National Defense

strategy annual Magazine - Issued by National Defence - Issue 01 - june 2014

THE UAE'S APPROACH TO REGIONAL SECURITY

Mohammed attends graduation ceremony of National Defence College

The Address of Maj. Gen. Pilot Rashad Mohammed Salem Al-Saadi

Commander of the National Defense College (NDC)

Praise be to Allah, and His peace and blessings be upon the Messenger of Allah..

The United Arab Emirates occupies an important geostrategic location that made it capture the interest of world powers over the past centuries. This interest has taken different forms of approaches in order to achieve objectives which were mostly centered on the economy. Those who ruled the emirates over hundreds of years were endowed with prudent statesmanship, which enabled them to achieve a balance that culminated in the Union on 2 December 1971. Since that date, a new birth of the State was recorded in letters of gold by the late Sheikh Zayed bin Sultan Al Nahyan, "God rest his soul," and his brother rulers of the Emirates. The UAE has made great strides that were admired by the world for all achievements it has realized at all levels. Such achievements needed power to protect them and ensure their continuity, so the UAE Leadership adopted an effective strategy with diplomatic, economic and military pillars. In spite of the enormous challenges that have been, and are still, witnessed in the region, the triumphant march of the UAE is continuing steadily and ambitiously under the leadership of His Highness Sheikh Khalifa bin Zayed Al Nahyan, the Supreme Commander of the Armed Forces, "may God protect him", His Highness Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President, Prime Minister, and Ruler of Dubai, "may God protect him", and Their Highnesses Members of the Supreme Council, Rulers of the Emirates.

The Armed Forces of the United Arab Emirates are one of the institutions that have achieved quantum leaps in a short period under the Union, becoming so modern, efficient and ready that they are quite capable of protecting the state and its achievements. This would not have been possible without the discerning vision of His Highness Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the Armed Forces. His vision, foresight, prudent thought, high aspirations and dedication in the service of the country enabled the Armed Forces to reach this level, which makes us as members of the Armed Forces talk about them very proudly.

We, in the National Defense College, are fully aware of the importance of the role of this college at the state level, and its contribution to the support of national strategies, through the preparation of selected individuals to be among the future promising leaders of the state, leaders who are able to offer more to the country. They should be armed with the features and values of loyalty and patriotism, knowledge and belief in their duty toward their homeland, their capabilities, open-mindedness, comprehensive thought and outstanding leadership skills. Therefore, the leadership of the college seeks to implement the policies and decisions of the founders of the college and its Supreme Council, so that the NDC should accomplish its overall mission ably and be an educational monument of quality output and a unique value-added, high-level platform. Therefore, we take the opportunity of graduation of the National Defense Course 2013-2014, the first in the history of the NDC, to document this event and provide some articles by a number of scholars, mentors and some personalities, so that this issue would serve as another way to introduce the college and offer part of its activities .

The first issue of the Journal of the National Defense College is a historic one due to its association with the establishment and opening of the college last year, 2013, as well as the graduation of the first batch, that is, the National Defense Session 2013 - 2014, which included thirty military and civilian students who had spent nearly one year to record a new history of military education in the United Arab Emirates.

The success of this session, with its distinctive curriculum, mentors and students, is nothing but an extension of a series of successes and excellence achieved by our country in various fields under a wise leadership. Congratulations to the nation for this blessed addition represented by the highly promising National Defense College and its first product as represented by this group of leaders.

I wish the National Defense College and its first session would achieve success and bear the desired fruit of this leading national project. I also hope that efforts will continue in order to make this edifice prominent and up to expectations, and that the efforts of those in charge of the college for the development of its future programs will be crowned with success on a permanent basis, in order to cope with the changes that occur, and the national requirements and aspirations.

I pray to God Almighty to preserve our UAE, the house of pride, dignity, security, and prosperity, with all its land, sea and air including its Leader, leadership and people.

01 Graduation

02 Word

03 Articles

04 Studies

05 Research

08

Mohammed attends graduation ceremony of National Defence College

03

Commander of the National Defense College (NDC)

14

THE UAE'S APPROACH TO REGIONAL SECURITY

18

NDC Dean's Welcome for the NDC Journal, The Beacon of Security

76

Middle East Implications of American Pivoting or Re-Balancing into the Asia-Pacific

27

UAE is politically and diplomatically key to GCC maritime aspirations

48

A Perspective for UAE's National Security

National Defense

A Specialized Yearly Journal
on Strategic Affairs
Issued By UAE National Defence College
First Issue June 2014

General Supervisior
Rashad Mohamed Salem Al Saadi

Editor in Chief
Abdulla Al Zaabi

Editorial Manager
Staff Major.Yousef Juma Al Hadad

Editorial Board
Colonel Doc. Mohamed Al Ali
Colonel Doc. Bader AL Shatri
Doc. Saleh Al Maita
Doc. Nathan W. Toronto
Awanee Al Khateeb

