



Drainage Services Department

DSD NEC Pilot Project – Experience in Option C ECC

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- Running an NEC Contract
- Observations



Background

- **2001 CIRC Report**

- Integrate “Partnering” to contractual relationship
- Alternative procurement, e.g, target cost

- **In 2006, Government decided to take one step further**

- To adopt NEC3 – contractual partnering
- Selected DSD’s project as trial



Background

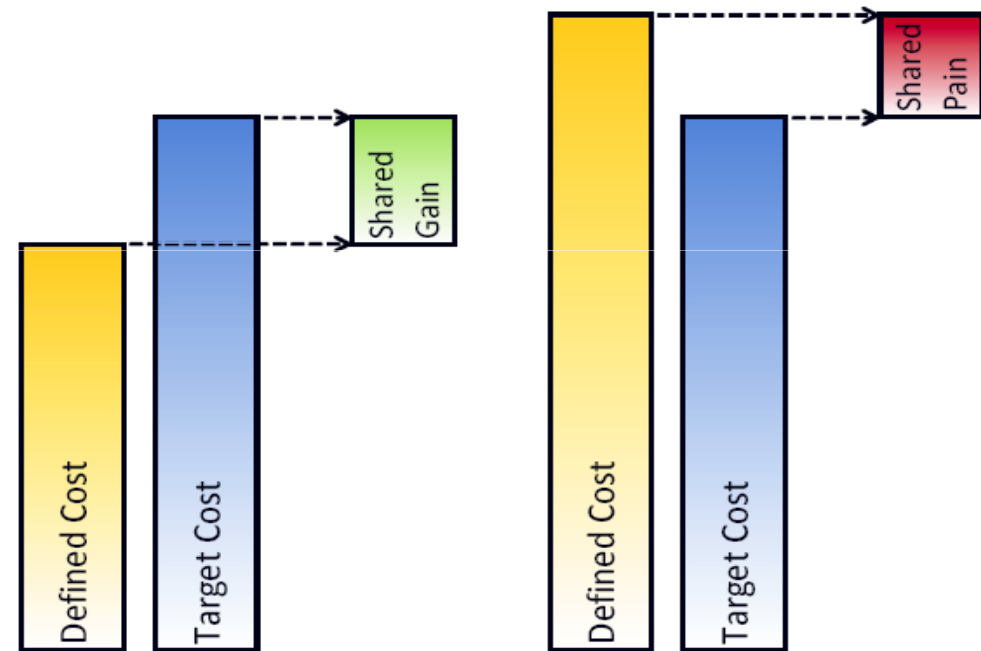
- Improvement of Fuk Man Road Nullah in Sai Kung
 - Decking of 180m long 12m wide open nullah, road improvement works & new landmark public park
 - Estimated final outturn cost \$68M; 33-month contract (Aug 09 to May 12)



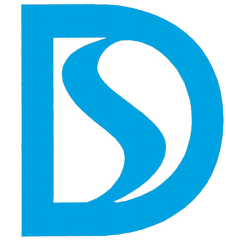


Preparation

- NEC Option Selection
 - 6 Options of ECC
 - Option C – Target contract with activity schedule selected
 - Option C because:
 - Pain/gain share – align common interest
 - Fairer risk sharing
 - Encourage alternative designs



Pain / Gain Share Model



Preparation

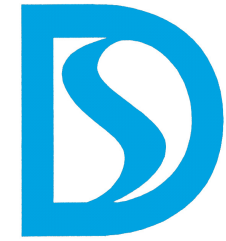
- Modifications to NEC core clauses
 - Cash Positive to Negative
 - Inclement weather
 - Adopt GCC criteria
- Option Z clauses (additional conditions of contract)
 - Select applicable standard policy conditions in GCC/SCC
 - E.g, Safety, labour and wages



Preparation

- Tendering Strategy
 - Prequalification
 - Briefing to potential tenderers
 - Invitation to tender
 - Tender briefing + dummy tender exercise
- Tender Assessment
 - Marking Scheme
 - 60% Price : 40% Technical
 - Financial model for price assessment





Running an NEC Contract

Drainage Services Department

Black & Veatch Hong Kong Ltd.

Chun Wo Construction & Engineering
Co. Ltd.





