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Cyber Security Export Market: United Arab Emirates
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EXECUTIVE SUMMARY

» The Middle Eastern cyber security market is valued at $23 billion. [1] The UAE makes up 41.5 percent of Middle Eastern security software maintenance and license revenue. [2] UAE military expenditures were estimated at $19.2 billion in 2011. [3][4] Growth in defense spending is expected to continue.

» The UAE is connected. 85 percent of residents are online. [5] Smart penetration is the highest in the world. [6]

» The government has recognized the need for cyber security. National Electronic Security Authority (Nesa) created in 2012.

» United States (US) – UAE relations support the involvement of US companies in the UAE cyber security market. Bilateral defense cooperation is ongoing. It has been reported that the US government is assisting the UAE in addressing the threat of cyber security attacks from Iran. [7]

» The US and UAE entered into a Trade and Investment Framework Agreement (TIFA) in 2004. US exports to the UAE in 2012 totaled $22.5 billion, the majority were high value goods. [8] More than 1,000 US companies have office in the UAE [9] and 60,000 US citizens live in the UAE. [10]

» The environment of the UAE is generally perceived as conducive to doing business. There are still potential challenges that must be considered when entering the market, particularly when pursuing business with the government.

» Direct government procurement from foreign companies is rare and offset requirements are common.

» Intellectual property rights protection in the UAE is better than in most countries in the region, but enforcement is perceived to be inconsistent.

» The UAE is a major business hub across industries and therefore many international companies are already well established and create a competitive environment.

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[1] (Mustafa, Awad, 2012)
[2] (ITP.net, 2013)
[3] (CIA World Factbook, 2013)
[4] (SIPRI, 2013)
[5] (Sinclair, Kyle, 2013)
[6] (Latitude Group, 2013)
[7] (Shanker, Thom and David E. Sanger, 2013)
[8] (CRS, 2013)
[9] (CRS, 2013)
[10] (CRS, 2013)

CYBER SECURITY IN THE UAE

CYBER TRENDS

The UAE is a highly connected society. A recent UN Broadband Commission report says 85 percent of UAE residents are now online.[11] That places the UAE 3rd amongst Middle Eastern countries and 17th globally for internet usage. The US was ranked 24th in the same study.[12] The UAE also has an extremely high rate of smart phone penetration. Some studies have ranked it as number one in the world[13], well ahead of the US and UK.[14]

In GCC countries the internet has got attention as an important tool for connecting the government to the people. The UAE has been pursuing E-Government and Smart-Government initiatives. [15] A lot of information and a number of government services are accessible on the Official Portal of the United Arab Emirates and on the sites of the individual emirates.

US brands, particularly in the technology sector, are generally held in high regard in the UAE. Advanced technologies make up a major part of US exports to the UAE. Of the $22.5 billion in exports in 2012, $13 billion were of computers, electronics, airplanes, and cars[16]. The value of the state of California's exports alone totaled $1.8 billion in 2012 and the top exports from California were computers and related equipment.[17]

The connectivity of the UAE is expected to grow further in the coming years with growth in cloud services estimated at 40 percent over the next three years in the UAE. [18] As part of that growth, Injazat Data Systems announced that it will be offering Managed Virtual Data Center services.[19] In that announcement, Injazat said, "The Managed Virtual Data Center services are inherently highly secured and are delivered from a protected environment that is fully compliant with the international ISO 27001 Information Security Management framework."[20]

Developments in the defense sector are also increasing the country's reliance on technology and need for connectivity. Even in the defense arena, connectivity will extend beyond the UAE's borders. The UAE was the first international purchaser of Thermal High Altitude Area Defense (THAAD) missile defense platform. [21] All countries of the Gulf Cooperation Council (GCC) countries have invested in missile defense, but the size and proximity of the GCC countries creates a need for integration of missile defense systems across the region. [22] How the integration will be carried out has not yet been confirmed, but when done, the region's missile defense capability will be enhanced, but that integrated system will require comprehensive protection from cyber threats.[23]

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[11] (Sinclair, Kyle, 2013)
[12] (Sinclair, Kyle, 2013)
[13] (Mashable, 2013)
[14] (Latitude Group, 2013)
[15] (Sinclair, Kyle, 2013)
[16] (Hamid, Triska, 2013)
[17] (Hamid, Triska, 2013)
[18] (Injazat, 2013)
[19] (Injazat, 2013)
[20] (Injazat, 2013)
[21] (Weisgerber, Marcus and Aaron Mehta, 2013)
[22] (Weisgerber, Marcus and Aaron Mehta, 2013)
[23] (Weisgerber, Marcus and Aaron Mehta, 2013)

While the high rate of internet access and availability of advanced technology makes the UAE an attractive and accessible market for many businesses, the high level of interconnectedness represents a vulnerability to cyber-attack and a need for cyber security throughout the public and private sectors.

CYBER ATTACKS

In the Middle East, there is a growing recognition of the threat of cyber-attacks and the market for cyber security software and services is expected to continue to grow. Attacks in the Middle Eastern energy sector in 2012 have received a lot of attention and spurred discussion of cyber security. Saudi Arabia's Saudi Aramco and Qatar's RasGas faced similar attacks that were meant to hurt the economies of each country.[24] Saudi Aramco is the largest oil producer in the world. Therefore its vulnerability sends a warning to all, particularly other major oil producing companies and countries, such as the UAE.