Sub-Editors
Mariam Al Romaithi
Mona Khalfan Al Abdul salam
Hanan Al Amri
Samira Nasser Ali Basloom
Salwa Mohamed Abdulla Al Marzooqi

Technical Supervisior
Major. Mohamed Jamaan Ba Matraf

Layout & Design
khalil Esmaeel Al Hosani
1LT. Ahmed Sulaiman Al Shehhi
Ahmed Mahmoud Ahmed

Photos Archive
Fatima Al Naqbi
Amel Ali Al Mazrouee
Mohamed Rhamdan Al Bloushi

Editor In Chief

His Highness Sheikh Khalifa bin Zayed Al Nahyan, the Supreme Commander of the Armed Forces, may God protect him, issued a Decree under Federal Law No 1 of 2012 to establish the National Defence College, which specializes in preparing and qualifying the military and civilian leadership. This was in light of our wise leadership's emphasis on the importance of academic military and civilian qualification at the strategic level, and in order to support the National Security Strategy through the preparation of future leaders; carrying out strategic studies and research to achieve the task, the unification of strategic concepts; building cognitive abilities in the field of strategic thinking and planning; consistent performance within the concerned government agencies; and the exchange of expertise to develop the strategy of national defense and security.

The other objectives of the college were to identify and assess the challenges facing the national, regional and international security and to study the principles and requirements for managing and employing the state's resources to protect national interests. The college would train and mould future leaders who will assume senior leadership positions in the Armed Forces, state agencies, and national institutions and bodies in both public and private sectors.

Today, after this outstanding national effort, the graduation of the first batch of the National Defence College (NDC) coincides with the first issue of the National Defence College Journal in both Arabic and English to reflect the cognitive and research product of NDC graduates in accordance with the highest scientific and academic standards.

With its content of strategic articles, studies and analyses by a number of statesmen and thinkers, writers and researchers, from within and outside the UAE, the NDC Journal constitutes an added value to the requirements of national security issues and crisis management, defense components, and strategic environment variables.

This issue includes a variety of strategic articles in the fields of leadership, management, space technology, and strategic military information and affairs in the economic, political and social domains, as well as strategic readings and analyses (local, regional and international), by the members of the faculty and students of the National Defence College.

In conclusion, it is hoped that this journal will be a scientific and intellectual reference for followers and interested readers, and an annual source for decision makers and houses of expertise, as well as a nucleus of strategic thinking in the National Defence College.

May God protect the nation and the Leader of the Nation.

Editor in Chief :
Abdulla Al Zaabi
Staff Colonel

Mohammed attends graduation ceremony of National Defence College

UAE Vice President, Prime Minister and Ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum, today attended the graduation ceremony of the first session of the National Defence College in Abu Dhabi.

National Security Advisor Sheikh Hazza bin Zayed Al Nahyan and Deputy Prime Minister and Minister of the Interior Lt. General Sheikh Saif bin Zayed Al Nahyan attended the graduation ceremony.

The ceremony was also attended by Minister of Culture, Youth and Community Development Sheikh Nahyan bin Mubarak Al Nahyan, Minister of Higher Education and Scientific Research Sheikh Hamdan bin Mubarak Al Nahyan, State Minister Dr. Sultan bin Ahmed Sultan Al Jaber, Chief of Staff of the UAE Armed Forces Lt. General Hamad Mohammed Thani Al Rumaithi, Director of Dubai Ruler's Office Lt. General Mosbbah bin Rashid Al Fattan, Undersecretary of the Ministry of Interior Lt. General Saif Abdullah Al Shafar, as well as a number of sheikhs and senior civil and military officials.

The ceremony began with the rendition of the UAE National Anthem following Sheikh Mohammed's arrival at the venue of the event. Then the college commander delivered a welcoming speech in which he welcomed the patron of the ceremony, Sheikh Mohammed, and the audience. He also expressed thanks and loyalty to President and Supreme Commander of the UAE Armed Forces His Highness Sheikh Khalifa bin Zayed Al Nahyan for founding the National Defence College, an unparallel learning edifice in the region. He also thanked Abu Dhabi Crown Prince and Deputy Supreme Commander of the UAE Armed Forces and Chairman of the Supreme Council of the college General Sheikh Mohammed bin Zayed Al Nahyan.

Then Sheikh Mohammed distributed certificates to 30 graduates and congratulated them on their achievement, urging them to continue to seek further education. Addressing the graduates, he said:"I am still learning a new thing every day, and haven' t stopped doing so, because learning and seeking knowledge are the reason behind human's progress, happiness and stability; they are the first block in nation building which we want to raise to achieve glory, prosperity and progress in the various fields of life."

