process like a mini project, including **COST control**



Ensure dissemination of important aspects of Contract - “Read the !x!x! Contract!!!”



Determine what exceptions / clarifications need to be taken to the Client's contract terms and conditions



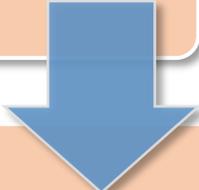
If there is a Joint Venture Partner, enter into a Memorandum of Understanding ("MOU") /Pre-Bid Agreement for an eventual Joint Venture Agreement that will, as a minimum establish:

- agreement between the parties as to Division of Responsibilities (DoR) with respect to the Scope of Services
- what exceptions to the Client's contract will be taken and how, as between the JV partners, the prime contract and other risks will be allocated

Whether bidding lump sum or cost-reimbursable, it is **critical** to understand the Scope of Facilities (Work) and the Scope of Services



Read the Specifications and disseminate important aspects among bid team members



If you don't understand any aspect of the Client's specifications and other requirements, seek clarification before submitting a bid. Must attend all / any Client pre-bid / Jobex meetings



Source: dreamstime.com



Source: seqlegal.com

The Contract Negotiation

The Negotiating Team



- Business Development Manager
- Proposal Manager/Project Manager designate
- Legal (Insurance)
- Others? Part-time by invitation e.g. Project Services, Risk Management, Construction and other Discipline Personnel, Safety Manager etc. as necessary
- Team should have the authority to negotiate, accept and commit the Company up to clearly defined approval / authority limits



Source: smallbusiness.chron.com



Based on the exceptions taken in the Bid



Develop a list of “Priority Provisions”, “Nice to Haves” and “Give-Aways” consistent with Client Key Buying Factors (“KBF’s”)



Negotiating team must understand and be aligned on the strategy



There must be a team leader for the negotiation



Preparation is essential including the development of fall-back positions consistent with internal approvals

Find out who they are! (e.g. use social media)

Get as much background on them as possible (today, making use of social media if necessary)

Find out if they are known to anyone in your organisation and what are their negotiating tactics?

Try to ensure that they also have the authority to commit their Company



Source: cathyalessandra.com

The Negotiation



Armed with the Right Team, a Negotiating Strategy and an Understanding of the Client Team and its KBF's:

Agree

- the rules of engagement with the Client
- Agree a realistic timetable
- Table the Substantive Issues Up-Front

And, Beware of the following:

- Dutch Auctions
- Splitting into teams
- A Client without negotiating authority and inability to commit the Company

Be prepared to “Walk” – No Deal/Contract is better than a Bad Deal/Contract



Source: notredameonline.com

The Negotiation – Risk Allocation



CONTRACTOR / CLIENT RISK ALLOCATION

Typical Contractor Risks	Typical Risks to be Negotiated	Typical Client Risks
<ul style="list-style-type: none"> • Scope / Completeness • Engineering Quality • Procurement • Subcontracts • Shipping / Transport • Construction • Local Content • Costs / Productivity • Escalation • Interfaces • Contractor Security • Etc. 	<ul style="list-style-type: none"> • Basic Design / Feed Qlty. Rely Upon • Soil Conditions • Exceptional Weather / Climatic Conditions • Commodity Pricing • Exchange Rates • Legal / Commercial / Insurance Terms & Conditions / Priority Provisions • Payment Terms • Etc. 	<ul style="list-style-type: none"> • Geopolitical • Country Political • Overall Venture Responsibility • Civil Strife / Unrest • General Security • Site Access • Pollution Responsibility • All Permissions / Permitting • Local Community Impact • Changes in Law • Etc.
<p style="text-align: center;">Contractor Structures its Proposal / Work Processes to <u>CONTROL</u></p>	<p style="text-align: center;">Contractor <u>ONLY TAKES</u> if can be adequately compensated or hedged or finds ways of controlling or a least significantly influencing</p>	<p style="text-align: center;">Contractor <u>MUST AVOID</u></p>



Source: medium.com

If possible, gain control of the contract drafting

Be polite but firm—avoid “table thumping”

When the Client agrees a point, stop talking about it immediately, say thank you and move onto the next point

Focus on the “Priority Provisions” and try to reach agreement on these as quickly as possible making use of the “Give-Aways” where necessary

Each member of the Team should endeavour to develop a positive relationship with their counterpart as early in the process as possible

The “Priority Provisions”

As guidance to the negotiating team, a company should establish certain requirements to be included in its contracts, deviations from which would require the approval of the CEO or Corporate Review Committee



Source: insidesmallbusiness.com.au

Contract terms and conditions that include :

- Well defined scope and specifications that are precise, certain and unambiguous
- Robust “changes/variations” language that includes time and money for directed changes, constructive changes, differing site conditions, force majeure events, changes in law or interpretation of law
- Minimisation of Client involvement and Client approvals in work execution..... and a Client with the ability to pay

The “Priority Provisions”

1. Acceptable Governing Law and Dispute Resolution provisions
2. Release from liability for Consequential Damages
3. Total Liability Cap with minimal carve-outs
4. Acceptable Property Damage risk allocation
5. Cash Positive or Neutral payment provisions, interest on late payment and the right to suspend (and terminate) for non-payment
6. No liability for pre-existing soil conditions, hazardous materials, UXO etc.
7. Acceptable indemnities (linked to Project Insurance Programme), warranty and guarantee provisions
8. Exclusive Remedy provision and limitations apply in contract, tort, strict liability or otherwise



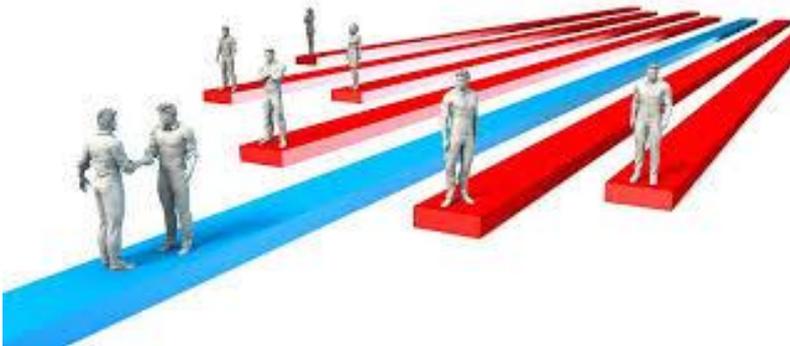
Source: dreamstime.com

The “Priority Provisions”



If cost reimbursable, all of the foregoing, plus:

- Minimize sub-cap on professional liability equal to a percentage of, but no more than, the fee (Better 50%)
- Clear definitions with respect to which personnel are fully reimbursable and which are included in overhead
- Fee structure that isn't eroded by costs
- Re-performance obligation that does not arise until commencement of the Defects Liability Period
- Avoid resultant re-work liability for Material and Labour
- Purchase “for and on behalf of” Owner/Client
- Assistance only with enforcement of vendor guarantees



Source: mtdsalestraining.com



Source: frsecure.com

- ECRI-TC-001 thru -006
- ECRI-PE-001 “A Structured Approach to Post Mortems, Project Close Out & Lessons Learned”



Source: projectsmart.co.uk

Key “Takeaways” from Module #2:

- The Front End of your business process is a Key Risk Area
- Importance of screening and early identification of risk
- The 3 Deadly Sins: Wrong Client, Wrong Place, Wrong People
- Be prepared to “No Bid” if circumstances or risk profile are not right for your company
- Get the right team on board to manage your proposal
- Read the ITB – all of it!
- Deploy the right negotiating team and stick to your strategy
- Secure your “priority provisions” and be prepared to walk away from a bad deal