



REFERENCE MATERIAL

on Safety Roles and Responsibilities of Key Stakeholders in the Hong Kong Construction Industry

> Version 1 January 2022

Disclaimer

Whilst reasonable efforts have been made to ensure the accuracy of the information contained in this publication, the CIC nevertheless would encourage readers to seek appropriate independent advice from their professional advisers where possible and readers should not treat or rely on this publication as a substitute for such professional advice for taking any relevant actions

Enquiries

Enquiries on this publication may be made to the CIC Secretariat at :

CIC Headquarters 38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon

Tel: (852) 2100 9000 Fax: (852) 2100 9090 Email: enquiry@cic.hk Website: www.cic.hk

© 2022 Construction Industry Council

Table of Contents

Preface	Page 4
List of Figures	Page 5
List of Tables	Page 5
1. Purpose	Page 6
2. The Stakeholder Model	Page 8

Preface

The Construction Industry Council (CIC) is committed to seeking continuous improvement in all aspects of the construction industry in Hong Kong. To achieve this aim, the CIC forms Committees, Task Forces and other forums to review specific areas of work with the intention of producing Alerts, Reference Materials, Guidelines and Codes of Conduct to assist participants in the industry to strive for excellence

The CIC appreciates that some improvements and practices can be implemented immediately whilst others may take more time to adjust. It is for this reason that four separate categories of publications have been adopted, the purposes of which are as follows:

Alerts	Alerts are reminders in the form of brief leaflets produced quickly		
	to draw the immediate attention of relevant stakeholders to the		
	need to follow some good practices or to implement some		
	preventive measures in relation to the construction industry.		

Reference	Reference materials for adopting standards or methodologies in
Materials	such ways that are generally regarded by the industry as good
	practices. The CIC recommends the adoption of relevant
	Reference Materials by industry stakeholders where appropriate.

Guidelines	Guidelines provide information and guidance on particular topics
	relevant to the construction industry. The CIC expects all industry
	stakeholders to adopt the recommendations set out in relevant
	Guidelines where applicable.

Codes of	Codes of Conduct set out the principles for all relevant industry
Conduct	participants to follow. Under the Construction Industry Council
	Ordinance (Cap. 587), the CIC is tasked to formulate codes of
	conduct and enforce such codes. The CIC may take necessary
	actions to ensure compliance with the codes.

We encourage you to share your feedback with us. Please take a moment to fill out the Feedback Form attached to this publication for us to further enhance this publication for the benefit of all concerned. With our joint efforts, we believe our construction industry will develop further and will continue to prosper for years to come

List of Figures

Figure 1	Inter-relationship between Roles, Levels and Responsibilities	Page 8
List o	of Tables	
Table 1	Roles of Stakeholders	Page 9
Table 2	Levels in a Project Organisation Structure	Page 10
Table 3	Examples of Responsibilities of Stakeholders at Strategic Level	Page 13
Table 4	Examples of Responsibilities of Stakeholders at Tactical Level	Page 16
Table 5	Examples of Responsibilities of Stakeholders at Operational Level	Page 22
Table 6	Examples of Responsibilities of Stakeholders at	

Behavioural Level Page 24

1. Purpose

This Reference Material is intended to revitalize a renowned maxim, "Safety is Everybody's Business" by providing a reference on the safety roles and responsibilities of key stakeholders in the construction industry. To achieve this, a "Stakeholder Model" (Model) was developed following a study on "Reviewing the Safety Roles and Responsibilities of Key Stakeholders", which was conducted in 2018 by the CIC.

The Model was developed based on details given in various literature, including occupational safety and health legislations, codes of practice, guidance notes, and the safety terms and conditions specified in various construction or consultancy contracts. The Model sets out various responsibilities of different stakeholders at respective levels in general to enhance workers' safety at work. It serves as reference material for good practice for relevant stakeholders at respective levels to meet their responsibilities and fulfill their roles.

The Model is specifically prepared for those who need to plan the project organisation in the pre-construction phase and those who need to review project organisation for effective project management. The users of this Reference Material should bring the material to the attention of the relevant stakeholders mentioned in the Model to inform them their respective roles and responsibilities to accomplish the objective of "Safety is Everybody's Business".

