



BC Association for  
**CRANE SAFETY**

# Crane Operator Qualification

## INDUSTRY WORKSHOP REPORT

**MOBILE CRANE TASK GROUP MEETING #4**

*WorkSafeBC, Richmond, BC  
February 14<sup>th</sup>, 2006*

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<b>In Attendance:</b>	Rob Magee	GWIL Industries
	Rod Griffiths	Griffiths Pile Driving Inc.
	Larry Sinclair	Marine & Pile Driving Work Group
	Mike Maitland	Sterling Crane
	Michael Pelletier	Emil Anderson Construction
	Kerry Hawley	Mega Crane
	Dominic Verhelst	Teck Cominco
	Peter Miller	JJM Construction
	Fraser Cocks	BCACS (Executive Director)
	Kathy Sheppard	WorkSafeBC
	Lee Middleton	Fulford Harbour Consulting (Facilitator)

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## **Background**

This workshop was the fourth in a series of task group workshops for mobile crane industry stakeholders. These stakeholders are working toward a competency based, licensing and certification framework for mobile crane operators in BC. The BC Association for Crane Safety is facilitating this process and providing the administrative support needed for industry to lead this change. The competency based certification framework will be used by WorkSafeBC as the foundation for a crane safety regulation to be enacted in January or July of 2007.

The first two workshops focused on defining the skills standards for mobile crane operators. Attention was paid to skills standards first because having these agreed to by industry is important for these reasons:

1. Skills standards define the assessment of a competent operator.
2. Skills standards show what different levels of operator require to do their job.
3. Skills standards lay out a training and career pathway for operators.

Together with the industry supported operator licensing structure, which was the focus of the third workshop, the skills standard outlines the framework for a competency based operator standard as well as the training required to get new operators to the required competency standard. The framework also shows what training and experience existing operators need to be able to move to higher certifications or to move within the industry.

The fourth workshop builds on this work and describes an approach to the 'business model' that could be used to coordinate the development, implementation and ongoing management of an operator certification scheme in the Province.

## **Workshop Goals**

The mobile crane operator occupation spans a number of industries and a variety of equipment types including hydraulic and lattice booms as well as lifting capacities ranging from less than 40 tons to over 125 tons. In developing a certification structure it is important to strike a balance between certification requirements that ensure a safe and competent level of operation and one that does not impose an inappropriate number and/or level of competencies for the different levels of required work.

### **Refined certification structure**

In the third workshop we refined the certification structure to strike the right balance between licensing complication and the operational realities of the industry. In this, the fourth workshop, we review the certification structure and re-validate it as being appropriate for industry use.

### **Business models**

Describe preferences for a business model to implement and coordinate all necessary crane certification assessment and documentation. The business model as outlined previously has two sub – components which will guide the discussion.

#### **Funding options**

Map out funding options that might be available to support this model from existing government industry training funds.

#### **Tracking and documentation**

Explore ways crane operator's licenses and record of certification can be stored, documented and validated by employers.

## **Certification Structure**

During the workshop the certification structure developed at the last workshop was validated with one change. This was to add an under ten tonnes category to the hydraulic certification, building in a way for the foundational competencies to apply to commonly used equipment while ensuring mobile operators of over ten tonnes receive a higher level of training for handling these more challenging lift situations.

Task group members felt the certification structure was sufficiently developed to move onto the next step – definition of equipment types including those to which the regulation will not apply.

The crane regulation will not apply to the following types of equipment:

- Service trucks with hoists
- Digger derricks
- Vehicle mounted aerial devices
- Possibly some types of carry deck

This is not an exhaustive list and will be finalised prior to the May hearings. Task group members suggested pictures be used to illustrate the levels of certification and the equipment types covered by each level.

Appendix A contains a diagram of the certification structure proposed for mobile crane operators.

## **Business models**

The groups divided the business model needed to run start and run the competency certification framework for crane operation into three phases:

- *Development* – design and development of assessment tools and competency certification scheme.
- *Start up* – assessment and certification of incumbent operators and promotion of the scheme to stakeholders as well as management of stakeholder interests.
- *Sustaining* – ongoing operation of the certification scheme, assessment of new trainees and updating competency requirements.