After that the college commander presented a memorabilia to Sheikh Mohammed before Sheikh Mohammed along with Sheikh Hazza and Sheikh Saif posed for photographs with the graduates and the college staff.

تخريج دورة الدفاع الوطني الأولى 2014/2013
الخميس 2014/6/5

By: Dr. Anwar Mohammed Gargash
Minister of State for Foreign Affairs

THE UAE'S APPROACH TO REGIONAL SECURITY

The UAE and the GCC are facing a rapidly changing security environment. After three years, the Arab world is still struggling with the effects of the political instability and violent extremism that was triggered by the protest wave of 2011. Internal and external foes are seeking to exploit this instability to further their own dangerous goals. These dynamics are posing a serious challenge to regional peace and risk undermining the established regional balance of power.

At the same time, the global balance of power is being transformed by the rise of new actors that are willing to challenge the status quo. This is causing conflict and tension from Eastern Europe to the South China Sea. While posing no direct challenge to the UAE, these global power shifts and the instability they beget are generating powerful spillover effects that are affecting the region.

These dangerous regional and global changes are reinforcing each other. By deepening uncertainty amongst regional and global actors, they are encouraging brinkmanship behavior and increasing the risk of miscalculations. The UAE and the GCC are profoundly affected by these changes, which foster the need to continuously recalibrate the regional security architecture.

Pillars of Regional Stability

The UAE's approach to regional security rests on six well-defined pillars that are fostering regional stability and prosperity and provide the basis for amicable relations with our neighbors. These pillars provide the foundation for our common security and help to foster growth and development across the region.

- **Domestic Strength:** To play an active and constructive role on regional security issues requires above all strength and cohesion at home. To this end, the UAE needs to maintain its economic strength and dynamism, which are crucial drivers of domestic cohesions and regional stability. Our economic dynamism is key to our security. It also requires the UAE to maintain capable military forces with the ability to respond rapidly to a variety of security contingencies. While the UAE can rely on strong allies to safeguard regional security, it needs to maintain the ability to respond forcefully to all local threats.

- **Moderation:** The UAE champions a moderate agenda at home and abroad that fosters reconciliation and opposes extremism in all of its forms. At home, the UAE's tolerant society is based on respect for other religions and people and opposes all forms of discrimination. The UAE's acknowledged leadership on women's right in the region is testimony to this culture of moderation. Abroad, the UAE seeks to foster moderation by working with moderate forces and supporting international efforts to counter violent extremism.

- **Non-interference:** The UAE embraces the principle of non-interference in domestic affairs as enshrined by the UN Charter and the Charter of the Arab League and respects the sovereignty and territorial integrity of other countries. This principally means that the UAE considers Arab Affairs to be first and foremost a matter for the Arab League and opposes undue outside meddling in the Arab world. Arab problems should be solved by Arabs. It also means that Arab countries should refrain from uninvited interference in the domestic affairs of their fellow Arab countries, be it by supporting dissent, or by providing platforms for destabilizing views. This is key to amicable regional relations.

- **Regional Balance of Power:** The UAE seeks a regional balance of power in the Arabian Gulf that enables friendly and reciprocal relations between all countries. The UAE considers all attempts to challenge this balance, whether by internal or external actors, as damaging to its interests and to the interests of the region. The UAE therefore seeks a balanced relationship between all powers in the region and opposes any bids to regional hegemony that would inevitably pose a challenge to its freedom and independence.

- **External Balancers:** The UAE maintains close ties with a number of countries with which it shares a history of friendship and a common interest in maintaining an open and stable regional environment. In addition, the UAE is always open to consider partnerships with countries that have not been previously active in the region, or are otherwise emerging as responsible international actors. The UAE cooperates closely with these countries, including on security issues, in pursuit of common interests and based on shared values, with the aim of ensuring a stable regional balance of power.

- **Multilateral Structures:** Effective multilateralism is key to ensuring peaceful relations amongst nations and upholding common international legal norms. To ensure an effective multilateral system, the UAE plays an active role in several multilateral organizations, including the Arab League, the GCC, and the UN. The UAE seeks to strengthen the ability of these organizations to play an effective role in conflict management and resolution and participates actively in their work on regional crises, such as the ongoing conflict in Syria.

The global balance of power is being transformed by the rise of new actors that are willing to challenge the status quo

The UAE embraces the principle of non-interference in domestic affairs as enshrined by the UN Charter and the Charter of the Arab League

Arab problems should be solved by Arabs

New Challenges to Regional Security

At present, the Gulf region is facing a number of prominent challenges that are threatening regional security and cooperation. These challenges are a direct consequence of complex regional and global changes we witnessed in recent years.