The Model given here provides a reference for the industry stakeholders only and is not a legal instrument to replace any laws, codes of practice, guidance notes, contracts or any other legal documents. This is intended to be a supplementary document providing a reference only for project management personnel's consideration in planning their safety related matters and making any safety decisions. The Model is not a legally binding model, required by law to be followed by the industrial stakeholders. It does provide what is regarded as a good practice to reduce errors, unclear safety roles and responsibilities that may increase the risks of accidents in the course of the project work.

The Model has a wide scope of application. It can apply to work planning and procedures that heavily rely on human performance, such as those high-risk works that require stringent monitoring. The specific roles and responsibilities of the different stakeholders proposed in the Model are designed to ensure that the legal requirements, current standards and methodologies are addressed by designated persons during the project organisational planning stage, thus addressing risks relating to safety well before such risks actually emerge during the construction phase.

2. The Stakeholder Model

2.1 Roles, Levels and Responsibilities of Stakeholders

Roles, levels and responsibilities are interrelated and each has its own definition. Role means a function or part played by a stakeholder in a particular operation or process. Level means a position in a project organisation structure bearing a specific role to ensure the effective functioning of a particular operation or process. Responsibilities are the obligations designated to a specific stakeholder with a specific role at a specific level. Their relationship is illustrated in the figure below:



Figure 1: Inter-relationship between roles, levels and responsibilities

2.2 Roles

In a project organisation structure, there are different stakeholders involved and they are given different office titles. They may be client, client's representative, designer, main contractor, subcontractor and workers in general. Their roles can be distinguished by their interests in the business or their employment.

Stakeholder	Roles
Client / Developer	A high-level project controller to commission the project, employing the project team and can oversee the overall performance of the entire project development and smooth operations in the aspects of quality, safety and environmental issues via contract specifications.
Client's representative	A designated person or office acting on behalf of the client under a contract with obligations to protect the interests of the client and to ensure the overall compliance of contract specifications, including the safety terms and conditions.
Designer	A designated person or office, or construction professional, who specify or alter a design, or specify a particular method of work or material, to advise the client, who may be the Developer or a contractor, by applying collective expertise in the matter of their professional knowledge, on the design and execution of the project/operation, depending on the scopes of work according to the contract. Scopes of work of a Designer may include, but not limited to: • the initial design of project development, • design and/or drawing up the specifications of the project, • the design of temporary work or structure in the construction phase, and • the design of electrical circuits basing on the need for the works.

Stakeholder	Roles
Main contractor	A person or firm engaged in carrying out the construction work normally pursuant to a contract directly from the client / developer.
Subcontractor	A person or firm engaged in carrying out specific tasks of construction work normally pursuant to a contract directly from the main contractor or its contractors.
Workers in general	A person employed either by the main contractor or subcontractor in carrying out designated tasks of construction work.

Table 1: Roles of Stakeholders

2.3 Levels

In a project, parties are designated with different posts to perform specific functions according to their competence. It is best to differentiate the parties' functions in different levels according to their deliverables. The levels are broadly divided into strategic level, tactical level, operational level and behavioral level.

Level	Functions
Strategic level	Persons holding senior management positions (Senior Management) in an organisation, with a function to make a high-level decision at the policy level in setting goals and objectives, and have the authorities in the allocation of resources and setting of criteria for the appointment of competent parties for respective roles and functions.
Tactical level	Persons in line management (Site Management) with a function to develop systems, programs, procedures, rules and any other means including the coordination and communication between parties to accomplish the goals and objectives.

Level	Functions
Operational level	Persons in line management (Supervisory Management) with a supervisory function to monitor the system implementation and provide feedback for review to accomplish the goals and objectives.
Behavioral level	Persons in line management (Frontline Operative) with an executive function to comply with work procedures, rules and any other means to accomplish the goals and objectives.

Table 2: Levels in a Project Organisation Structure

Due to different stakeholders having their own roles in a project organisation structure, there is a combination of stakeholders from different parties at each level.