In the workshop the task group focused on the first and second phases. After discussion of the roles and responsibilities of each industry and government partners supporting development of the crane certification scheme in the Province the Task Group reviewed the work of the boom truck and tower crane task groups to guide development of a crane certification business model. The points we reviewed were:

### **Business Model main points**

- 1 **Use Industry Training Authority support to issue and develop credentials:** Program standards funding supports development of the competency and assessment standards for operators.

- 2 **BC Association for Crane Safety tracks operators:** The safety record of individual operators is important to the industry and the stakeholders felt that for the certification structure to be most useful industry, through its third party agent, should play a key role in tracking the ongoing safety record and certification status of operators.
- 3 **BC Association arbitrates improper operation cases:** Where an operator disputes a charge of improper operation, outside the normal mandate of WorkSafeBC enforcement, the Association will arbitrate between employer and operator and suggest training / improvement plans for operator skill development. Where appropriate the Association would become involved as the industry advisory development in WorkSafeBC investigations or hearings.
- 4 **Logbook tracks experience and skills:** In order for the certification structure to be of best value a Logbook will be developed by the Association to track operator competence and experience. The Logbook will be used to re certify operators after a time frame of 3-5 years. Those operators who are able to demonstrate ingoing evidence of competence through their Logbook will simply be reissued a license.
- 5 **Association develops a communication plan:** To reach the many stakeholders in the boom truck industry the Association needs to develop a plan to inform people about the regulation, certification scheme and assessment. Use of a trade magazines, web sites and inserts in notification of assessment were suggested.
- 6 **Certification happens once:** Renewal of certification as above is every 3 to 5 years and is a 'licensing formality' if the operator has evidence of competent crane operation in that time period.
- 7 **Incumbents don't pay a fee:** For the first assessment cycle of incumbents the task group members stated that to make the certification scheme as easily accepted as possible by stakeholders that there be no, or only a nominal, assessment fee.

The mobile crane group were at first supportive of this approach to the business model for crane certification and licensing. After a period of discussion they felt some points needed clarification: namely, what will the ongoing role of the BC Association for Crane Safety be? What ongoing role will the associated government agencies play?

Specifically the mobile task group had these questions:

1. What will the BC Safety Authority be prepared to do in the ongoing tracking and certification (licensing) of operators?
2. What needs to be defined in terms of the ongoing sustainability of the certification structure of the Crane Association's business model before the ITA can support program standards applications for development of assessment tools from the Association?
3. What will the different licensing strategies (Association vs. Gov't Agency) do to the enforceability and comprehensiveness of the Crane Safety Regulation from the WorkSafeBC's point of view?

Fraser Cocks stated that he would seek answers to each of these questions immediately. In the section on Business models below are three charted models that represent full involvement of the BC Association for Crane Safety through to limited involvement for the Association.

The mobile task group felt that they needed answers to the three questions above before they could endorse any of the three models presented.

## **Funding**

The task group stakeholders formally endorsed applying to the Industry Training Authority for funds to develop the program standards on a competency basis for tower crane operators.

Application deadline for this cycle of funding in March 15<sup>th</sup> 2006 and will require, as described in the meeting notes from the last task group meeting (#3) broad evidence of industry support, both through letters of support and evidence of stakeholder engagement in the process. Attending the task group meetings is a significant commitment and powerfully demonstrates industry support in development of the certification scheme.

## **Tracking and documentation**

This section summarises what task group members have agreed to in past meetings on the subject of tracking and documenting operator competence. Points of support were:

- 1 **Have the system third party verified:** In short what the employers wanted was a place to go and verify the accuracy of the licensing information an operator presents.

- 2 **Link licensing to a Logbook:** If an operator wishes to move through the certification levels having a way to document, with some detail, their experience against the skill requirements of the next licensing level is important. Additionally re-certification options would depend very much on being able to track an operators working history, the idea being active operators would have less frequent and less onerous recertification requirements.
- 3 **Track the safety record of each operator:** Stakeholders felt a third party association or applicable government agency should have responsibility for tracking the safety record of each operator by logging accidents. This is similar to the driving licensing scheme in use in the Province.
- 4 **Link with company's existing record keeping:** Some companies are already tracking the competency of their operators and stakeholders felt that for the assessment and licensing system to work most effectively in the Province, these existing structures should be used to support licensing where they exist.