Most severe amongst these challenges has been the emergence of a new wave of extremism. Extremist actors have been able to exploit changes in the regional and global environment and are threatening the status quo in several countries in the region. The repercussions of the failure of the international community to tackle the conflict in Syria and to assess properly political developments in Egypt have been particularly severe in this regard. These events are fuelling sectarianism across the region and serve as a magnet for extremists. This has also encouraged dangerous extremist forces in the UAE and other Gulf states. To ward against these dangers it is necessary for all countries in the region to unite behind a common agenda that clearly denounces extremism and sectarianism in all of its forms. Arab countries need to rally behind moderate forces that provide the best hope for the future.

Competition for hegemony amongst regional powers remains another important security challenge for the region. The use of conflicts in the region as a proxy for the rivalry amongst major powers remains an important source of regional instability and conflict. Big powers bear particular responsibility to uphold regional stability. Therefore, for the UAE, Iran's occupation of the islands, Abu Musa, Greater Tunb and Lesser Tunb, remains a major point of contention. The UAE seeks a peaceful resolution of this conflict through either direct negotiations or international arbitration. To this end, the more conciliatory language of the current Iranian government is encouraging, but needs to

be followed by concrete action.

The withdrawal of international troops from Iraq and Afghanistan and the emergence of alternatives to oil and gas from the Arabian Gulf have led to speculations that the region might witness a rollback of the presence of the US in the region. Talk of an American pivot to Asia has further underpinned the misconception of an American withdrawal from the region. These speculations embolden possible challengers and might lead to dangerous miscalculations that threaten regional peace. The UAE is confident of the commitment of the US and its other international partners in the region and continues to maintain close and confident relations with them concerning regional security issues.

Israel's occupation of Palestine continues to be another important driver for extremism, conflict, and instability across the region. The UAE is deeply concerned about the recent breakdown in the US-led peace talks and will do all it can to help bring the talks back on track. The main impediment remains the issue of Israeli settlements, which are illegal under international law. Israel needs to recognize that it is in its own interest to come to a just and stable solution to the crisis. Failure to resolve this long-standing problem peacefully and amicably will only provide an opening to extremists on both sides and spawn further conflict.

On top of these traditional challenges to regional security, the region faces also a number of non-traditional security challenges that threaten our economic wellbeing and the stability of our societies. The proliferation of WMD, in particular, is a key danger for regional and international security. In this respect, the UAE welcomes the talks between the P5+1 and Iran that seek to address the concerns of the international community over Iran's nuclear weapons program. An airtight, sustainable solution to this issue is important to avoid the dangers of a potential regional arms race. International terrorism remains another threat to regional security. To ward against this threat it is important for Arab countries to adopt common guidelines on how to tackle terrorism in all of its forms, as called for at the recent Arab League summit in Kuwait this year and to deny safe haven to wanted individuals and provocateurs. Transnational crime is a challenge to our social and economic wellbeing. Non-state actors, such as pirates at sea and criminal syndicates, represent a new and growing challenge to regional security.

The UAE's Response to Emerging Threats

In order to check these challenges to security and ensure a stable system in the region, the UAE is leading the regional and international response on three levels.

First, the UAE, together with its partners, seeks to strengthen the ability of the region to respond collectively to security challenges. In spite of current events, the UAE still considers the GCC to be the prime vector for discussions on regional security and for devising a regional response to common, external threats. In order to respond to regional challenges it is pertinent for the GCC to overcome recent divisions and close ranks. The UAE is also playing a leading role in the creation of a GCC Security Academy able to foster a common security culture in the region. The UAE considers it crucial for all GCC countries to step up their preparedness against common security challenges.

Second, the UAE is seeking to bolster multilateral partnerships that are key to ensuring regional and global security. Relations with NATO represent an important vector for the UAE's multilateral engagement on security issues. To deepen this relationship, the UAE has taken an active role in NATO's Istanbul Cooperation Initiative (ICI), and has become one of the few countries able to operate alongside NATO forces in the field, as illustrated in the Balkans, Libya and Afghanistan. The United Nations and the Arab League represent other important areas of multilateral engagement. By taking an active and constructive role in the UN and within the Arab League, the UAE seeks to bolster the ability of these organizations to act effectively and with legitimacy on international security issues.

Finally, bilateral security partnerships with key global powers continue to provide a cornerstone of our common security. With power increasingly dispersed internationally, the UAE has sought to deepen and widen the range of its security partnerships. This has meant deeper cooperation with our traditional partners, as well as pursuing contacts with new actors. The UAE therefore aims to strengthen and widen its multitude of partnerships, in order to maintain regional stability.

Conclusion

By uniting around our common values and principles, the UAE can ensure that it remains an island of stability in the current regional turmoil. The guarantee of stability, of economic prosperity, and of an open and international outlook, allows the UAE to maintain the confidence and trust of its closest neighbors and partners, and of the wider international community. This puts the UAE in a position where it can continue to play an active and effective role on regional security issues in the region and the wider world, which is valued and appreciated by all our partners. Above all, this serves the interests of all UAE citizens who benefit from a secure and stable regional environment and prepares the UAE for the rapid changes the regional and global security environment is currently experiencing.