For example, stakeholders at the strategic level may include persons from client or developer, client's representative, designers, and main contractor who are at corporate level responsible for making high-level decisions. Stakeholders at the tactical level may include persons from the client's representative, main contractor, and subcontractor who are responsible for the overall planning at the project level. Stakeholders at the operational level may include persons from the client's representative, main contractor, and subcontractor who monitors and supervises the workforce at the project level. Stakeholders at the behavioral level may include workers and operatives who are responsible for carrying out any tasks of construction work at the project level.

Multi-functions at different levels

Due to the emerging complex organisation structure and high division of work, it is not uncommon that a person with a specific role may be assigned different functions at different levels. For example, a resident site staff (RSS) of the client's representative, having the role in protecting the interests of his/her client, may be assigned with functions at the tactical level to participate in the development of safe work procedures and at the operational level to monitor the adherence of the frontline staff to the safe work procedures.

Shared functions at the same level

There are also situations that the same function at the same level may be shared by persons from different stakeholders. For example, an RSS of a client's representative, and a safety officer of the main contractor or subcontractor may all have the same function at the operational level, to monitor the adherence to the safe work procedures by the frontline staff. Each person must perform their respective function even if other stakeholders share the same functions. In some cases, a person can perform his function by exercising his influence and control on the matter. While the person may not simply delegate his responsibilities to others stakeholders to avoid legal liability, in some circumstances, and to the extent allowed by law, the person may fulfil his duties by making arrangements for other persons who are reasonably expected to be competent to perform the necessary work.

Post titles at different levels

To capture all post titles in today's increasingly complex organisation structures would be extremely difficult. Post titles are different and never exhaustive in the construction industry. It is better to differentiate stakeholders by their functions rather than the titles they are holding. For example, a designer can be an architect, an engineer, a surveyor, an internal designer (see *Guidance Notes of Design for Safety*, by the Development Bureau, 2013). In project design, a designer can be an architect at the strategic level giving professional advice to the client or developer. In structural design, a designer can be an engineer employed by the main contractor or a subcontractor at the tactical level to prepare temporary work's design for structural support. Even for minor work design, a designer can be a registered electrical worker at the tactical level to prepare a wiring diagram for a switch room. Hence, at different levels, different stakeholders may have different titles, depending on the functions that they need to perform.

2.4 Responsibilities

To further assist the stakeholders to understand their roles, levels, and responsibilities, the tables below has listed out some examples of safety responsibilities of respective stakeholders according to their roles and levels in a project organisation structure by using the "Stakeholder Model".

A. Client / Developer Examples of Stakeholders: Owners, Works Departments, or other persons holding similar office / function	
Types of responsibility	Description
A1. Pre-tendering	A1.1 Formulate a safety policy for project development
consideration	A1.2 Establish performance targets relating to safety
	A1.3 Consider design risks during the planning and allocate sufficient resources and time
	A1.4 Specify safety requirements for contractors
A2. Tendering consideration	A2.1 Select and appoint competent designers, main contractors and nominated subcontractors
A3. Construction stage consideration	A3.1 Maintain performance database of contractors relating to safety
	A3.2 Review time and safety impact due to subsequent changes in design
	A3.3 Take regulating actions against poor performers, breaches of safety requirements

Strategic Level (Continued)

B. Designer

Examples of Stakeholders: Architect, Engineer, Surveyor or other persons who specify or alter a design or specify a particular method of work or material

Types of responsibility	Description
B1. Pre-tendering consideration	B1.1 Plan and manage pre-construction design and arrangement
	B1.2 Design out the foreseeable risk for the entire project life cycle, including construction, maintenance, and demolition stage
B2. Tendering consideration	B2.1 Advise on selection and appointment of contractors
B3. Construction stage consideration	B3.1 Inform client (e.g. Developer, Consultant or Contractor) about significant risks in design
	B3.2 Advise client (e.g. Developer, Consultant or Contractor) on time and safety impact due to subsequent changes in design

C. Client's Representatives

Examples of Stakeholders: Consultant, Principal Resident Engineer, Chief Resident Engineer, or other persons holding similar office / function

