

Road Asset Management Systems + Performance-Based Contracting

Session 3.4: Conclusions and Way Forward

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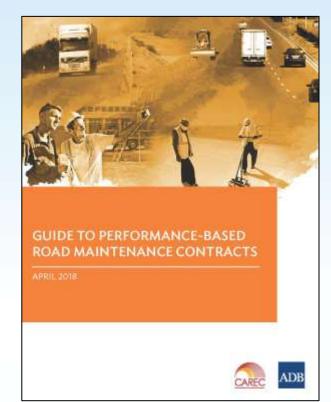
Day 1	Day 2	Day 3
Road Asset Management System (RAMS)	Road Asset Management System (RAMS)	Performance Based Contracting (PBC)
Session 1.1	Session 2.1	Session 3.1
Introduction to RAMS	Data processing and	Introduction to PBCs
	management	
Coffee break	Coffee break	Coffee break
Session 1.2	Session 2.2	Session 3.2
Functions of a RAMS	Data analysis	Performance standards
	and planning	
Lunch	Lunch	Lunch
Session 1.3	Session 2.3	Session 3.3
Data to be collected	Road asset management	Inspections and Payments
Coffee break	Coffee break	Coffee break
Session 1.4	Session 2.4	Session 3.4
Method of data collection	Conclusions and way	Conclusions and way
	forward	forward



PBC in the CAREC Region

Lessons Learned

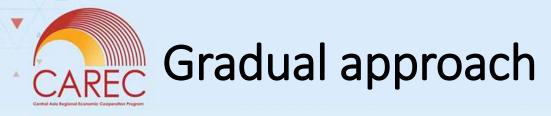
- Ensure there is a conducive environment
- Apply a gradual approach
- Balance risks between employer and contractor
- Tailor PBCs to conditions in each country
- Arrange proper supervision and inspection
- Provide mentoring and training for both employer and contractors
- Very few IFI supported PBCs have failed once they get to the implementation stage
- PBCs offer fewer opportunities for corruption





Conducive environment

- High level commitment to PBCs is required in order to be successful
 - Ministry responsible for roads Road Authority
 - Ministry of Finance
- Road Asset Management System (RAMS)
 - To support preparation and monitoring of PBCs
- Competitive road contracting industry
 - Contractor capacity to implement works
 - Contractor capacity to manage PBC contracts
- Sustainable funding
 - Committed funding for the PBC contracts



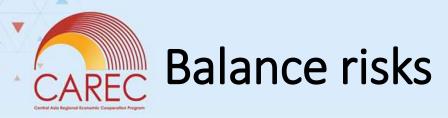
- Start with easier PBCs
 - Flat terrain, little snowfall, medium traffic, new roads (or include new pavement)

Simplify PBC design

- Apply volume-based payments for defects that are difficult to predict
 - e.g. snow clearing
- Apply simple calculations of deductions clear impact of non-compliance
- Avoid/reduce deductions in initial months
- Avoid response times where possible immediate deductions

Carry out various pilots

- Staged approach incorporating lessons learned
- Gradually expanding scope and size of contracts

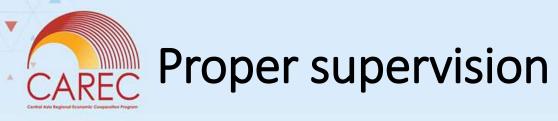


- Avoid allocating too much risk to the contractors
 - This will lead to very high bid prices
 - Gradually increase risk over time in future contracts
 - Experience gained in earlier contracts will allow contractors to better judge risks
- Avoid allocating too little risk to the contractors
 - Use of response times can undermine PBC contracts
 - Contractors no longer managing contract but functioning as modern-day force account unit



Tailor PBCs to each country/region

- Each country is different
 - Different legislation and procedures
 - Different road conditions and characteristics
 - Different road agency and contractor capacities
- PBCs need to be tailored to each country
 - Especially regarding the performance standards
 - Also regarding inspection procedures and deductions
 - As much as possible, fit PBCs to existing systems that employer and contractors are used to



- PBCs require less supervision and inspection
 - Supervision still key to successful PBCs
 - Poor supervision leads to poor performance
 - Poor inspections lead to fewer deductions and lower performance
- There needs to be a strategy in place for regular supervision
 - Planned formal inspections
 - Sampling of road sections
 - Application of deductions based on inspection results
 - Proper monitoring of performance



Training and mentoring

- Employer staff lacks experience with PBCs
 - Need for training and mentoring of employer staff
 - Generally PMU or project supervision consultant
 - Need to transfer capacity to employer staff
 - Need to evaluate and disseminate lessons learned
- Contractors lack experience with PBCs
 - Training of contractors
 - Bidding documents
 - Performance standards
 - Inspections and payments
 - Pre-bid meetings for interested contractors
 - On-the-job support to contractors



Failure during implementation

- Very few of the implemented PBCs have failed
 - Many have had important lessons learned that have been incorporated in next contracts
 - All have been moderately to very successful
 - Generally better performance (better and more predictable road conditions)
 - Not always less expensive (especially initial pilots can be more expensive)
- Several PBCs have not made it to implementation
 - Lack of interest from road authority / government
 - Lack of interest / competition from contractors
 - High perceived risks leading to high bid prices



- PBCs are more resistant to corruption
 - Fewer transactions involved
 - More transparency
 - Performance is easily verified at any moment
 - Easier to audit contracts
- PBCs are not corruption-proof
 - Inspection results can still be doctored
 - Important to carry out regular audits



- PBCs have important benefits for road maintenance
- Different types of PBCs
 - RMGs, PBMRs, OPRCs, Network Management Contracts
- Performance standards need to be determined for each country
 - They need SMART indicators and thresholds
- Inspection procedures need to be clearly defined
- Approach to response times needs to be agreed upon
- Procedures for payment deductions have to be developed
- Bidding documents need to be prepared
- PBC pilots need to be developed
- PBC training courses (and guides) need to be prepared



- What do we want to achieve in terms of PBCs in the next 5-10 years?
 - Number of pilots
 - Size of pilots
 - Scope of pilots (rehabilitation, periodic, routine, winter, emergency)
 - Timing for starting the pilots
 - Pilot development
 - Training and capacity building
 - Subsequent replication and upscaling
- How will this be financed?
- What kind of support is required?
- Who will lead this?