NDC Dean's Welcome for the NDC Journal, The Beacon of Security

By: John R. Ballard, Ph.D.
Dean of the National Defense College

"The mind is not a vessel to be filled, but a fire to be kindled." Plutarch

This Journal is a vehicle for knowledge creation and strategic communication. Knowledge creation is a fundamental requirement for any college, but it is of particular importance in an institution of higher learning such as the National Defense College, which seeks to lead in the development of strategic thinking and promote the development of strategic security at national, regional and international levels. The National Defense College also seeks to contribute directly to the security of the UAE and other friendly countries by studying and further developing strategic concepts of potential utility, so that national decision-makers can take advantage of every appropriate opportunity to increase prosperity for the citizens of the nation.

"We cannot solve our problems with the same thinking we used when we created them." Albert Einstein

Many analysts feel that there are powerful, new driving forces which are changing the nature of national competitiveness around the globe. Those forces are many, but most commonly include globalization, advances in information technology, a rise in information intensity, new media sources and dramatically expanding networking and connectivity. Maximizing our future potential requires us to harness these forces and use them to our advantage. These are things that the UAE, as a learning society, can and should do.

This journal, The Beacon of Security, should help us identify and mitigate threats as well as take advantage of the full range of strategic security opportunities that stand on the horizon for the UAE and its brotherly nations in the region. With creativity, passion, commitment to the nation, awareness of emerging trends, and adherence to cultural fundamentals, this forum should serve as a marker beacon as the UAE travels the path set by UAE Vision 2021.

"We want the UAE to transform its economy into a model where growth is driven by knowledge and innovation. Productivity and competiveness will come to rival the best on the world as a result of investment in science, technology, research and development throughout the fabric of the UAE economy." UAE Vision 2021

That vision calls for us to be a learning society. A learning society regards the actual process of learning as an 'activity, not a place' – which means learning is understood to take place everywhere, both inside and outside educational institutions, until it becomes a fundamental part of everyday life in a globalized world. Learning societies are broader in context than industrial societies, thus, they have an impact on and are affected by an expansive range of contexts, both international and domestic, and must draw on a wide range tools to facilitate broadly based, lifelong learning in all individuals. Lifelong learning is enabled through a learning society of dedicated individual learners, aided by technology and networking, sharing learning experiences over a wider formal and informal network of learning, all of which is intended to help the people prosper. This journal is designed to facilitate such a learning society in the UAE.

Learning societies are broader in context than industrial societies

Lifelong learning is enabled through a learning society of dedicated individual learners

We hope that everyone who has creative, critical ideas to share will look to The Beacon of Security as the premier regional forum to impart such strategic security thinking and help transition the UAE to the learning society called for in UAE Vision 2021. That transition will keep the UAE in the forefront of the modern world, and will certainly help retain the UAE's reputation as one of the most dynamic and creative societies on earth.

We look forward to seeing your ideas in print.

United Strategy against Infectious Disease

The objective of this research is to answer the question of how United Arab Emirates health authorities can effectively respond to an outbreak of infectious disease. The strategy of the UAE health authorities should supports coordination between all stakeholders, standardization of procedures, and development of national workforce in dealing with infectious diseases outbreak. This strategy should be the responsibility of a central authority that can oversee the health threat and public health of the UAE. Globalization and its impact on easing the movement of people from one country to another, and the free trade market that the UAE is depending on to sustain its economy, are two main factors to be considered in any strategy to deal with infectious disease outbreak. Large percentage of the UAE population consists mainly of Asian labors, those labors are gathering in crowded camps in most situations. These situations represent a high risk area in spreading infection from these camps. On the other hand, each of the governmental health authorities in the UAE, including the Ministry of Health has their own strategy, those strategies do not address infectious disease as a national threat and there is no mandate for coordination between deferent health authorities. If we compare the UAE government system with other similar federal system in other countries, then we can admire the need for central government authority to coordinate and lead the efforts in prevention and controlling infectious disease.

By:
Staff Brigadier General
Matar Alnuaimi

Throughout history, infectious disease outbreaks have killed millions of people in different parts of the world. They have seriously impacted the destinies of many civilizations, either by eradicating the whole society or by causing defeat in battlefields; in both instances, they represented an unpredicted event. In modern history, the movement of people from one part of the world to another has been dramatically increased due to free trade economies, global finance, and tourism. When people move, microorganisms like bacteria, virus, fungi, and helminthes move with them.

