Hotel Security in the Middle East

John H. Hatcher, MBA, PE, CPP, CSC, CHS, LEED AP President HMA Consulting

TOPICS

- Design Process
- Current Regulations and Guidelines in the Middle East
- Current Technologies and Standard Implementations for Hotels
- New Technologies and Trends





Design Process





Design Process

- Pre-Design Analysis/Risk Assessments
- Concept Scoping
- Detailed Design
- Procurement
- Implementation







Threat Vulnerability Risk Analysis







Site Survey - Adjacencies







Site Survey – Hazards







Site Survey – Fire & Police Support







Site Survey – Crime Statistics







Threat Vulnerability Risk Analysis







Loss Event Profile

- Defining threats against the facility. Categories typically considered:
 - Crimes against the property
 - Crimes against the people
 - Bomb blast
 - Bio-terrorism
 - Chemical agents
 - Demonstrations
 - Natural disasters

Year	Nonths	Population coverage	Violent crime total	Murder and nonnegligent manslaughter	Forcible	Rabbery	Approvated	Property crime total	Binglary	Lancery.	Hotse schicle theft	Violent Crime rate
1985	12	443,575	4.329	0.0000	485	1,165	2,197	45.305	14,736	24,912	6.249	571.3
1885	12	444.110	4.239	60	426	1,484	2.270	63 168	17.048	29.404	6.703	964.5
1287	12	441.408	3,796	40	301	1.322	2.047	12,258	17.345	28 151	6,755	860.4
1985	12	\$40,136	3,000	80	377	1.365	2,104	45 331	14.853	25,831	6,707	005.4
1988	12	431.562	4,307	61	352	1,617	2,277	44.013	13.675	23.736	6.802	997.6
1884	12	444,710	4.813	840	422	1.398	2,928	42,377	11.440	25.667	6.280	1,002.3
1991	12	\$49.025	0.066	54	473	1.499	3.036	#4,654	11,625	26,629	6 500	1,128.2
1962	12	464.255	6.368	61	472	1,036	1.005	44.414	11,249	37,214	6.561	1,309.3
1953	12	457.448	0.480	.00	818	1.724	4.101	44,860	10.000	29.216	6.578	1,416.6
1234	12	461,271	6.471	65	546	1048	4.112	48 503	10,301	33,711	4,881	1.402.5
1201	17	466,232	6.027	227	473	1.603	3,774	47,586	10.470	32.063	5.116	1,292,7
1295	12	469.632	6.308	67	477	1.470	3.296	65.750	10.690	36.667	6,140	1,130.0
1897	12	477.046	6.005	58	4D0	1.507	3.200	40.968	9,778	35.628	4.540	1.073.0
1205	12	463.637	4,616	06	421	1,272	2,667	42,106	9,268	28,867	3.981	995.6
1233	13	473,772	4.071	50	308	1,004	2.663	40.101	8.038	29,433	3,630	059.3
2999	12	606.132	3.961	34	366	990	2.576	43,894	7,280	33.012	3.662	780.6
2081	12	607.617	6,183	46	406	1,090	2,643	41.650	0.465	29,771	3.516	824.2
2987	12	012,440	4,214	28	445	1,169	2,742	45,711	8.314	33,666	3.711	622.7
2963	12	521,681	4,642	40	366	1.361	2,847	47,586	8.300	36.367	3.600	889.8
3994	12	525.884	4,321		374	1.103	2,736	45,854	8.315	33.444	3,636	822.5
2045	12	531.688	4,536	54	368	1.193	2,633	42,148	8.925	28.636	4.585	953.6
2004	12	530.016	4,301	56	307	1.179	2,740	34,292	9.304	20.169	4.810	802.4





Threat Vulnerability Risk Analysis







Loss Event Probability

- Almost Certain It is a given that this event will occur
- Likely The likelihood of occurrence is greater than of non-occurrence
- Credible There is approximately a 50-50 chance the event will occur at some time
- Unlikely The event is more likely to not occur than to occur. This does not imply that the event will definitely not occur merely that it is unlikely
- Rare Either there is a very remote possibility of occurrence or there is not enough information available on which to evaluate the probability of



occurrence



Threat Vulnerability Risk Analysis







Loss Event Criticality

- Vital: such an occurrence would cause a serious setback to the business
- Important: a loss event of this kind would have a major impact on the company and associated businesses from a financial and organisational point of view
- Secondary: a loss of this kind would be covered by normal budget contingency allowances and would not impact greatly on the operation of the company
 Unknown: there is insufficient information to judge the effect of a loss event on the organisation





Threat Vulnerability Risk Analysis







Prioritize Events Needing CM

Impact

Vital

Secondary

Important

29 33	1, 3. 10, 11, 14, 16, 39, 40, 41, 45	4, 5, 13, 15, 17, 18, 32, 42, 44	45		
30	12, 27, 28	2, 15, 34, 47	6 19	31	
	38 43	8, 21. 22, 23	9, 24, 25, 26, 37, 48, 53	7, 20, 35, 36, 49, 50, 51, 52	
Rare	Unlikely	Credible	Likely	Almost Certain	