Government websites of the UAE were attacked in July of 2013. The country's computer emergency response team (aeCERT) was able to address and minimize the impact of the attacks[25], but this demonstrates how government sites are vulnerable targets. These sites are important to the government in relating to and connecting with the people. Addressing such attacks requires international cooperation, as the source is often international. Mohamed al-Ghanim, director general of the Telecommunications Regulatory Authority (TRA), said, "We confirmed that the attempts started in Egypt and acting accordingly, we contacted the concerned authorities in Egypt to coordinate our efforts on this matter."[26]

GOVERNMENT CYBER SECURITY INITIATIVES

The government of the UAE has taken a variety of initiatives to address cyber security. The TRA is one authority that plays a role in cyber security and their efforts are accompanied by a variety of federal initiatives. A significant percentage of the UAE's security spend is expected to be on cyber security over the next few years.[27] The national organizations engaged in UAE cyber security include:

The Telecommunications Regulatory Authority (TRA)	Established in 2003. "Responsible for the management of every aspect of the telecommunications and information technology industries in the UAE."[28]
UAE Computer Emergency Response Team (aeCERT)	Established by the TRA "to facilitate the detection, prevention and response of cyber security incidents on the Internet."[29] A lot of the work of aeCERT is focused on outreach and education, but it is also the unit the government credited with stopping the 2013 attacks on government websites.
The National Electronic Security Authority (Nesa)	Established in 2012 and affiliated with the Supreme National Security Council. "NESA will be responsible for implementing and making national policy of the UAE electronic security and will also look after cyber threats and attacks."[30]

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[24] (Din, Suleman, 2013)
[25] (Carey, Glen, 2013)
[26] (Carey, Glen, 2013)
[27] (UKTI, 2013)
[28] (TRA, 2013)
[29] (aeCERT, 2013)
[30] (Alfred, Sarah, 2013)

| Ministry of Defense | "Maj Gen Mohammed Al Essa of the Ministry of Defence, said that the three services of the armed forces were working closely on enhancing the security of digital communications systems to sustain a high readiness to face any threat to national or regional stability."[31] |

THE CYBER SECURITY MARKET IN THE UAE

Some of the features of the UAE economy that make it an attractive place to do business are the same ones that make the country vulnerable to cyber security attacks: the high rate of internet usage, the high penetration of cell phone usage, the government's use of online portals, the government's investment in high tech defense platforms, the sophisticated infrastructure and open markets. Therefore, both the necessity of security and the wealth of the nation are making funds available and creating demand for cyber security.

The value of the Middle Eastern cyber security market is currently estimated at nearly $23 billion. The UAE made up 41.5 percent of Middle Eastern demand for security software maintenance and license revenue in 2011.[32] As it does for many other business sectors, the UAE serves as a regional hub for cyber security. The country can be called a hub, because the demand from the public and private sector makes it a prime market, a number of security companies have already opened offices in Dubai, large IT tradeshows are hosted in the UAE and the openness of the economy allows for buyers from other countries to participate in the market.

» The largest Information and Communications Technology event in the Middle East is hosted in Dubai. GITEX Technology Week will take place October 12-16, 2014. As with many other industries, having operations and a sales presence in Dubai can provide cyber security companies with access to other markets in the region.

MARKET ACCESS

There are approximately 1,000 US companies with offices in the UAE,[33] 60,000 US Citizens currently living in the UAE. The US export market to the UAE, worth $22.5 in 2012 was made up primarily of high value goods.[34] This combined with the World Bank ranking the UAE number 23 out of 189 countries for ease of doing business[35] indicates that the UAE is accessible to American companies. However, a closer view on trade and investment agreements and regulations and the government procurement processes is required when considering the marketing of cyber security solutions to the government of the UAE.

TRADE AGREEMENTS

The US and UAE entered into a Trade and Investment Framework Agreement (TIFA) in 2004 and began discussions of a bilateral Free Trade Agreement (FTA) at that time. An FTA was never established, but negotiations were replaced by a US-UAE Economic Policy Dialogue that includes two meetings per year between US and UAE officials.[36]

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[31] (Mustafa, Awad, 2012)
[32] (ITP.net, 2013)
[33] (CRS, 2013)
[34] (CRS, 2013)
[35] (World Bank, 2013)
[36] (CRS, 2013)

The US and UAE governments are also already collaborating specifically in relation to cyber security. According to the *New York Times*, it is expected that the US Government is assisting the UAE, and other gulf states, in addressing the threat of cyber security attacks from Iran.[37]

US and UAE trade ties are also furthered through the GCC-U.S. Framework Agreement on Trade, Economic, Investment, and Technical Cooperation.[38] The GCC is a political and economic alliance of the UAE, the Kingdom of Saudi Arabia, Bahrain, Qatar, Oman, and Kuwait. The region applies the single point of entry principle, the free movement of goods is allowed throughout and a common external tariff is applied at the first port of entry. While efforts to engage in freer trade are in progress for the UAE and GCC, they are not universal.   In 1994, the UAE ended enforcement of the Arab League's boycott of companies that do business with Israel, but still has a ban on direct trade with Israel.

IMPORT REGULATIONS

The GCC common external tariff is 5 percent and is applied by the UAE, however there are exceptions.[39] While a much higher tariff is applied to alcohol and tobacco, other items are entirely exempt from customs duties.[40] The exemptions include diplomatic and military goods.[41] These exemptions may be relevant for goods sold by US businesses to the UAE government, depending on the procurement agency and terms of the contract.

Tariffs are not applicable on goods brought into the UAE's free zones from abroad, but they are on goods brought directly into the mainland or into the mainland from the free zones. Similarly, import licenses are required for goods that enter the mainland of the UAE, but not for goods that remain within the free zones. Only companies registered in the UAE are able to obtain import licenses.[42]

In addition to being aware of the tariffs applicable and the licenses required to bring goods into the UAE, potential importers should also be aware of documentation requirements. Proper documentation is required to avoid import delays and costly fines. All documentation must be authenticated by the UAE embassy in the country of origin.[43] This is not an exhaustive list of the requirements for import into the UAE, but it does highlight the importance of having a trusted advisor who knows the local regulations and how they are applied and of a partnership with a local company for those without their own UAE business license.

