

Drainage Services Department

Evolution of Partnering Contracts - NEC Trial in Government Projects Tender Preparation & Administration of NEC Contracts

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- Gearing up for NEC Preparation work
- Making NEC work Administration experience
- Observations



Gearing Up for NEC



- DSD NEC trial covers...
 - Different options
 - ECC Fixed Price (A/B), Target (C/D), TSC, PSC
 - Different nature
 - New projects, maintenance works
 - Different scale
 - Projects of varying complexity and scope
 - Different management structure
 - In-house or consultant-managed



Preparation Work



- To launch NEC...
 - Choose the right Option
 - Option selection
 - Prepare tender documents
 - Turning Government works policies to NEC form
 - Industry awareness
 - Contractors' forum, pre-tender meeting
- Assistance by NEC Advisers







- New projects Engineering and Construction Contract (ECC)
 - Option A / B Fixed price
 - Financial risk more on Contractor
 - Option C / D Target cost
 - Fairer risk sharing
 - Option E Cost reimbursement
 - Option F Management contract
- Maintenance works Term Service Contract (TSC) Option A – Priced contract







Project	Estimated cost	NEC Form	Start / Completion
Building and Civil Maintenance to DSD plant and facilities	\$160M	TSC Option A – Priced contract with price list	End 2012 / End 2016
Pak Hok Lam trunk sewer and Sha Tau Kok village sewerage	\$200M	ECC Option B – Priced contract with bill of quantities	Mid 2012 / Early 2017
Lam Tsuen village sewerage	\$120M		End 2012 / End 2015
Fuk Man Road nullah improvement	\$70M	ECC Option C – Target contract with activity schedule	Aug 2009 / May 2012
Happy Valley underground stormwater storage scheme	\$700M		Mid 2012 / Early 2018
Yuen Long and Kam Tin Sewerage	\$180M	ECC Option D – Target contract with bill of quantities	Aug 2012 / Mid 2016



Choose the Right Option



TSC Option A

- Building and Civil Maintenance to DSD plant and facilities
- Certainty of site areas (within DSD premises)
- Scope of works not certain at tender stage
- Option A Priced contracts with price list
 - measure using price list



Choose the Right Option

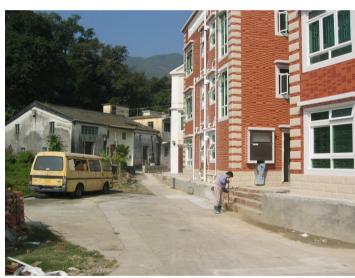


ECC Option B

 Pak Hok Lam trunk sewer and Sha Tau Kok village sewerage

Lam Tsuen village sewerage

- Resemblance to conventional approach
- Familiar



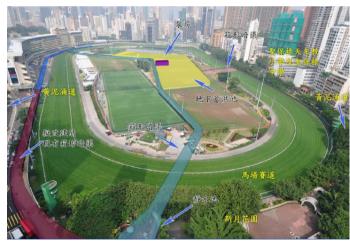


Choose the Right Option



- ECC Option C
 - Fuk Man Road nullah improvement
 - Happy Valley underground stormwater storage scheme
 - Cost saving incentive
 - Fair risk sharing

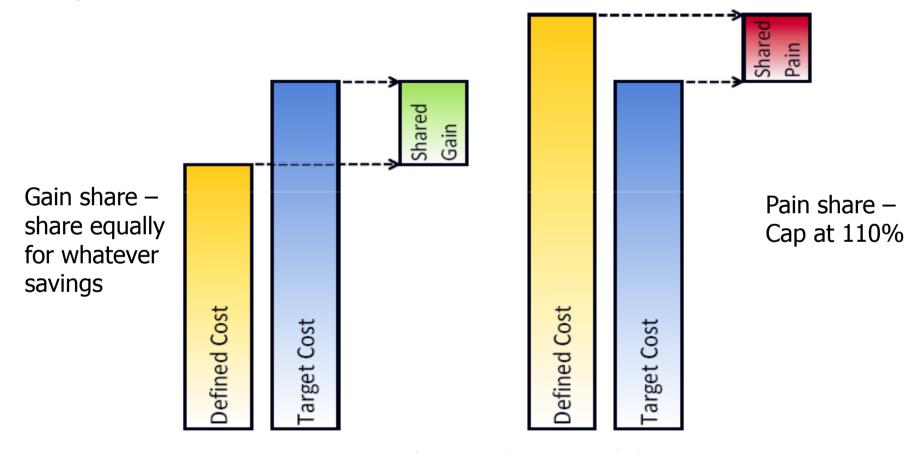












Pain / Gain Share Model







- ECC Option D
 - Yuen Long and Kam Tin Sewerage
 - Cost saving incentive
 - Fair risk sharing
 - Flexibility to use BQ rates for compensation events



Prepare Tender Documents



- Modifications to NEC core clauses
 - Cash Positive to Negative
 - To suit Government practice
 - Inclement weather
 - Adopt GCC criteria
 - Subcontracting
 - For Target cost contract, payment on reimbursable basis
 - Introduce tendering requirements
 - incentive to select most competitive offer