Probability







Threat Vulnerability Risk Analysis







Define Countermeasures

- Define countermeasure(s) for each qualified loss event. CM include:
 - Architectural solutions
 - Landscaping solutions
 - Lighting solutions
 - Manpower solutions
 - Technology solutions









Retest the Criticality vs. Probability

Vital		1, 3, 5, 10, 11, 14, 16, 18, 29, 31, 32, 33, 39, 40, 41, 42, 45	4, 15, 17, 46	13, 44		
<i>Impact</i> Important		27, 28, 30, 34	2, 6, 12, 19, 47	15		
Secondary	-	38	8, 21, 22, 23, 25, 26, 43, 48, 53	9, 24, 35, 36, 37, 49, 50, 51, 52	7, 20	
	L	Rare	Unlikely	Credible Probability	Likely	Almost Certain





Concept Scoping

- Application of countermeasures to the details of the project
- Coordination of other design consultants to achieve countermeasures





Detailed Design

- Development of detailed documents including:
 - Device locations
 - Installation details
 - Control room layouts
 - Detailed specification requirements
- Guard force procurement packages







Procurement

- Evaluating technical and financial proposals on the following basis:
 - Compliance with the bid package
 - Capital cost
 - Long term PM cost







Implementation

- Oversight of the implementation process:
 - Submittal and shop drawing reviews
 - Periodic installation inspections
 - Commissioning oversight
 - Final acceptance testing







Current Regulations and Guidelines





Current Regulations and Guidelines

- Government bodies in the region are beginning to define minimum security requirements for hotels.
 - Primarily address CCTV requirements (locations, fields of view, resolution and recording requirements)
 - Uniform requirements for all hotels
 - Standard measures to allow police interface to the systems
 - Operators need to identify additional measures as necessary to achieve security goals





Abu Dhabi Requirements







CCTV "full" coverage of the following:

- All entrances and exits (including roof)
- Front desk
- Back of House Areas:
 - Kitchen
 - Laundry
 - Housekeeping, etc.





CCTV "full" coverage of the following:

- Public Areas:
 - Parking (indoor and outdoor)
 - Coffee Shops, Phone booths
 - Department entries
 - Spa
 - Gym
 - Swimming Pool, etc.
 - Conference/Meeting Rooms
 - Business Centre
 - Restaurants, Dining, Bar, etc.





- CCTV "full" coverage of the following:
 - Guest Areas:
 - Room Floor corridors
 - Lift cabs





- Additional Requirements:
 - Connectivity to MOI monitoring
 - Lobby and Front Desk 4 CIF/25 fps
 - One month recording
 - H264 encrypted video streams











Dubai Requirements 1 (As per Law 24 of 2008)

- Color CCTV with "identification view" coverage of the following:
 - All entrances
 - Vehicle entries (plate reading)





- Color CCTV with "recognition view" coverage of the following:
 - Reception desks
 - Lift lobbies at ALL floors
 - Inside lift cabs
 - Emergency stair doors on ALL floors
 - Safe deposit and luggage rooms





- Color CCTV with "recognition view" coverage of the following:
 - Entrances to:
 - Bars
 - Discos
 - Night clubs
 - Ballrooms/function halls
 - Business centres





- Color CCTV with "detection view" coverage of the following:
 - Loading and deliver areas
 - Vehicle drop off areas





- Color or BW CCTV coverage of the following:
 - Inside car parks
 - Lobby and lounge areas
 - LPG storage
 - Main Electrical rooms
 - Water tank access





- Recording:
 - 31 days
 - 4 fps all cameras
 - 4 & 5 Star:
 - Dedicated control Room
 - 24/7 Security Guards
 - Female Security Guards





Other Middle East Country Requirements





Other Regional Requirements

- Most countries have not developed firm guidelines
- Several have higher security needs with more stringent de facto standards
 - Metal Detectors
 - X-Ray Screening
 - Explosives Detection
 - Vehicle Screening
 - Set back distances (particularly from lobbies)
 - Road blockers and bollards





Current Technologies





Current Technologies and Standard Implementations

- Extensive CCTV in common areas
 - May act as deterrent, but typically used for postincident investigation
 - Number of monitors and operators should reflect quantity of cameras
- Mostly analogue or hybrid systems





Current Technologies and Standard Implementations

- Offline room access locks
 - Preprogrammed cards
- No centralized monitoring or control







Current Technologies and Standard Implementations

- Minimal use of centralised Access Control and Monitoring Systems for
 - BOH areas
 - Perimeter portals







Emerging Technologies





IP CCTV

- Becoming more cost effective
- I MegaPixel, 4 CIF









Implementation of new and sophisticated video analytics software

- Monitors for erratic/uncommon behavior
- Alerts security guards to these events
- Enhances CCTV to a more proactive measure





Online room access locks

- Active centralised monitoring
 - Wireless connectivity
- Possible energy savings measures
 - Smart room controls
- Contactless access locks







Less obtrusive under vehicle detection systems







Aesthetic bollards and planters









Key "Take Aways"

- The current regulations and guidelines are minimums
- You are responsible for a comprehensive security approach to your facility
- Be aware of the emerging technologies they may save you capital and operational expenses





THANKYOU

Questions?

John H. Hatcher, MBA, PE, CPP, CSC, CHS, LEED AP President HMA Consulting