GOVERNMENT AND DEFENSE PROCUREMENT

When doing business with the government, there are requirements that may not be faced in the UAE's private sector. A basic, yet important, issue is that while a great deal of the business done in the UAE is conducted entirely in English, Arabic remains the official language and proposals to the government must be made in Arabic.[44]

The UAE is a member of the WTO, but it has not signed the Agreement on Government Procurement (GPA).[45] "The GPA recognizes that the government and its agencies are normally the largest purchaser of goods in any country and that they face pressure to favor domestic policies. The aim of the GPA is to

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[37] (Shanker, Thom and David E. Sanger, 2013)
[38] (CRS, 2013)
[39] (USTR, 2013)
[40] (USTR, 2013)
[41] (USTR, 2013)
[42] (HSBC and PwC, 2012)
[43] (USTR, 2013)
[44] (US Commercial Service, 2013, p.10)
[45] (USTR, 2013)

open this government business to international competition."[46] However, the federal government and Abu Dhabi are implementing electronic procurement systems to ease the process for contractors.[47]

As in many other countries, the government of the UAE has a desire to promote domestic businesses and to grow the domestic defense industrial base. Local firms receive a 10 percent price preference in the government procurement process.[48] Further it is rare that a contract is directly awarded to a foreign company, the government usually works through local agents which must be wholly UAE owned or with companies established within the UAE that have majority UAE ownership.[49] Exceptions are made for major project and defense work where it is deemed that no local company can provide the goods or services required.

In addition to the price preference for local companies and the requirement for UAE ownership of companies doing business with the government, it is important to be aware of the UAE's offset program. The UAE Industrial Development Program (also known as the UAE Offset Program) is meant to secure some benefit for local companies when foreign entities are awarded major defense contracts. Defense contractors that are awarded contracts worth more than $10 million will be required to establish commercially viable joint ventures with UAE local business partners that are expected to generate profits equal to 60 percent of the contract value (normally over a seven year period). [50] Though some defense contracts may be exempt from UAE ownership requirements due to a judgment that there is no suitable domestic supplier, those contracts may still be subject to the UAE's Industrial Development Program.

There are various government entities that issue tenders and are often issued at the emirate level. Tenders can be public or restricted.[51] Public tenders are announced in the media. Some are open to global suppliers and others are only announced locally and are only open to local suppliers. Restricted tenders are only issued to suppliers registered with the relevant government entity and pre-selected.[52]

The following sites list UAE government tenders that may be relevant to cyber security providers. In addition to current opportunities, the tenders posted may present contact details useful in pursuing relationships.

> » Abu Dhabi eGovernment Gateway (Government site)
> » Government Contracting Opportunities in Abu Dhabi (Government site)
> » Abu Dhabi City Municipality Current Tenders & Auctions (Government site)
> » eSupply – Dubai Procurement Portal (Government site)
> » Government of Dubai Tenders & Bidding (Government site)
> » Emirates Tenders (Commercial subscription site)
> » Global Tenders – UAE (Commercial subscription site)

Abu Dhabi and Dubai are leaders in government and business and the majority of the cyber security opportunities in the UAE are expected in those two emirates, but opportunities may also arise in the other five emirates. All will certainly have infrastructure to protect. Links to the government and tender sites (where available) are provided in Appendix 1: Useful Links.

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[46] (WTO, 2013)
[47] (USTR, 2013)
[48] (USTR, 2013)
[49] (US Commercial Service – Safety and Security Resource Guide, 2013, p. 206)
[50] (USTR, 2013)
[51] (US Commercial Service – Safety and Security Resource Guide, 2013, p. 206)
[52] (US Commercial Service – Safety and Security Resource Guide, 2013, p. 206)

MARKET SIZE AND GROWTH

DEFENSE SPENDING

The defense budget of the UAE is not published and it is therefore difficult to quantify the exact value of the budget and the amount spent on particular programs. However, research has been completed to estimate the value of the UAE's defense market and UAE defense spending has been estimated at $19.2 billion in 2011.[53] The market is sizable and growing at a time when defense budgets of many other developed nations are being cut.

FIGURE 1: UAE MILITARY EXPENDITURES 2006-2011
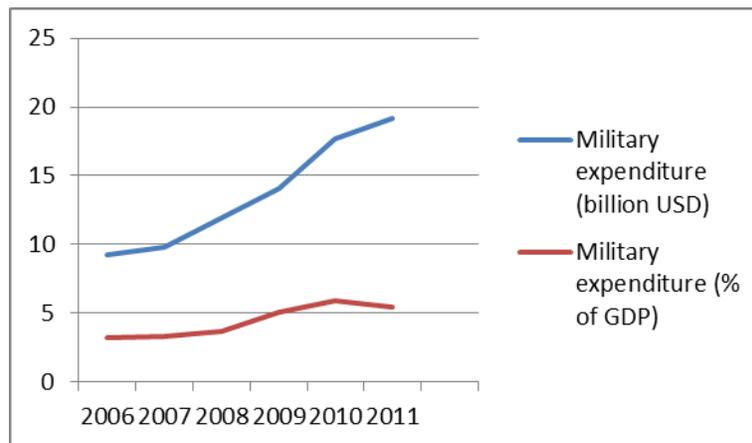
Source: SIPRI military expenditures database

The oil wealth and economic growth of the UAE facilitate defense spending. Much of the UAE's defense spending is motivated by a desire to maintain regional stability and address regional threats.[54] According to Business Monitor International, "The UAE is increasingly assertive on foreign policy in an effort to create and preserve regional stability."[55] A significant portion of recent purchases has been on high tech platforms. The UAE relies heavily on foreign OEMs for high tech purchases, as domestic capability in this area is limited.[56]

Over the period of 2007-2010, it agreed to spend $10.4 billion, through the US Foreign Military Sales program more than any country, aside from Saudi Arabia.[57] The UAE also makes a considerable portion of its defense purchases from France and Italy.

