The views expressed in this material are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.



ADB Health, Safety and Security (HSS)

Awareness Training Course ADB

It may be shared outside ADB with appropriate permission



HSS WORKSHOP FOCUS:

- ADB HSS
- Safety Culture
- Hazard Identification
- Life Saving Rules
- Risk Management
- HSS Good Practice Guide
- Safe Work Practices
- Incident Reporting & Investigation
- Emergency Preparedness

Fiji, 10–13 June 2024



UXO Unexploded Ordnance

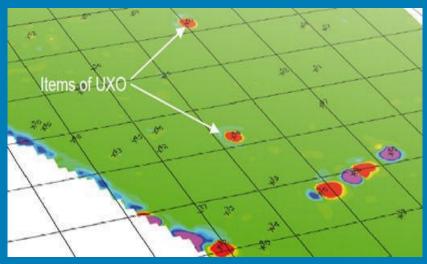
Key Risk Assessment considerations:

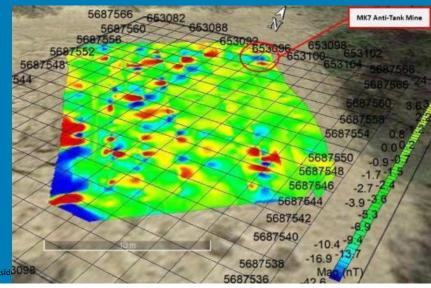
- Known UXO
- Suspected UXO
- Chance UXO Finds
- Blasting Caps Armed vs Unarmed
 All have high risk
- Survey Technologies
- Mitigation, Removal & Disposal



UXO Survey Methodologies:

- Historical Research
- Ground Penetrating Radar (GPR)
- Electromagnetic Induction (EMI)
- Magnetometers
- Seismic Acoustic Surveys (various)
- Advanced Imaging (various)
- Chemical Signature Detection
- Preferred:
 - Autonomous Vehicle Mounted
 - Multi-sensor Units
 - Multiple Survey Passes











		Consequence			
		Slightly Harmful	Harmful	Extremely Harmful	
Likelihood	Likely	Medium Risk	High Risk	Extreme Risk	
	Unlikely	Low Risk	Medium Risk	High Risk	
	Highly Unlikely	Negligible Risk	Low Risk	Medium Risk	







MODULE 7 **Emergency Preparedness** and **Response**

Understand the best practices involved in emergency management.



Emergency Classification Level 1- Minor

> Any unplanned HSS incident that can be managed with on-site resources.



Emergency Classification Level 2 - Severe



Any uncontrolled HSS event that is contained on-site but requires external assistance and has the potential to escalate...



Emergency Classification Level 3 – Major/Extreme

This is an uncontrolled crisis-level event that has serious effects beyond the site, and requires external resources typically utilized in a large-scale emergency.



Incident Command System - ICS

Internationally recognized "ICS"

- Standardized roles
- Common terminology
- Scalable up or down...



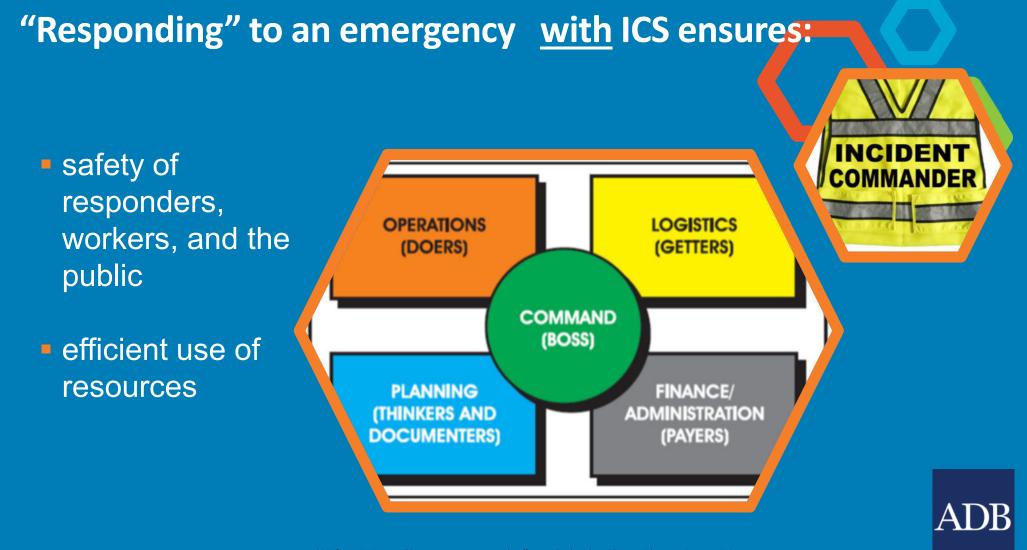


"Reacting" to an emergency without ICS...