Task group members also requested the Association investigate the use of the Construction Safety Network's database as a tool for tracking and registering operators in the Province in lieu of the use of the BC Safety Authority or a self-administered database within the Association. This database is currently used to track a wide range of cross provincial safety qualifications in the road building and heavy construction industries.

## **Business models**

The three tables below summarise the business model proposals on the table before the task group to develop and run the crane certification scheme. The first proposes a strong coordinating role by industry through the BC Association for Crane Safety. The third model proposes strong involvement by government in tracking and licensing operators with the Association functioning in an advisory capacity. The second model uses a blended approach, partly involving government or third party licensing services while also preserving a direct industry leadership role for the BC Association for Crane Safety.

Business model 1: Strong Association role

***Central independent coordination***

	WorkSafeBC	BC Safety Authority	Industry Training Authority	Association for Crane Safety (Industry)
<i>Function</i>				
Set operator competency standards			Fund development of these.	Yes
Certify training			Yes – certify training programs, including foundation training programs	Advise on training approval
Develop assessment tools			Fund development of tools	Yes – in close consultation with SMEs
Conduct Assessments			Results sent to ITA	Yes
Record assessment results and issue qualifications			Yes	Recommend award on basis of standards met
Issue certificates of competence (licenses)				Yes
Track Safety violations	Provide infraction information to the Association			Maintain database of safety violations
Update Provincial Operator database				Maintain database or contract third party to do so
Enforce Safety infractions	Yes			
Arbitrate Safety infractions				Yes
Promote and facilitate training opportunities				Yes

Business model 2: Government or third party run licensing.

***Government Licensee, Association assessors***

	WorkSafeBC	BC Safety Authority	Industry Training Authority	Association for Crane Safety (Industry)
<i>Function</i>				
Set operator competency standards			Fund development of these.	Yes
Certify training			Yes – certify training programs, including foundation training programs	Advise on training approval
Develop assessment tools			Fund development of tools	Yes – in close consultation with SMEs
Conduct Assessments			Results sent to ITA	Yes
Record assessment results and issue qualifications			Yes	Recommend award on basis of standards met
Issue certificates of competence (licenses)				Yes
Track Safety violations	Provide infraction information to the Association	Maintain database of safety violations		
Update Provincial Operator database		Maintain database or contract third party to do so		
Enforce Safety infractions	Yes			
Arbitrate Safety infractions		Yes		
Promote and facilitate training opportunities				Yes

Business model 3: Government agency assesses and licenses

***Government or contracted Assessor and Licensee, Association advisor***

	WorkSafeBC	BC Safety Authority	Industry Training Authority	BC Association for Crane Safety (Industry)
<i>Function</i>				
Set operator competency standards			Fund development of these.	Yes
Certify training			Yes – certify training programs, including foundation training programs	Advise on training approval
Develop assessment tools			Fund development of tools	Yes – in close consultation with SMEs
Conduct Assessments		assessment role or contractor such as BC Safety Network	Results sent to ITA	
Record assessment results and issue qualifications		Recommend award on basis of standards met	Yes	
Issue certificates of competence (licenses)		Yes		
Track Safety violations	Provide infraction information to the Association	Maintain database of safety violations		
Update Provincial Operator database		Maintain database or contract third party to do so		
Enforce Safety infractions	Yes			
Arbitrate Safety infractions		Yes		
Promote and facilitate training opportunities				Yes