Because the UAE has a considerable percentage of its labor population coming from other parts of the world with different, and in many cases lower, healthcare standards than the UAE, extra precaution has to be taken by the UAE health authorities to prevent the transmission of infectious disease from those countries. The aim of the UAE health authorities is to protect the UAE community from any risk of an infectious disease outbreak. Because the health authority is composed of five distinct organizations, any solution will require high level of cooperation and coordination in surveillance and response procedures. The UAE health authorities will face a serious challenge in cooperation and coordination when serving the UAE population.

The spread of infectious disease has increased because of thechanging lifestyle of humans, rapid increase in population, trade and economy worldwide, and the overuse of antibiotics.

One of the main factors in controlling an infectious disease effectively is to report any case quickly to health officials

The MOH as the primary government player should have a comprehensive strategy on how the UAE should deal with infectious disease

High density populations are at greater risk for transmitting infectious disease. The UAE is one of these types of areas as it is considered the fastest in growing population and resource use. The main associated risk with this type of situation is the lack of public health measurements. Public health officials need to monitor such areas regularly to detect any risk of potential infectious disease outbreak.

Infectious disease management

is affected by many factors; one of them is human behavior, where public health decisions are taken by individuals directly or indirectly involved in public health security. In other words, some decision makers will drive their country's strategy towards providing state of art treatment facilities and ignore public health infrastructure. Those decisions may affect the infrastructure of public health facilities, perhaps as a result of underestimating the threat that a disease outbreak could cause to national security. This commitment from senior officials is very important in having an effective disease surveillance system and controlling new emerging diseases.

Domestic Case Study

In March of 2009, an outbreak of the H1N1 influenza virus was first noted globally in Mexico, and in June 2009 the disease spread quickly in many parts of the globe. The WHO requested governments around the world to consider the H1N1 the top of their public health priority. In the UAE serious procedures were conducted against H1N1. The first important step taken by MOH was to make reporting in suspected cases mandatory for all healthcare providers. The Health Authority of Abu Dhabi (HAAD) provided all healthcare providers with case definition and reporting guidelines. The total number of confirmed cases was 908 cases; out of this total, 26 patients died from H1N1. The first laboratory-confirmed case in Abu Dhabi was reported on 20 May 2009 and there were eventually 12 Emirati and 14 expatriate fatalities.

HAAD's Department of Communicable disease analyzed the 2009 outbreak and concluded that the average age of confirmed patients was 20 years and 59.1% of the cases indicated some traveling activities during the prior week of infection. Ninety four and a half percent of notified cases came from government hospitals.

From this case, we can identify some important lessons. First, there is an essential need for health authorities to have complete data from all parts of the UAE, as this case study provides information from the surveillance system in Abu Dhabi only. Another important finding is that quick actions taken by HAAD before, during and after the outbreak enabled a decisive approach by health officials isolating the suspected cases, tracing contacts, and providing prophylaxis. The most important finding from this case study is that more than 50% of the total number of deaths from H1N1 were from expatriates; this indicates the critical role of UAE population demographics in prevention and control measures.

It is obvious from the above study that in order to overcome gaps within the notification system it is necessary to enable health officials to be notified in order to take actions in prevention and control of infectious disease. Furthermore, the study indicates the need to involve the private healthcare sector in the notification and surveillance system as this sector provides healthcare to the majority of the UAE population. One of the main factors in controlling an infectious disease effectively is to report any case quickly to health officials, in order to be able to oversee the situation in larger scale and to provide any needed support. In addition, the study indicates the impact of travel and movement of people coming and leaving the UAE; this movement represents an important factor which any UAE national strategy should address, perhaps through unified screening medical tests at all entry ports in the UAE.

Analysis

A closer look at the strategies of UAE health authorities has revealed some, especially in relation to infectious disease surveillance and control. And by reviewing the strategy documents of each of the health authorities, this research analyzes whether those strategies support policy and procedures that enable the country to deal effectively with infectious disease outbreak. The UAE health strategies in general should be designed to prepare public health infrastructure, establish methods of communication locally and internationally, and assess the level of readiness among them.

Globalization has reduced the barriers between countries, and in so doing has increased the possibility of transmitting infectious disease

Ministry of Health (MOH)

The MOH strategy has a very general article about public health in which the fourth objective states: "promote public healthcare standards and raise public healthcare awareness among the community up to international standards." It has nothing about infectious disease in particular or disease outbreak, the MOH strategy does not have an important part of the country's concern on public health safety and national security. The MOH as the primary government player should have a comprehensive strategy on how the UAE should deal with infectious disease; it should lead other health authorities in this field and regulate and coordinate all related type of activities.

Dubai Health Authority (DHA)

On the other hand, the DHA has a more clear strategy; compared to MOH, the DHA strategy states: "reduce the burden of communicable/infectious diseases." This strategy states the need "to manage the risk of new and emerging infectious diseases and ensure that past achievements are protected and maintained." However, the strategy document does not have articles about standardization and unification with other health au-

thorities or the need to cooperate between them.