Types of responsibility	Description
C1. Pre-tendering consideration	C1.1 Participate in the Design Safety Review process
	C1.2 Advise on instructions, requirements, and standards set in the contract
C2. Tendering consideration	C2.1 Advise on selection and appointment of main contractors and nominated subcontractors
C3. Construction stage consideration (Monitoring and Communication)	C3.1 Provide overall control of work and safety
	C3.2 Monitor and appraise contractor's safety performance
	C3.3 Communicate with client and designer on work progress

Strategic Level (C	ontinued)
	Genior Management ders: Director, Chief Executive Officer (CEO), Project ager, or other persons holding similar office / function of
Types of responsibility	Description
D1. Policy and Directives	D1.1 Formulate company safety policy and standards
	D1.2 Define standards for safety performance
D2. Accountability and Authority	D2.1 Set up and implement an accountability system
	D2.2 Monitoring and overall supervision
D3. Support and resources	D3.1 Provide sufficient support and resources

Table 3: Examples of Responsibilities of Stakeholders at Strategic Level

Tactical Level

E. Client's Representatives

Examples of Stakeholders: Resident Engineer or other persons holding similar office / function

omee / rametrem	
Types of responsibility	Description
E1. Overall project	E1.1 Formulate a Project-wide safety system
planning	E1.2 Setup Project-wide accountability system
E2. Monitoring and supervision	E2.1 Suspend works that can cause imminent danger / situation
	E2.2 Supervise and direct the execution of works
	E2.3 Monitor works to ensure compliance with requirements and standards set in the contract
	E2.4 Monitor works to ensure compliance with endorsed safe work procedures and design
	E2.5 Monitor adequacy of safety training
	E2.6 Conduct safety inspection and monitor corrective actions
E3. Review and Scrutiny	E3.1 Review and approve safety plan, safe work procedures, temporary works design and material submission
E4. Reporting	E4.1 Compile statistics and report contractor's safety performance

Tactical Level (Continued)

F. Main Contractor – Site Management

Examples of Stakeholders: Project Manager, Construction Manager, Site agent, Engineer or other persons holding similar office / function of the main contractor

Engineer or other person	ns holding similar office / function of the main contractor
Types of responsibility	Description
F1. Overall planning and establishment of safety program	F1.1 Establish safe system of work to ensure safe and healthy workplace without risks
	F1.2 Incorporate inputs from client, designer, architect and safety officer in the project safety plan
	F1.3 Allocate sufficient and adequate resources for safe execution of works, such as manpower, PPE, plant, and equipment
	F1.4 Prepare safety plan and working procedures
	F1.5 Prepare temporary works design
	F1.6 Define imminent danger / situation and empower respective site staff for suspension of work
	F1.7 Develop incentive policy to encourage workers and subcontractors to follow safe work procedures
	F1.8 Develop disciplinary policy to penalize workers and subcontractors for not following safe work procedures
F2. Standards of compliance	F2.1 Establish system to identify hazards and develop controls
	F2.2 Ensure safety in-house rules, procedures and methods are developed, maintained and reviewed
F3. Selection and evaluation of	F3.1 Develop pre-qualification criteria for new subcontractor
subcontractors	F3.2 Select and appoint competent subcontractors

Tactical Level (Continued)	
F. Main Contractor – S	ite Management (Continued)
Types of responsibility	Description
F4. Monitoring and overall	F4.1 Suspend works that can cause imminent danger / situation
supervision	F4.2 Set up accountability system for contractor and subcontractor
	F4.3 Continue to review safety plan and working procedures
	F4.4 Ensure proper execution of temporary works design
	F4.5 Ensure works are carried out according to endorsed safe work procedures and design
	F4.6 Conduct safety inspection and follow up corrective actions
	F4.7 Ensure reported hazards are promptly responded and rectified
F5. Communication and coordination	F5.1 Ensure works are properly planned, coordinated and monitored among project teams and subcontractors
	F5.2 Ensure safe work procedures reach down to the operational level
	F5.3 Ensure subcontractors understand requirements and hazards of works
F6. Training for	F6.1 Train up site staff for necessary competence
competence	F6.2 Ensure the competence of workforce of subcontractors

Tactical Level (Continued)