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[53] (SIPRI, 2013)
[54] (BMI, 2013)
[55] (BMI, 2013)
[56] (BMI, 2013)
[57] (CRS, 2013)

CYBER SECURITY MARKET POTENTIAL

When the growth of the UAE's defense market is considered in connection with the current size and anticipated growth of the technology and cyber security sectors, the potential value of the market to American companies looking to provide hardware, software and services abroad becomes apparent. "The UAE is the most advanced nation in the [Arabian] Gulf and the Arab world with regards to its cyber-technology infrastructure, however, having the most advanced infrastructure makes you the most vulnerable because of the rapidly changing and developing advances in cyber warfare," Gen Al Buainnain said."[58] One source estimates Middle East spending on cyber security during the next decade will be almost $23 billion[59] and another source places the UAE's share of Middle Eastern spend on security software at 41.5 percent.[60] The total cyber security estimate of $23 billion likely includes goods and services other than software, but these two estimates paint a picture of the significant market in the UAE and growth is expected to continue.[61]

MARKET SECTORS

According to ITP.net, "the top three sectors of finance, government, and telecommunications together contributed to 58.2% of total security software spending in the GCC in 2011."[62] Therefore, while expenditure to protect government websites, defense systems and infrastructure is a considerable part of the UAE's cyber security market and the government an important potential customer companies entering the market should also consider expenditure by private industry and state owned enterprises (that are not always included in government procurement analysis). Market sectors include internet security, digital signatures, biometrics, software protection, user rights management, and data security to name a few. Infrastructure and homeland security, crisis and incident management based on software also offer opportunities in the information security market. Security consulting services are also in demand in the UAE[63].

MARKET ENTRY

The United Arab Emirates (UAE) does not have any barriers to trade in place that are targeted specifically at US companies, but direct government purchases from foreign suppliers are extremely rare[64]. Therefore, the establishment of a local presence and development of personal relationships are vital to entering the market and securing significant opportunities with the government or state owned enterprises.

The type of presence best suited to a particular company will depend on the nature of the goods and services being sold and the types of opportunities being pursued. There is not one solution that is best for all cyber security companies, but it is clear that a local presence will be required to some extent if significant cyber security related awards are to be secured from the government.

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[58] (Mustafa, Awad, 2012)
[59] (Din, Suleman, 2013)
[60] (ITP.net, 2013)
[61] (ITP.net, 2013)
[62] (ITP.net, 2013)
[63] (ITA Global safety and security guide, 2013-2014).
[64] (US Commercial Service – Safety and Security Resource Guide, 2013, p. 206)

LOCAL AGENT

Working through a local agent does not require opening a local office, but broadens the opportunities that an American company can pursue beyond those available when only marketing directly from abroad. Establishment of a local agent agreement may allow an American company the opportunity to compete for government tenders that are closed to foreign entities and it more broadly can provide sales, marketing, after sales support.[65]

Foreign companies that want to access the UAE market, but do not want to open their own office or secure their own licenses to operate in the UAE can appoint a commercial agent.[66] Only UAE citizens or companies wholly owned by UAE citizens are permitted to act as agents.[67] Commercial agents are registered with the Ministry of Economy.[68] A license and presence is required separately for each emirate in which the agent does business. It may therefore be necessary to select a different agent in each emirate.[69] A summary of the laws relevant to commercial agents and agent agreements can be found on the Abu Dhabi eGovernment Gateway.

While most business leaders will automatically recognize the importance of selecting an agent with the appropriate technical capabilities and business relationships, the relevant UAE regulations make this selection an even more important decision.

» The law gives the agent automatic exclusivity in the assigned territory, therefore the agreement must clearly state the geographic territory to be covered by the agent.[70]

» The agent is entitled to commission or profit by law, therefore the agreement should define the agent's responsibilities and how performance will be measured in detail.[71]

» It is difficult to terminate an agent agreement.[72] The law requires substantial justification for termination of an agent agreement and even with that justification, the agent will likely be entitled to compensation.[73] This inherent commitment that comes with an agent agreement in the UAE means that agents must be carefully vetted and the terms and timeframe of the agreement clearly defined.

> **Article 23 of Federal Law No. 18 of 1993 concerning Commercial Dealings provided that:**
>
> "It shall not be permissible for non-UAE nationals to run businesses unless upon joining a partner or partners holding the UAE nationality in accordance with the terms and within the limits specified in the Commercial Company Law".

Hiring a commercial agent presents an attractive offer to American companies entering the UAE market. However, potential challenges come with the fact that the law provides entitlements to the agent and the agent agreement cannot be easily terminated. In the realm of cyber security, intellectual property protection and technical knowledge are both crucial to preserving the competitive advantage of the company and serving the customers. These requirements further highlight the importance of thorough

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[65] (US Commercial Service – Safety and Security Resource Guide, 2013, p. 206)
[66] (Abu Dhabi Chamber 2013, p. 10)
[67] (UKTI, 2011)
[68] (US Commercial Service, 2013, p.6)
[69] (US Commercial Service, 2013, p.7)
[70] (US Commercial Service, 2013, p. 7)
[71] (US Commercial Service, 2013, p. 6)
[72] (UKTI, 2011)
[73] (Abu Dhabi eGovernment Gateway, 2013)

vetting of potential agents and of engagement of legal counsel in establishing an agreement. They may also be reasons to encourage American companies looking to play a major role in the UAE cyber security market to consider establishing their own local physical presence.