Prepare Tender Documents



- Option Z clauses (additional conditions of contract)
 - Select applicable standard policy conditions in GCC/SCC
 - E.g, Safety, labour and wages
 - Some are put in Works
 Information as appropriate



Industry Awareness



- Before Tender
 - Contractors' forum
 - Invite eligible tenderers
- During Tender



- Enhance understanding
 - E.g., Type of contract (Priced / Target), Fee percentage
- Ensure correct tender submissions
 - E.g., Proper pricing documents





Making NEC Work – Experience from Fuk Man Road Project



Training

- Forming the right team
- Relationship Management
 - Establish a "Partnering" spirit
 - Maintain and improve throughout



NEC Key Features

- Risk management
- Time management
- Compensation event

Drainage Services Department

Black & Veatch Hong Kong Ltd.

Chun Wo Construction & Engineering Co. Ltd.



Training



- Training to team members
 - Employer
 - Project Manager
 - Supervisor
 - Contractor
- At design / tender stage
 - Overseas secondment
- Joint training at contract stage





"10.1 – The Employer, the Contractor, the Project Manager and the Supervisor shall act as stated in this contract and in a spirit of mutual trust and co-operation"

Establish partnering spirit

- Start-up partnering workshop
- Joint NEC training
- Set up joint office

Maintain and improve

- Partnering review
- Champion Group meeting







- Establish partnering spirit
 - Start-up workshop to align mutual objectives:
 - Time 6 months ahead
 - Cost 5% savings
 - Others quality, safety, developing landmark

Supervisor's Assistant Resident

Joint Site Office Engineer

Contractor's Engineer







Maintain and Improve



- Bi-monthly Champion Group meeting
 - Open discussion
 - Review Team's performance, including frontline staff (Pioneer Group)



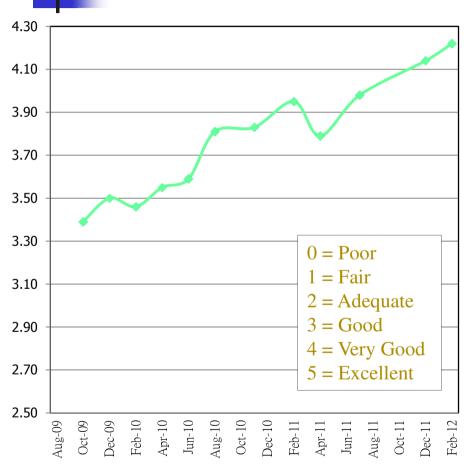
Half-yearly partnering review



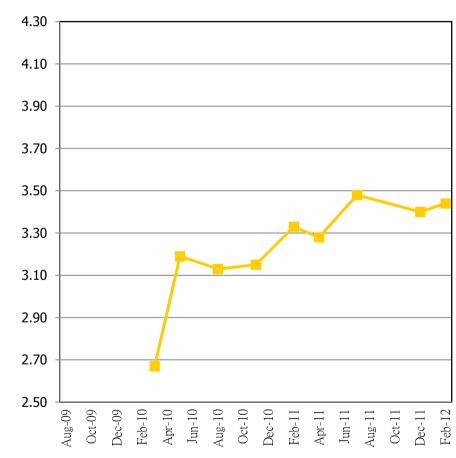
Joint DSD / BV / CW dragon boat team 2011







Partnering score of Champion Group



Partnering score of Pioneer Group



NEC Key Features



- Risk Management
 - Early Warning
 - The C and PM give an early warning by notifying the other asap
 - Prices
 - Delay Completion
 - Affect quality
 - Risk reduction meeting
 - E.g., change in roundabout layout
- NEC Proactive risk management





- Compensation Event
 - Time frame and sanctions
 - Default acceptance if no reply
- NEC vs GCC
 - Quick settlement (pre-event agreement)
 - Unforeseen physical conditions, inclement weather – compensation events
 - TIME and COST
 - Fairer risk sharing



Observations – Fuk Man Road Project



Benefits

- Good working relationship
- Almost 6 months ahead of contract period,
 5% cost savings
- Compensation events
 - Expected to resolve all4 months after completion
- Early warnings
 - 15 early warnings issued
 - Resolved jointly and promptly





Observations – Fuk Man Road Project



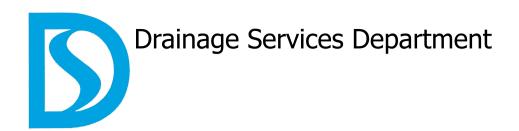
Insight

- Collaborative working at frontline level
 - Need time to adapt
 - Training and team building very important
- Compensation event
 - Time frame stringent, yet need to achieve
 - More resources expected in contract stage
- Review of contract provisions
 - E.g., Subcontracting
 - Review, take into account practical difficulties





- NEC facilitates better project management
 - Time & cost savings, fairer risk sharing, better relationship
- Founded on collaborative and partnering spirit
- Has been successful on Fuk Man Road
- Try, and Learn





Thank You