G. Main Contractor - Safety Personnel

Examples of Stakeholders: Safety Manager, Safety Officer or other persons holding similar office / function of the main contractor

Types of responsibility	Description
Types of responsibility	Description
G1. Planning and implementation of safety system	G1.1 Assist development and implementation of safety program or safe system of work
G2. Monitoring	G2.1 Suspend works that can cause imminent danger / situation
	G2.2 Report irregularities on safety system
	G2.3 Assist in identifying hazards and recommending controls
	G2.4 Conduct safety inspection & recommend corrective actions
	G2.5 Investigate incident and suggest remedial actions
	G2.6 Monitor behaviour of workers and foremen
G3. Communication	G3.1 Communicate workplace hazards to affected workers
	G3.2 Report contractor's and subcontractors' safety performance
G4. Training	G4.1 Organise safety training for staff, workers and subcontractors

Tactical Level (Continued)

H. Subcontractor of any tiers – Site Management

Examples of Stakeholders: Site Agent, Engineer or other persons holding similar office / function of the subcontractor

Types of responsibility	Description
H1. Communication with the main contractor	H1.1 Secure prior approval from the main contractor before commencement of work
	H1.2 Maintain coordination and communication with the main contractor
	H1.3 Comply with all in-house safety rules
H2. Overall planning	H2.1 Provide site-specific safety plan
and monitoring	H2.2 Ensure works are carried out according to endorsed safe work procedures, design, and statutory requirements
H3. Overall	H3.1 Ensure proper supervision of work
supervision and delegation of power	H3.2 Suspend works that can cause imminent danger / situation
	H3.3 Ensure reported hazards are promptly responded and rectified
	H3.4 Delegate power to operational level to remove workers from site who repeatedly violate the safety works practice
H4. Provision of resources	H4.1 Ensure the provision of necessary PPE
	H4.2 Ensure provision of safe plant and equipment
H5. Assurance of competence	H5.1 Provide necessary safety training programmes to site staff to ensure safety competence at work

	y tiers – Safety Personnel ers: Safety Officer or other persons holding similar office / actor
Types of responsibility	Description
I1. Planning and implementation of safety system	I1.1 Assist development and implementation of safety program or safe system of work
I2. Monitoring	I2.1 Suspend works that can cause imminent danger / situation
	I2.2 Assist in identifying hazards and recommending controls
	I2.3 Conduct safety inspection & recommend corrective actions
	I2.4 Investigate incident and suggest remedial actions
	I2.5 Monitor behaviour of workers and foremen
I3. Communication	I3.1 Communicate workplace hazards to affected workers
	I3.2 Report workers' safety performance to the subcontractor
I4. Training	I4.1 Organise safety training programmes for staff and workers of subcontractors

Table 4: Examples of Responsibilities of Stakeholders at Tactical Level

Operational Level

J. Client's Representatives

Examples of Stakeholders: Inspectorates, Work Supervisors or other persons holding similar office / function

Types of responsibility	Description
J1. Monitoring and inspection	J1.1 Suspend works that can cause imminent danger / situation
	J1.2 Require contractor and subcontractor for prompt rectification when necessary
	J1.3 Supervise and inspect project work, maintaining a safe system of work without risks
	J1.4 Ensure works are carried out according to specification, drawings and contract and statutory requirements
J2. Reporting of site safety performance	J2.1 Check, coordinate and report safety matters to line management
	J2.2 Monitor safety performance of contractor and subcontractors

K. Main contractor - Supervisory Management

Examples of Stakeholders: Foreman, Safety Supervisor, Competent Peron (CP), Independent Checking Engineer (ICE), Registered Professional Engineer (RPE) or other persons holding similar office / function of the main contractor

Types of responsibility	Description
K1. Take adequate steps to assure safe workplace and equipment	K1.1 Conduct routine training and briefing to ensure workers understanding of and adherence to approved safe work procedures
	K1.2 Rectify unsafe condition promptly
	K1.3 Suspend works that can cause imminent danger/situation
	K1.4 Ensure unsafe plant & equipment are not used