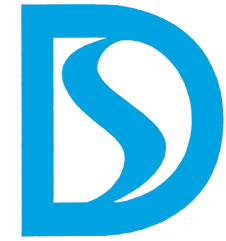
Running an NEC Contract

■ Partnering

- To establish a “Partnering” spirit
- To maintain and improve throughout

■ Administration

- Different from GCC
 - Risk management
 - Time management
 - Compensation event



Partnering

*"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





Partnering

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





Partnering

- Joint Site Office
 - PM, Supervisor, Contractor sharing same office
 - Improved communication

Supervisor's
Assistant Resident
Engineer

Contractor's
Engineer





Partnering

- Maintain and Improve



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



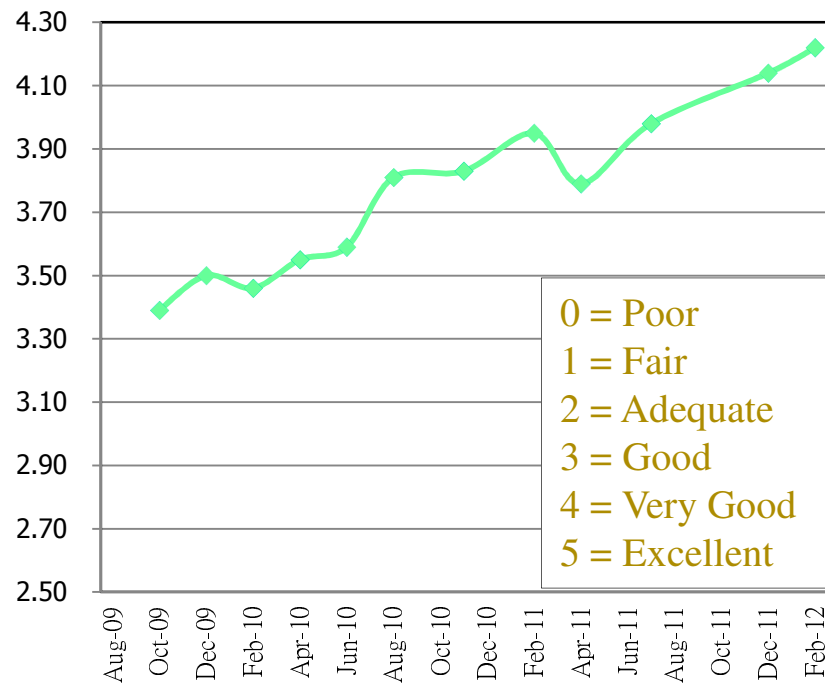
- Half-yearly partnering review



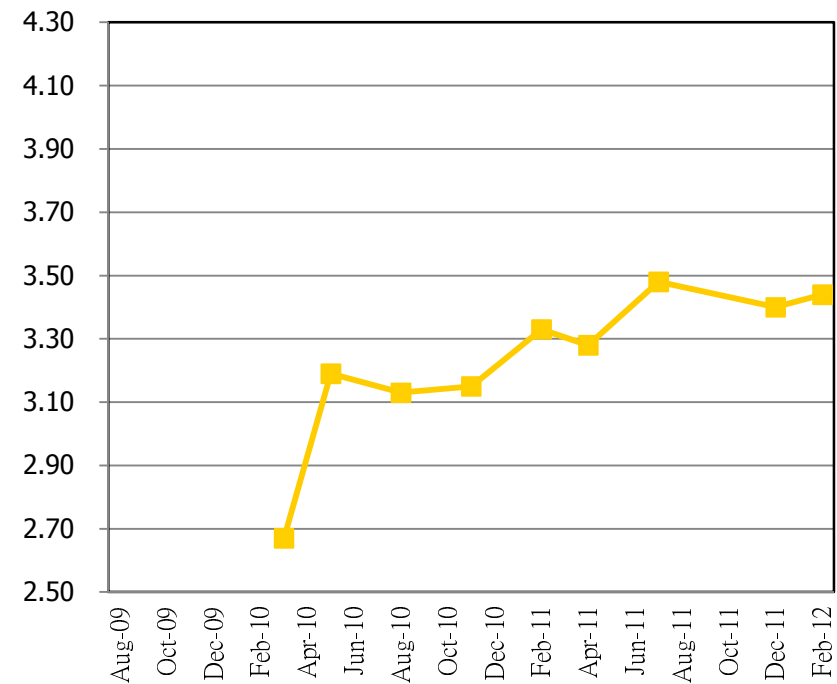
- Joint DSD / BV / CW dragon boat team 2011



Partnering



Partnering score of **Champion Group**



Partnering score of **Pioneer Group**



Administration

- 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





Administration

- 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

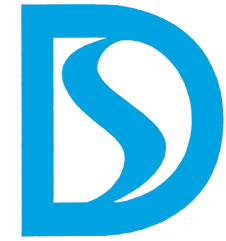


Observations

■ Benefits

- Good working relationship
- Time & Cost savings expected
- Compensation events
 - 80% agreed
 - From instruction to agreement – 2 months
- Early warnings
 - 15 early warnings issued
 - Resolved jointly and promptly





Observations

■ Problems

- Collaborative working at frontline level
 - Need time to adapt
 - Training and team building at start – very important
- Compensation event
 - Time frame – stringent, yet need to achieve
 - More resources expected in contract stage
- Subcontracting
 - Tendering requirements on subcontracting
 - Review, take into account practical difficulties



Concluding Remarks

- NEC provides a framework which 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
- Prepare to try out more NEC projects



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Thank You