When establishing an agent agreement, American companies should work with a trusted local attorney who will protect their interests and ensure that all agreements are compliant with the local law.[74] When starting the process of selecting an agent and an attorney, companies may contact:

- » The US Commercial Service. Meetings with potential partners can be arranged through the Gold Key Matching Service (there is a fee for this service).
- » American Chamber of Commerce Abu Dhabi.
- » American Business Council of Dubai & the Northern Emirates.

LOCAL PHYSICAL PRESENCE

Companies that are planning to make a long term investment in the UAE and play a major role in the cyber security market should consider establishing a local physical presence. The requirements of government procurement, the high value placed on personal and lasting relationships, the need to protect intellectual property and the need for a highly skilled work force to sell, implement and service cyber security solutions all support establishing a local presence. This decision should only be made based upon comprehensive market research and perhaps after testing the market through direct marketing or a commercial agent. The volume of the business and nature of the products and services sold will dictate if the investment if worthwhile, e.g. standard off-the-shelf solutions may not demand the same presence as customized solutions.

The UAE Commercial Companies Law, Federal Law No. 8 of 1984,[75] (Commercial Companies Law) allows seven different types of business entities.[76] The most common structures chosen by foreign companies to establish a physical presence in the UAE are the limited liability company and the branch office.[77]

LIMITED LIABILITY COMPANY

A limited liability company must be 51 percent owned by UAE nationals. Free zone companies can be 100 percent foreign owned, but they are generally not allowed to conduct commercial activities in the UAE outside of the free zone.[78]

BRANCH

Branch offices are wholly owned by the parent company, but they do require a local national sponsor.[79] The scope of commercial activities that a branch office can conduct is limited compared to a UAE majority owned company and varies from emirate to emirate.[80]

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[74] (US Commercial Service, 2013, p. 7)
[75] (US Commercial Service, 2013, p.7)
[76] (HSBC and PwC, 2012, p.14)
[77] (US Commercial Service, 2013, p.7)
[78] (US Commercial Service, 2013, p.7)
[79] (UKTI, 2013)
[80] (HSBC and PwC, 2012, p.14)

REGISTRATION AND LICENSES

» The Abu Dhabi Chamber of Commerce & Investment (ADCCI)'s Trade License Guide provides a summary of the requirements for obtaining a license to do business in Abu Dhabi. Other emirates can have their own licensing and registration requirements.

Prior to making major investments and commitments to any particular market entry strategy, American companies should do comprehensive market research and become familiar with the country, culture, and competition.

COMPETITION

The UAE is a major business hub and companies entering the market should expect competition from a wide range of international players. The government aims to develop the defense industrial base of the UAE and to decrease reliance on foreign countries and companies, but at the present time, in both the defense and IT sector, a demand for imports is expected to continue and to grow. The domestic competitors that are present may be viewed as opportunities for partnership - partners that can improve market access and fulfill government offset requirements. International competitors may already be well established and may come from Europe, Asia, South Africa, or Australia, etc.[81]

In the UAE, American goods and services are generally perceived as being of high quality. American companies normally rely on technical and qualitative advantages when competing with less expensive foreign competition.[82] European products and service are also perceived to be of high quality and with advanced cyber security capabilities already established in a number of European countries,[83] As the UAE is considered an easy place to do business[84] and is open to businesses from most countries, American companies should consider their main competitors in other parts of the world as potential competitors in the UAE.

See Appendix 2: Current Players in the Market for further details of the companies currently engaged in the UAE Cyber Security Market.

» Defense and/or security trade events offer networking, partnership and other opportunities. These include IDEX, ISNR, INTERSEC and ISS World MEA. Please click on the links for event details.

LEGAL ISSUES

UAE legislation is a mix of Islamic (Sharia) law and civil law.[85] Under the UAE's dual court system, Sharia law governs criminal and family law matters. Civil matters are governed by civil courts that are based on French and Egyptian legal systems.[86] Observers have declared that justice in the UAE is selective.[87]

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[81] (US Department of Commerce – Safety and Security Resource Guide, 2013, p. 207)
[82] (US Department of Commerce – Safety and Security Resource Guide, 2013, p. 207)
[83] (US Department of Commerce – Safety and Security Resource Guide, 2013, p. 207)
[84] (World Bank, 2013)
[85] (Khedr and Alnuaimi, 2010)
[86] (CRS, 2013)

Dispute resolution systems can be cumbersome to navigate and the effectiveness varies from emirate to emirate.[88]

COMPANY LAW

While the UAE's liberal trade policies and advanced infrastructure make it an attractive place to do business and a major entry point for foreign companies to access the region, there are some legal differences and challenges that American companies should be aware of when considering if and how to enter the market. In a report by HSBC and PwC, while highlighting the many opportunities in the UAE, the writers also warn that "some of the challenges to invest in the UAE include: the need for a local sponsor owning 51 percent of the business (if not in a free zone); ability to enforce contracts; more limited creditors' rights and options (bankruptcy laws not keeping pace with the economy development); and some inherent risks to the region because of geopolitical concerns."[89]

The UAE Company Law regulates foreign business entities in the UAE. Foreign investors must be registered and licensed by UAE authorities before commencing business operations anywhere in the UAE. Foreign investors can establish a business in the mainland of the UAE or within a free trade zone. There are more than 30 free trade zones currently established in the UAE and the majority of them are in Dubai. A foreign investor can establish a wholly owned entity (100 percent foreign owned entity) in a free trade zone. This can be an ideal situation for engaging in international trade and using Dubai as a hub, but entities registered in a free trade zone cannot engage in commercial activities outside the free trade zone and within the mainland of the UAE.