Abu Dhabi Health Authority (HAAD) and Abu Dhabi Health Services Company (SEHA)

The HAAD strategy is structured into strategic context and gaps in each of its strategic objectives. It has two general articles related to infectious disease outbreak. The first one reads, "HAAD drives programs to improve societal health and drive preventive health behavior and devolve and sets public health polices and best practice in public health." The second one states that "HAAD is responsible for leading all Emirates-wide emergency preparedness efforts on behalf of the health system and management of the 24/7 operations center." Those two articles set the baseline for general strategy on public health; however, they do not state any policy against infectious disease outbreak or the need to cooperate and unify efforts within the UAE. Similar to the DHA, HAAD strategy gaps result from lack of federal entity enforcement to cover a broader vision which realize being part of the UAE and its national security.

UAE Armed Forces Medical Services (MSC)

The MSC is a military unit and has its own mission in supporting personnel during peace time and operations. It also has a responsibility towards supporting other governmental health organizations, including infectious disease surveillance and control activities. The MSC has experienced a few infectious disease outbreak situations in the past, including SARS and H1N1. In both incidents, the MSC provided support to the governmental health authorities, including establishing and running a medical isolation facility that can receive up to 100 patients at the same time. In all emergency plans, the MSC took the supportive role to other health authorities.

To conclude this analysis, it is clear that all health authorities are working in isolation from each other. This individuality reflects negatively on the day-to-day management in dealing with disease surveillance and response. Moreover, the strategies of all government health authorities are more focused on treatment medicine and not preventive medicine, in which the UAE needs to be prepared. In regards to contingency plans, the MOH is currently reviewing an updated plan that I had the chance to review while writing this research. This plan needs to be examined in drills to measure its effectiveness. Additionally, many of the UAE public health infrastructures are not capable of supporting the execution of the plan. Therefore, the MOH should focus its efforts to overcome this obstacle.

By following the WHO guidelines in infectious disease case identification, accurate diagnosis across all countries worldwide would be accomplished. The UAE governmental health authorities use international guidelines from either WHO or CDC, but the efficiency of using those two guidelines is questionable because of the missing legal framework. Unification of all related policy and procedures is one of the major supportive elements in controlling infectious disease in the UAE.

Results

It is necessary for UAE health policy makers to include clear statements and directions in the UAE health strategy about how to deal with infectious disease before, during and after an outbreak. They should also emphasize the level of involvement from each health partner in surveillance and response activities.

This type of strategy is designed to be created and maintained at the Federal level. It still allows for individual healthcare providers to create their own procedures, provided they are in alignment with the national strategy. This would include suitable structures to provide the needed resources, including manpower and infrastructure facilities.

By identifying our threats, challenges, objectives, and the instruments to use, the UAE health authorities can draft a strategy tailored to society and the government system. Locally, there is an obvious need to have one federal authority to manage all national healthcare resources and efforts, and also lead the research and other type of activities in relation to infectious disease.

The proposed Centre of Infectious Disease can be situated under the Minister of Health. The Center would be responsible for the following tasks: (a) providing a well established country-wide public health system, (b) detecting and responding to infectious diseases across the UAE, (c) coordinate all the efforts related to surveillance and respond to infectious disease, (d) advice and support healthcare providers in science and technology related to infectious disease, (e) standardize all activities related to infectious disease including epidemiological procedures, prevention, control and treatment, (f) conduct training courses and other learning activities to educate the public health workforce in dealing with infectious diseases outbreak, (g) to esteem the health services under global perspectives, (h) provide biological security outcomes by setting up all the guidelines in surveillance and management of infectious diseases.

Conclusion

Globalization has reduced the barriers between countries, and in so doing has increased the possibility of transmitting infectious disease and enhanced multilateral cooperation between states and international organizations. The UAE depends on free trade and tourism to promote its economic power and this dependence has produced a unique population dynamic in which the majority of the country's population are expatriates. This combination between globalization and domestic context of the UAE should urge health policy makers to consider infectious disease outbreaks as a threat to the UAE national security. The threat of infectious disease outbreaks is one of the unexpected crises that could face the UAE society, and eventually could cause a major disaster. The nature of infectious disease, especially the evolving of new strains, requires more cooperation between all health organizations. Regional and global cooperation is something vital to monitor the statues of new emerging diseases.

Local and federal health authorities in the UAE have coordinated their efforts to deal with previous infectious disease outbreaks, yet each authority has its own strategy and procedures in dealing with infectious disease. A more formalized UAE public health infrastructure needs to be established and improved in order to increase the efficiency of response and control procedures. It is necessary for the UAE to have one central Federal authority and to combine all efforts between different health authorities in improving and using available resources, and increasing capacity to prevent and control infectious disease outbreak. With a clear Federal strategy based on identifying threats, opportunities, and choosing the right instruments to reach the desired objectives, The UAE can overcome the challenges of its unique society and any potential health threats caused by infectious diseases outbreaks.

