



## Analysis of Mumbai Combined Arms Operation and Recommended Protective Measures

**Background:** On 26 November 2008, Islamic extremists conducted terrorist attacks in Mumbai, India. Mumbai is the commercial and financial capital city of India, with a population of over 14 million. Ten gunmen paralyzed India's largest city in a matter of minutes Wednesday night, with the siege continuing until Saturday afternoon. To fully identify appropriate protective measures, it is essential to retrace the assault planning process, and examine all facets taken by the terrorists to achieve their



**Scope:** This document provides analyses of the tactics, techniques, and procedures emerging from the Mumbai attack and provides security recommendations to address possible similar terrorist attack methods. The following phases of the assault have been analyzed to develop specific protective measures:

- Surveillance
- Target Selection
- Infiltration
- Accessing the Target
- Engagement of Security Force

### SURVEILLANCE

The attacks were synchronized and coordinated, suggesting a high level of sophistication and planning.

*Recommended protective measures include:*

- Train staff to be aware of unusual events or activities (e.g. individuals loitering for no apparent reason, sketching, pace counting, etc.);
- Report any individual taking photographs or video taping venues, in particular those focused on access routes or obstructed paths into the venues (e.g. alleys, trails, etc.) to local law enforcement or facility security personnel;
- Install and monitor CCTV cameras at all venues covering multiple angles and access points;
- Develop a process for capturing images from CCTV photographs and video for comparison against Terrorist Watch Lists, and for further distribution to established command posts;
- When possible, establish random security patrols to disrupt potential surveillance efforts; and
- If possible, establish or enhance Business Neighborhood Watch Programs.



## TARGET SELECTION

The main attack focused on less secure, high visibility commercial facilities frequented by Western citizens. Targets included five-star hotels catering to international business and tourists; a popular restaurant for backpackers and Western travelers; a Jewish Community Center; and crowded transportation terminals. Other sites included a movie theater, police station, and hospital. Witness reports indicate that the terrorists appeared to be familiar with layouts of the target sites.

*Recommended protective measures include:*

- Establish security at venue access points and potential approach routes;
- If possible, randomly alter delivery entrances to venues to avoid developing discernable patterns;
- Avoid widely distributing site blueprints or schematics and ensure those documents are kept secured;
- Prepare for upcoming facility or area special events and dignitary visits; and
- Know facilities' vendors.



## INFILTRATION

The terrorists used a fishing vessel and small ships to gain access to Mumbai armed with small arms, grenades and explosives, allowing them to circumvent security checkpoints. Inflatable rafts carried terrorist teams to India Gateway and/or Badwhar Park at 9 p.m. local time. The lax security along Mumbai's coastline gave the heavily armed assailants simple, direct, and covert access to the heart of the city. Land route entry would have posed logistical problems due to infamous Mumbai traffic, and heavily monitored train stations.

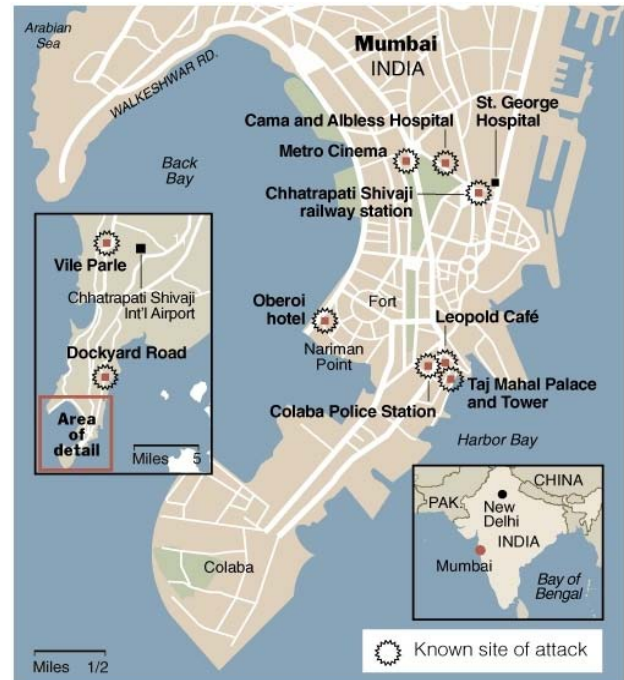
*Recommended protective measures include:*

- If a maritime approach is a feasible method of attack, deploy adequate harbor patrols and ensure increased awareness;
- Establish or reinforce surveillance detection and awareness programs for water-front businesses and residents to identify and report unusual activity;
- Encourage local population to report unusual behavior to increase vigilance and reporting;
- When a maritime threat exists, establish check points or other access control measures for all vessels;
- Require all vessels to positively identify themselves prior to entering the port area; and
- Increase planning, exercises, and coordination between the Captain of the Port and Federal, State and local law enforcement agencies.



## ACCESSING THE TARGET

According to media reporting the terrorists executed multiple attacks over a short period of time, not the simultaneous attacks that are the hallmarks of al-Qa'ida operations. Substantial knowledge of the facilities; targeted quick assaults with grenades and AK-47s aimed at large groups; hostages taken; and establishment of defensive strong-points contributed to the terrorists successfully accessing and commandeering the main targets. The terrorists were able to hit and run and successfully seize and hold.



*Recommended protective measures include:*

- Establish an outer perimeter at target sites to deny access or intercept potential assailants;
- Establish a credentialing process for facilities;
- Conduct background checks on all employees, if possible;
- Ensure security personnel and security measures are in place at all access points;
- Develop an emergency lock down procedure to critical parts of the facility (e.g. automatic locking mechanisms of access doors and windows to critical sites);
- Establish safe rooms within the confines of the venue/facility; and
- Establish communication messages to be broadcast over intercoms to instruct personnel on immediate actions.

## ENGAGEMENT OF SECURITY FORCE

It is possible that targets were attacked in a deliberate sequence in order to draw security forces away from the primary targets that the terrorists planned to seize and hold. These attacks included a strike on key local Indian leaders responsible for orchestrating response to the attack, possibly to delay and disrupt Indian law enforcement response to the attack.

*Recommended protective measures include:*

- Encourage local law enforcement to meet with key staff at venues to assist in the development of emergency evacuation and lock down procedures;
- Ensure personnel are familiar with emergency evacuation and emergency lock down procedures;
- Ensure local law enforcement have special weapons and tactics training;
- Establish protocols for fire suppression in the event of fires;
- Develop an alerting and notification network for other responders and sectors once an attack is imminent, has been launched, or has resulted in simultaneous attacks;
- Establish a secure perimeter surrounding command posts;



- Conduct security sweeps for secondary devices and increase security measures in zones that could be compromised;
- Determine if private corporations have provided Special Operations/assault training to non-law enforcement organizations responsible for facility security. If so, provide details on training and the number of personnel trained to facilitate communications with responding law enforcement personnel; and
- Situate specialized units at satellite locations throughout the region for a more immediate response capability.