Therefore, companies looking to engage in the Emirati market with businesses and the government of the UAE will likely need to establish an entity within the mainland. The UAE Company Law provides for seven different types of businesses, but most foreign investors establish either a limited liability company (LLC) or a branch. [90]   Foreign ownership of an LLC is limited to 49 percent.[91] This was expected to change in 2013 when the UAE Company Law was revised. The change was not made in the revised Law, but is expected to be considered again under a new UAE foreign investment law.

INTELLECTUAL PROPERTY RIGHTS

Copyright, trademark and patent laws were passed in 2002. Multiple sources, including the US Commercial Service have declared the UAE a regional leader in intellectual property rights protection.[92] However, according to an HSBC report, enforcement varies across the emirates and more could be done throughout the country.[93] Intellectual property rights are treated differently in the UAE than in the US and the US Government cannot normally protect the rights of individuals operating in the UAE.[94] Therefore, it is imperative to have a comprehensive plan for protection of intellectual property. Risks can be mitigated by registering trademarks with the Ministry of Economy prior to entry in the UAE market, hiring a local IP lawyer or consultant, working with trade associations and other organizations that focus on IP rights protection and through the careful selection of a partner.[95]

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[87] (CRS, 2013)
[88] (US Commercial Service, 2013)
[89] (HSBC, 2013, p. 10)
[90] (HSBC, 2013)
[91] (HSBC, 2013)
[92] (US Commercial Service, p. 16)
[93] (HSBC, 2013, p. 10)
[94] (US Commercial Service, p. 14)
[95] (US Commercial Service, p. 15)

CYBER LAW

In 2012, the President of the UAE issued Federal Decree No 3 for 2012 that established the National Electronic Security Authority (Nesa). [96] Nesa is headquartered in Abu Dhabi and affiliated with the Supreme National Security Authority. Nesa's responsibilities include:

» Proposing UAE national electronic security policies,

» Implementing UAE national security policies,

» Establishing a plan to address risk of cyber security attack,

» Coordinating other authorities concerned with electronic security and

» Leading operations to fight cybercrime in the UAE. [97]

The government's focus on cyber security was further highlighted by the passage of a new *IT Security Law* (Cabinet Resolution No. 21 of 2013 regarding the regulation of information security) in August 2013. [98] Amongst other requirements, the law restricts the use of personal email and social media by government employees at work. The purpose of the law is to protect confidential data and to increase security awareness. [99]

TAXES

The GCC common external tariff on imports from outside the GCC is 5 percent and is applied by the UAE, however there are exceptions. [100] These are explained in the Import Regulations section.
For most companies in the UAE, there is no federal corporate income tax. The law allows for emirate level corporate income tax up to 55 percent, but in practice, corporate income tax is currently normally only imposed on oil and gas companies and banks. There is no federal or emirate level personal income tax in the UAE. [101]

There is currently no VAT in the UAE, but the UAE and other GCC countries have made a commitment to introduce one. [102]

An accountant or advisor with experience in the UAE should be consulted to determine the taxes and fees that would be applicable to a US company entering the UAE market. It should be noted that licenses and registrations may be required even when taxes are not applicable.

POLITICAL ENVIRONMENT

According to the US Department of State, "The U.A.E. plays an influential role in the Middle East, and is a key partner for the United States." [103] The UAE was formed in 1971 following independence from the United Kingdom. The US and the UAE established formal diplomatic relations in 1972. The UAE has a stable political system. It is a federation of seven emirates: Dubai, Abu Dhabi, Sharjah, Fujairah, Ras Al-

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[96] (Mustafa, Awad, 2012)
[97] (Mustafa, Awad, 2012)
[98] (Ford and Williamson, 2013)
[99] (Ford and Williamson, 2013)
[100] (USTR, 2013)
[101] (HSBC and PWC, 2012)
[102] (HSBC and PWC, 2012)
[103] (U.S. Department of State, 2013)

Khaimah, Umm Al-Quwain, and Ajman.[104] Sheikh Khalifa bin Zayed Al Nahyan has been president of the UAE since the death of his father, the founder and first president, Sheikh Zayed bin Sultan Al Nahyan, in 2004. While there are federal leadership and federal laws, each emirate has its own leader, rules and regulations.

The UAE has enjoyed growth and stability since its founding. The reinvestment of oil wealth and moderate foreign policy along with liberal trade policies have protected the country from complete vulnerability to fluctuations in oil prices and allowed it to become a regional hub for business and trade. The UAE has diplomatic relations with more than 60 countries[105] and is a member of many major multi-lateral organizations including: Arab League, Gulf Cooperation Council (GCC), United Nations (UN), World Trade Organization (WTO), World Bank and International Monetary Fund (IMF), amongst others.

UAE - US RELATIONSHIP

The US and UAE engage in bilateral cooperation on a wide variety of issues including defense, non-proliferation, trade, law enforcement, energy policy, and cultural exchange.[106] The UAE is threatened by Iran. According to one columnist, "Sheikh Mohammed understands this existential threat and luckily for Washington has been the architect of a close strategic, defense and security relationship between the U.S. and U.A.E." [107]   The value of military sales from the US to UAE is estimated at nearly $22 billion.[108] Another major UAE defense partner is France, the two countries collaborate and a significant portion of the UAE's defense material comes from France.

» Further information on the current relationship between the UAE and US can be found in the Congressional Research Service's 2013 Report.

SAFETY AND SECURITY

Violent crime and theft are rare in the UAE, but can occur and visitors should take the precautions that they would normally when visiting a major city in the USA or abroad. American citizens should be aware of the local laws and that they are subject to them. For example, the UAE has strict laws in regard to drug use and transport and the possession and transport of military and police equipment. People have also been arrested for social media posts that are deemed to disrupt order in the UAE. Travelers should heed general warnings to Americans in the Middle East.[109]

» When planning a trip to the UAE it is advisable to check the State Department's International Travel Information site for the UAE.
» Registration in the State Department's Smart Traveler Enrollment Plan will allow you to sign up for travel alerts and for the State Department to better assist you in the event of an emergency.