- Lacks accountability
- Has poor communication
- Unsystematic planning
- Unable to efficiently integrate responders
- "Un-even" Playing Field !



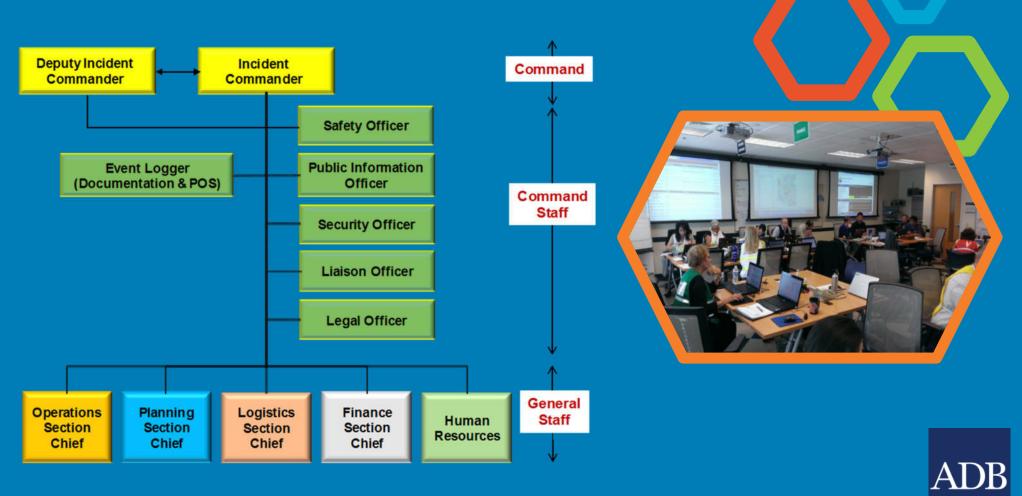
ADB



ICS core positions ...



ICS is Scalable ...



ICS core roles...

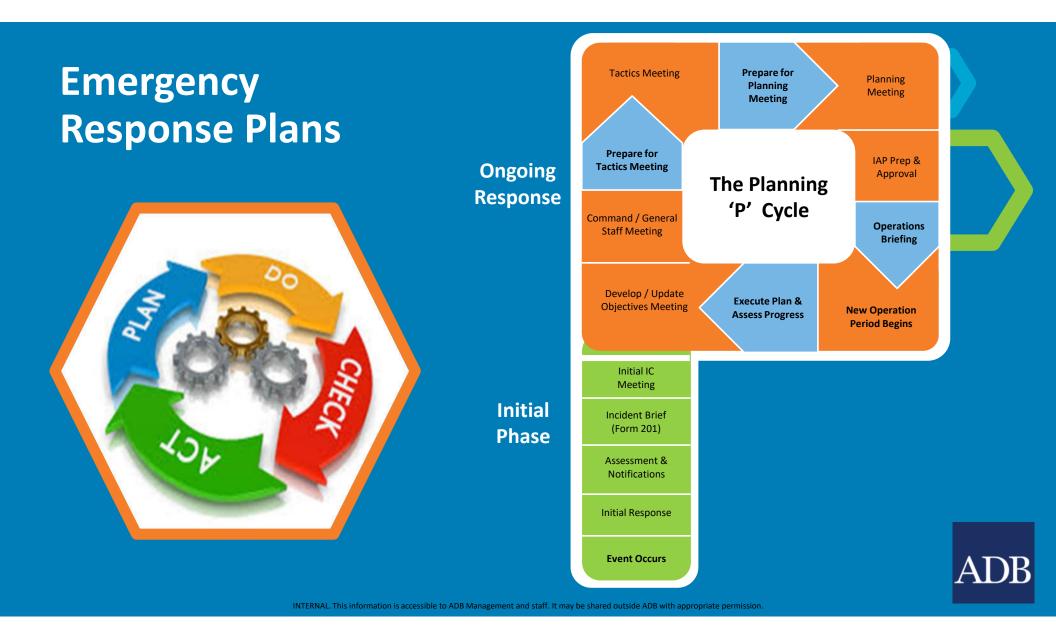
Function	Description			
Incident Command	 Establishes incident objectives, strategies, and priorities. Assume overall responsibility for the incident. 			
Operations	 Determines tactics and resources for achieving objectives. Directs the tactical response. 			
Planning	Collects and analyzes information.Provides engineering and technical support.			
Logistics	Provides resources and needed services.Tracks resources.			
Finance/ Administration	Accounts for expenditures, claims, and compensation.Procures needed resources.			
Event Logger	 Collects information including # of persons on scene. Maintains documentation. All personnel shall maintain a log of events. 			

ADB

Emergency Response Plans

What are the basic elements of an emergency response plan?