Operational Level	(Continued)
K. Main contractor – S	upervisory Management (Continued)
Types of responsibility	Description
K2. Supervision of subcontractors and workers	K2.1 Conduct routine inspections to ensure the following of safe working procedures, implement disciplinary procedures
	K2.2 Suspend the works of the workers who repeatedly violate safe work procedures
	K2.3 Ensure proper use of PPE
K3. Communication with subcontractors and workers	K3.1 Ensure subcontractors and workers understand requirements of hazards of works
L. Subcontractor of any tiers Examples of Stakeholders: Foreman, Safety Supervisor, CP, RPE or other persons holding similar office / function of the subcontractor	
Types of responsibility	Description
L1. Take adequate steps to assure safe workplace	L1.1 Conduct routine training and briefing to ensure workers understanding of and adherence to approved safe work procedures
and equipment	L1.2 Rectify unsafe condition promptly
	L1.3 Suspend works that can cause imminent danger / situation
	L1.4 Ensure unsafe plant & equipment are not used
L2. Supervision of subcontractors and workers	L2.1 Conduct routine inspections to ensure the following of safe work procedures
	L2.2 Suspend the work of the workers who repeatedly violate safe work procedures
	L2.3 Ensure proper use of PPE

Table 5: Examples of Responsibilities of Stakeholders at Operational Level

	ubcontractor of any tiers – Frontline Operative ers: Workers, Operatives or other persons holding similar
Types of responsibility	Description
M1. Compliance with rules and	M1.1 Adhere to safe work procedures, instructions, training materials, and rules
instructions	M1.2 Cooperate with employer
M2. Participation in safety training	M2.1 Participate in safety training and briefings
M3. Communication with supervisors and co-workers	M3.1 Report accident / incident / dangerous occurrence to supervisor
	M3.2 Report hazards to supervisor and warn co-workers
	M3.3 Make suggestions to improve safety
	M3.4 Give feedback on control measures
M4. Use of Personal Protective Equipment	M4.1 Wear PPE whenever necessary
M5. Caring for himself and others	M5.1 Refuse to carry out work in unsafe environment or when others could be jeopardized

Table 6: Examples of Responsibilities of Stakeholders at Behavioural Level



Feedback Form [Reference Material on Safety Roles and Responsibilities of Key Stakeholders in the Hong Kong Construction Industry]

Thanks for reading this publication. To pursue improvement in our future versions, we appreciate your valuable suggestions.

(Please put a " ✓ " in the appropriate box)

1. As a whole, I feel that the publication is:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Informative						
Comprehensive						
Useful						
Practical						
2. Does the publication enable you to understand more about the Safety Roles and Responsibilities of Key Stakeholders in the Hong Kong Construction Industry?	Yes		No	No C	Comment	
3. Have you made reference to the publication in your work?	Quite Of	ten	Sometimes	Ν	lever	
4. To what extent have you incorporated the recommendations of the publication in your work?	Most		Some	١	None	
5. Overall, how would you rate the publication?	Excellent	Very Good	Satisfactory	Fair	Poor	
6. Please give any other comments and suggestions (use separate sheets if necessary).						
Personal Particulars (optional)*:						
Name : Mr. / Mrs./ Ms./ Dr./ Prof./ Ir / Sr / Ar ^						
Company :						
Tel :						
Address :						
E-mail :						

2. The CIC will not transfer your personal data to any third parties without your prior consent.

3. It is not obligatory for you to supply the CIC with personal information in this form.

Please send this feedback form to:

CIC, Construction Safety - Industry Development

E-mail : enquiry@cic.hk

Address: 38/F, COS Centre, 56 Tsun Yip Street, Kwun Tong, Hong Kong

Fax No : (852) 2100 9090

^{* 1.} The information you provide to the Construction Industry Council ('CIC'), including any personal data as defined in the Personal Data (Privacy) Ordinance ('Ordinance'), will be used solely for purposes related to the activities of the CIC.

^{4.} You are also entitled to request access to and correction of any errors in your personal data. If you wish to do so please write to the CIC at 38/F COS Centre, 56 Tsun Yip Street, Kwun Tong, Kowloon.

[^] Circle the appropriate option.