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[104] (HSBC, 2012)
[105] (Wikipedia, 2013)
[106] (U.S. Department of State, 2013)
[107] (Sobhani, Rob, 2011)
[108] (Sobhani, Rob, 2011)
[109] (US Department of State – Travel.State.Gov, 2013)

ECONOMIC ENVIRONMENT

The economy of the UAE is an open one and the country's trade surplus is sizable.[110] In 2012, the UAE had the 50th largest economy in the world with the 15th highest per capita gross domestic product (GDP).[111] While the discovery of oil in the UAE over 30 years ago has helped to propel the country from a poor desert nation to a wealthy nation and a major player in the global economy, growth and stability have been enhanced by efforts to diversify the economy. The trade, logistics, banking, tourism, real estate and manufacturing industries have grown in the UAE and reduced oil and gas output to approximately 25 percent of the UAE's GDP.[112]

The UAE is also looking to grow its defense industrial base, but currently still relies heavily on imports in the defense sector. It has been claimed that the UAE spends more on defense imports per capita than any other country in the world.[113] The defense budget is not published and therefore precise measures are difficult to obtain, but defense spending has been estimated to be over 6 percent of GDP.[114]

US - UAE TRADE RELATIONSHIP: A MARKET FOR US EXPORTS

The UAE has become the largest market for US exports in the Middle East and the 17th largest in the World[115]. In 2012, US exports to the UAE totaled $22.5 billion. UAE exports to the US were worth $2.3 billion. Trade in both directions was increasing at the start of 2013.[116] American exports to the UAE are predominately made up of advanced technology; including commercial aircraft, power generating equipment, defense equipment, computers and electronic equipment, and transportation and infrastructure related goods and services. The UAE dirham is linked to the US dollar at a fixed exchange rate of 3.67 AED = 1.00 USD. The peg limits the government's control over monetary policy, but the consistency with the US dollar can provide an advantage to US products. The peg is particularly advantageous to American goods when the Euro is strong or rising.[117]

» Further details on the UAE's economy and trading partners can be found in the CIA World Factbook.

SOCIO-CULTURAL ENVIRONMENT

The UAE has a population of 5.4 million people and less than 20 percent of the population is Emirati.[118] Over 80 percent of the population is made up of expatriates from 150 different countries.[119]The Emirati culture is a conservative Muslim culture, but is generally tolerant of the varied cultures of the many expatriates. Most Emiratis wear traditional dress when conducting business, but Western business attire

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[110] (HSBC, 2012)
[111] (CIA World Factbook, 2013)
[112] (HSBC, 2012)
[113] (Zawya, 2013)
[114] (CIA World Factbook, 2013)
[115] (USTR, 2013)
[116] (US Commercial Service, 2013)
[117] (US Commercial Service, 2013)
[118] (CIA World Factbook, 2013)
[119] (US Commercial Service, 2013)

is acceptable and expected for others. Women need not cover their heads, but should dress conserva-
tively. Men and women do work together.[120]

Arabic is the UAE's official language, but English is commonly used in business meetings and sufficient
for travelling and shopping in the major cities. While English is sufficient for conducting general business
in the UAE, Arabic is important when pursuing business with the government.[121]
When planning a trip to the UAE or scheduling projects with UAE counterparts, it is important to consider
Islamic holidays for which public holidays are declared. The exact dates are not always set far in ad-
vance. During the holy month of Ramadan, working hours are shortened and Ramadan is followed by
Eid al Fitr, approximately one week during which the government and businesses are closed. It is
unrealistic to expect to initiate major agreements or projects during this time.

DEMAND FROM THE PRIVATE SECTOR

BANKING

The government of the UAE is not alone in its concern about cyber security, "increased government
spending has coincided with demand from the private sector, particularly Middle Eastern banks."[122] In
"what the authorities said was one of the most sophisticated and effective cybercrime attacks ever
uncovered" $45 million dollars was taken via ATMs in a matter of hours. While those behind the attack
were spread across multiple countries, two major operations took place in New York City and one
targeted the MasterCard debit card accounts of the National Bank of Ras Al Kaimah (RasBank).[123]
Globally, banks are victims of cyber-attacks and are looking for solutions to safeguard their systems. In
the UAE with a highly mobile and such a large percentage of the population online, the demand from the
banking sector is bound to be particularly high.

TELECOMMUNICATIONS

Amongst claims that the UAE has the highest penetration of smart phone usage and that 50 percent of
smart phones in the UAE are attacked, it is clear that significant demand for cyber security comes from
the telecommunications sector as well. The two major providers of mobile phone service in the UAE are
Du and Etisalat. Du hosted its first cyber security conference in Dubai in September of 2013. "Speaking
of the significance of the event, Marwan Abdulla Bin Dalmook, Senior Vice President - Technology
Security and Risk Management, du, said: "It is in every organization's best interests to have information
security integrated into the very fabric of its business mission, in order to provide full protection of its
employees' data. This is especially important in an increasingly mobile world, in which 1.2 billion workers
worldwide are classed as mobile. Mobile devices are the second highest security concern after applica-
tion vulnerabilities, and today's event has been successful in the discussion of ways to counter these
threats."[124] According to the Du website, the cyber security conference will become an annual event to
share information on both risks and safeguards.