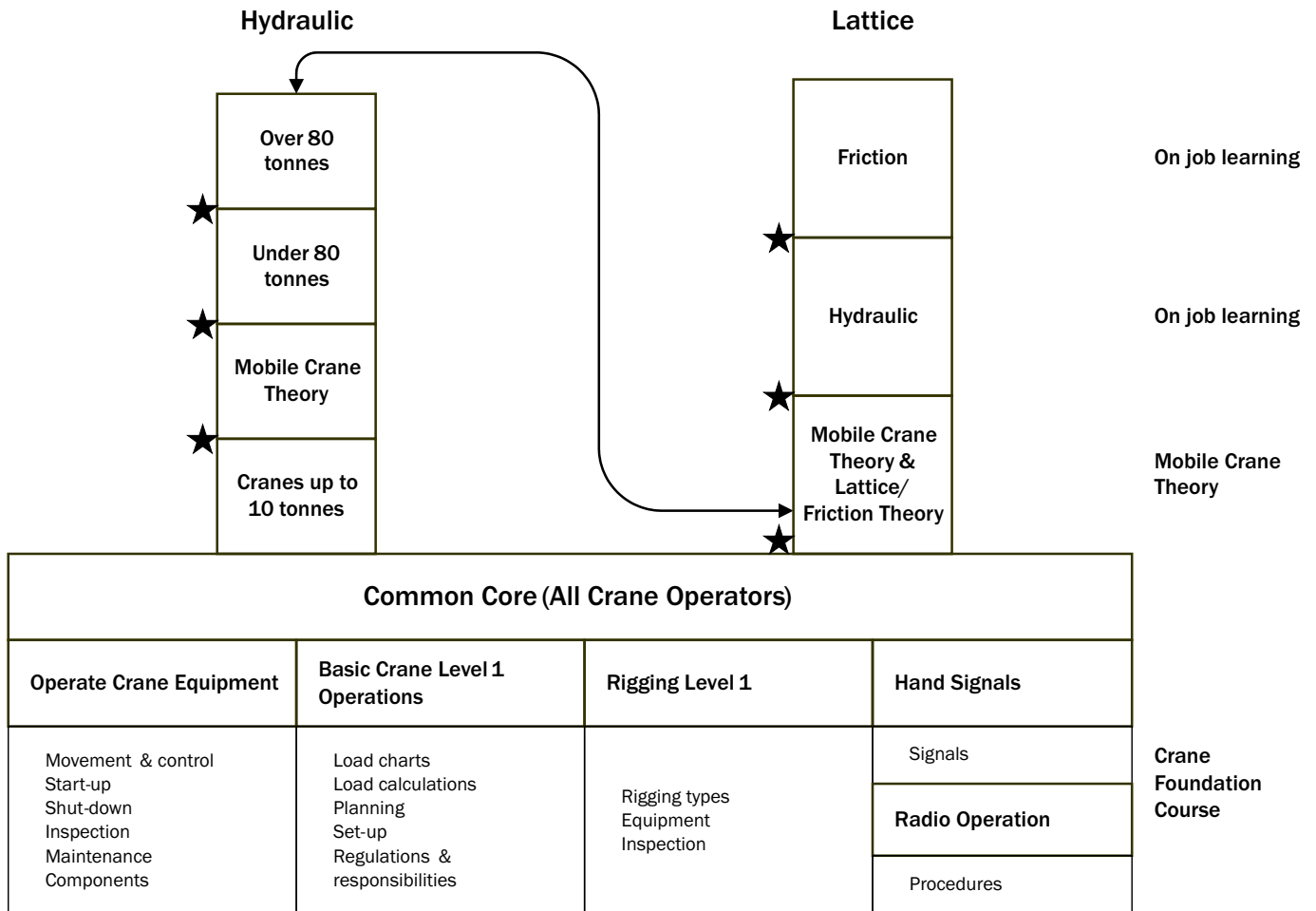
## **Next steps**

The next task group meeting is scheduled for March 15<sup>th</sup> or 16<sup>th</sup>. At that meeting we will review the application for program development (standards) funding from the ITA prior to submitting this to them. In doing so, we will define more precisely the role of the assessor and the nature of the assessments and agree to a business model for development and implementation of the crane safety regulation and certification scheme.

With the work of all three task groups we will then be in a position to draft the crane safety certification framework for presentation to stakeholders around the Province prior to the May WCB public hearing.

# Appendix A Draft Certification Structure

## Mobile Crane Operator: February 20/06 Model



## BC Crane Certification Framework