Communication and ERP Activation are critical components of the emergency response.





Effective Communication... Follow your Supervisor's instructions as best you can !!!



Placemats for Response Personnel

Incident Management Team (IMT)					
Emergency Response Placemat					
Title / Role	Division / Location				
Incident Commander	Corporate / Head Office (Calgary)				
Reporting	Notifications / Communications				
Reports to: Crisis Management Team Leader Minimum Direct Reports: Operations Section Chief Planning Section Chief Logistics Section Chief Finance & Admin Section Chief Additional Direct Reports: Crisis Advisor Crisis Advisor Legal Advisor EHS Officer Liaison Officer Information Officer	Internal: • Emergency Management Support Team (EMST) through the EMST Director • Incident Management Team (mobilize) • Internal response resources • Available off-duty personnel • Others as required External: • Mutual aid partners and third-party response contractors • Alberta Energy Regulator (AER) • Health Authority • OH&S/WCB • Ministry of Environment				
ICS Form Requirements					
 Section 7.1.1 ICS 201 – Incident Briefing (Initial Incident Commander Section 7.1.2 ICS 202 – Incident Objectives 					

- Section 7.1.3 ICS 203 Organization Assignment List
- Section 7.1.12 ICS 214 Activity Log

	T Incident Commander (IC) is the overall Person-in-Charge of the emergency response for all , 2 & 3 classified emergencies occurring at any AltaGas sites and facilities.
• • •	Establish an Incident Command Post Establish ICS organization needed to manage the incident Approve and authorize the implementation of an Incident Action Plan Coordinate activity for all Command and General Staff Coordinate with key people and officials
	Initial Actions
Confir	m the Level of Emergency and Immediate Response Requirements
•	 Obtain incident briefing from Operations Section Chief or Site Control Room If first point of contact regarding an emergency, try to establish communications with the person who reported the emergency and complete the Section 2.3 Initial Communication With The AER If the BST has not been activated and you are the first point of contact for the BST, notify an activate the Operations Section Chief and establish the EOC. Confirm the Emergency Level and communicate the Emergency Level to all responders. Gather details of the incident/emergency and evaluate the severity of the situation. Confirm the size and location of the response zones. Reference: Section 6.4 Emergency Planning Zones, Section 4.1 Isolation And Monitoring, and Section 4.2 Evacuation And Sheltering



ACTIVITY Emergency Preparedness Case Study



GROUP EXERCISE - Sample Emergency Operations Center Board

UPDATE LOCATION Halifax Harbour Bridge		ΓΙΜΕ	INCIDENT EVENT LOG					
DATE: Simulation		1330	 Ops receives call from Security – fuel tanker truck has crashed and exploded on MacDonald Bridge 					
TIME: ^{1500 hrs}		an section	1335	 HHB Security On-scene: Truck had Critically Injured, Driver MIA 				
Notifications:	DONE			1345	 Several other vehicles were damaged and the several other vehicles were damaged and the several damaged and the s	ged, no other injuries being ving difficulty navigating congested		
Ambulance Fire Dept.	& \$			1400	 Fire Department On-scene – Fire is and overflowing into the water 	s out but fuel truck is leaking badly		:
HPD, HPA	~			1415	 Ambulance has injured passenger deceased. 	under care, Truck Driver found		-
HHB Mgt & BoD HRM	✓✓			1430	 Call to HHB CEO from Develop Nov reporting large oil sheen at boardy have been deployed. 			
Halifax Transit	 ✓ 				 HHB Security reports that the truck had impacted the bridge riser structure causing significant damage to the bridge infrastructure. Facebook Post and Twitter are reporting a terrorist attack is underway on the MacDonald Bridge, MacKay Bridge is the next likely target 			
Waterfront DNS DFO/CCG/EC	 ✓ ✓ 			1445			ļ	A
JRCC Media	✓ ТВС			1500			R	
Wind: 15 kts l	NW	PERSONS ON SCEN	E		RISK ACTION PLANNING	RESOURCES NEEDED		
Tide: Ebbing Forecast: _{Stab}		NUMBERLOCATION1Truck2HHB?Public	MISSING 1 0 ?		 Emergency Services Security & Traffic Control Spill Contingency & Notices Legal Advice, NoK, Media ? Board of Directors Advice 	 Medical Traffic Control Fire Fighting Spill Equipment Engineering Media Liaison 		ADB

Summary

- incident command systems structure an emergency response
- emergency preparedness protects workers, communities, and the environment
- project risk assessments should include the hierarchy of controls





Safety Leadership





"The lowest level of safety a Supervisor shows ... is the highest level you can expect from your workforce."

> SAFETY SYSTEMS. OPERATIONAL EXCELLENCE.

They expect you to come home safely.

Don't disappoint them.

Course Assessment