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[120] (US Commercial Service, 2013)
[121] (US Commercial Service, 2013, p.10)
[122] (Din, Suleman, 2013)
[123] (NY Times, 2013)
[124] (du, 2013)

CRITICAL INFRASTRUCTURE

Critical infrastructure falls in both the public and private sector; regardless of ownership, it requires protection from hackers and cyber-attacks. As of 2012, "a team of 20 people from the Abu Dhabi National Oil Company and its subsidiaries are examining how to bolster cyber security as the emirate seeks to increase pumping capacity from 2.8 million barrels per day (bpd) to 3.5 million bpd by 2018."[125] As the major companies and state owned enterprises of the UAE look to protect their infrastructure, "Foreign companies are moving in to provide defense for existing oil installations as well as new projects, such as Abu Dhabi's $20bn nuclear plant, where construction kicked off last week."[126]

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[125] (Gulf Managers, 2012)
[126] (Gulf Managers, 2012)

Table 2: UAE Cyber Security Market at a Glance

Strengths
- Anticipated GDP and defense spending growth
- Government recognition of the need for cyber security
- Close defense relationship with USA

Weaknesses
- Limited transparency in government spending and procurement
- Conditions in government contracts

Opportunities
- Public and private sector opportunities
- Internet and data security, biometrics, infrastructure protection, user rights management

Threats
- Limitations in intellectual property rights protection
- Competition from global technology companies already engaged in the UAE market

APPENDIX 1: USEFUL LINKS

Country & Business Information:

- » [CIA, The World Factbook – UAE](#)
- » [Congressional Research Service, The United Arab Emirates (UAE): Issues for U.S. Policy](#)
- » [US Commercial Service – UAE](#)
- » [US Department of State, Travel.State.Gov – UAE](#)

Cyber Security Related Agencies in the UAE:

- » [Telecommunications Regulatory Authority](#)
- » [aeCERT](#)
- » [UAE Ministry of Defense](#)
- » [Abu Dhabi Security & Information Centre](#)

Government Tenders:

- » [Abu Dhabi eGovernment Gateway (Government site)](#)
- » [Abu Dhabi City Municipality Current Tenders & Auctions (Government site)](#)
- » [Government Contracting Opportunities in Abu Dhabi (Government site)](#)
- » [eSupply – Dubai Procurement Portal (Government site)](#)
- » [Government of Dubai Tenders & Bidding (Government site)](#)
- » [Emirates Tenders (Commercial subscription site)](#)
- » [Global Tenders – UAE (Commercial subscription site)](#)
- » [Sharjah Municipality Tenders (Government site)](#)
- » [Fujairah Government Portal (Government site)](#)
- » [Ras al Khaimah Tenders & Auctions (Government site – in Arabic)](#)
- » [Ajman Municipality Tenders & Bids (Government site)](#)
- » [Government of Umm al Quwain (Government site – Arabic)](#) [Abu Dhabi eGovernment Gateway (Government site)](#)

APPENDIX 2: CURRENT PLAYERS IN THE MARKET

Press releases and news articles provide a snapshot of the activities of the companies currently in the UAE cyber security market.

Thales, a French company, and **Injazat Data Systems** are collaborating to offer critical infrastructure cyber security solutions to UAE companies.[127] Thales recently announced the partnership with Injazat (a joint venture between **Mubadala Development Company** and **Hewlett Packard**) on their website. According to the announcement, "The 24/7 cybersecurity service will be delivered from Injazat's Tiers IV[1] ISO 27001 certified data centre in Abu Dhabi. It will provide situational awareness and incident response continuous monitoring services that will be fully compliant with international information assurance frameworks."[128]

Narus, a wholly owned subsidiary of the Boeing Company, focused on cyber security and machine intelligence highlighted its capabilities at the Dubai Airshow in November 2013.[129] Narus partners with **Boeing**, **IBM**, **Maxtera**, **HP**, **NEC**, **Secure Tech**, **Giza Systems** and **Dell** to offer cyber security solutions to governments and private enterprises. Their sales contact for the European and Middle East region is in Dubai.

In Dubai in February 2013, RSA introduced a security analytics solution at a media roundtable. At the roundtable, **RSA** Executive Chairman, Art Covelo, explained that with the expansion of technology, particularly increases in mobility, and the amount of data stored, we have enhanced productivity, but also multiplied exposure to cyber threats. In support of RSA's new analytics solution, he explained that the solutions focused only on prevention of known threats is not enough and that more in the way of detection and response is required.[130]

Above are just a few examples of recent activity in the cyber security market in the UAE. ITP.net is one site that reports on the information technology news in the Middle East.

The participant, exhibitor, and presenter lists of major cyber security, defense and IT related conferences include current competitors in the market or those considering entering. Following are participant lists from a few recent exhibitions and conferences that serve as an indication of the types of companies in the market.

Exhibitors at the Oil & Gas ICS Cyber Security Forum 2013 held October 7-10, 2013 in Abu Dhabi included representatives from:

- » Invensys
- » Cassidian Cyber Security
- » McAfee
- » Ultra-Electronics
- » ISnSC - Cyber Defense
- » Codenomicon
- » Dell | SonicWALL

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[127] (Albawaba Business, 2013)
[128] (Thales, 2013)
[129] (Narus, 2013)
[130] (McBride, Stephen, 2013)

- » Palo Alto Networks
- » Owl Computing Technologies
- » BAE Systems

Speakers at the (ICS)[2] Secure Abu Dhabi Conference 2013 held March 26 in Abu Dhabi included representatives from:

- » ISC2
- » IBM
- » Du
- » First Information Security
- » Wave Systems Corp
- » Symantec
- » ADCO
- » National Bank of Abu Dhabi
- » Red Hat FZ-LLC
- » Injazat Data Systems

Speakers, panelists and moderators at the du Cyber Security Conference held September 19, 2013 in Dubai included representatives from:

- » du
- » Telecommunication Regulatory Authority (TRA)
- » Verizon – Smart Government Security
- » Oman Data Park
- » I(TS)2
- » Fortinet Middle East

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