A Maritime Strategy for the UAE

UAE is politically and diplomatically key to GCC maritime aspirations

The importance of developing and maintaining a cohesive maritime strategy increases in direct proportion to the wealth a nation attains through maritime trade and its perceived stature on the international stage. This study determines how far-reaching the UAE's future maritime security strategy must be, especially in light of those multi-faceted challenges affecting, and affected by, the maritime sphere. Commencing with observations on the current Gulf maritime construct and those events that have shaped its development, this study examines the elements required to contain known threats and provide flexibility in combating emerging issues. Finally, this study makes UAE-centric recommendations to support discussion of this strategy.

By:

Colonel Nasir Alyafei

The Centre of Gravity, the constant battle for maritime security, is defined by those current and future threats upon which the UAE and other global trading nations must base maritime strategy.

There appears to be no consensus on how to define maritime security. Some concentrate on "the protection, preservation and augmentation of the national interest accruing from a country's territorial waters", while a recent NATO Parliamentary paper avoids providing a definition at all. However, Feldt, Roell, and Thiele in their 2013 thesis, provide a useful description: "the combination of preventive and responsive measures to protect the maritime domain against threats and intentional unlawful acts," for which there are three fundamental aspects to address:

- The preservation of the freedom of the seas,
- Facilitating and defending commerce,
- Maintaining good governance at sea.

These three elements provide the basis for all strategic and regional maritime stakeholders to conduct their business. Maritime security is merely one element of an overall maritime strategy for which in turn naval strategy, while key, is merely the military component. Possession of a navy therefore does not imply a cohesive maritime strategy, just as security itself is not confined to physical protection.

Layered Protection

Maritime security can therefore be broken down into three distinct "layers"—a "security-in-depth" analogous to any warfare theater, where protection of assets is covered from the immediate area out to "beyond horizon range."

The inner or Protection Layer focuses on the national geophysical space, concentrating on the littoral, to include protection of the coastline, border and port security, integrity of

offshore installations as well as preservation of the maritime environment.

The second or Involvement Layer focuses on ensuring that international lawful maritime activity is allowed to progress unimpeded insofar as it affects a nation's maritime security directly.

The final or Reassurance Layer covers those wider elements of maritime security that form part of the political and diplomatic efforts to ensure freedom and safety of commerce, trade and lawful maritime activity.

UAE Littoral Focus

The UAE's maritime presence has, since its formation, been wholly within the immediate littoral, maintaining an overt naval presence constantly within the southern Arabian Gulf and its environs, with no strategic military tasks beyond local limits. The UAE has therefore, in concert with it's expanding influence, begun to look towards the second and third layers of protection and identified a need to develop a more rounded, coherent and globally appropriate maritime strategy.

The Strategic Maritime Environment

Maritime strategy is not an autonomous concept that stands alone from any other element of domestic or foreign policy, but rather is a fundamental element of a greater whole.

Likewise, a navy is not the sole arbiter of maritime security ; however, it is the single most effective tool for protecting assets, and it possesses the flexibility of response in support of emerging security issues. As Booth and Grove argue, a navy should be capable of military constabulary and diplomatic functions:

- War-fighting
- Maritime Security
- International Engagement

In order to fully appreciate the need for this more global approach, it is necessary to determine those current and likely threats that the UAE will face which may be countered unilaterally, as a member of a multinational coalition or, more likely, as part of an organization determining maritime strategy policy both within the Arabian Gulf and elsewhere.

The UAE Dichotomy

The UAE has both an internal coastline with off-shore infrastructure inside the Strait of Hormuz and a shorter, highly significant outer coastline bordering the Arabian Sea. This is the basis of a dichotomous outlook on maritime strategy, firstly, inside the Gulf as an influential GCC member that is sympathetic towards the US and various EU states in the fractious relationship with Iran; and, secondly, outside the Gulf as a global economic trading partner with responsibilities, assets and interests that extend well beyond territorial and economic limits.

National Endeavor

From its formation, the most pressing priority of the UAE has been protecting state sovereignty. The application of the first layer of security was therefore easy to visualize and achieve, and something that the UAE has conducted and expanded upon. The UAE Naval Forces were charged with border and coastline protection and the safety and security of all those elements deemed critical to national

integrity. Additionally, the majority of Naval Maritime Tasks (NMTs) have been centered within the Gulf, with only a small naval presence located in Fujairah on the eastern coast. The recent UAE naval expansion and attendant future vision has at its heart a fleet of modern, highly capable and well-supported ships that can not only integrate into a multi-national task group, but also have the capability to assume a command role both for conventional war-fighting as well as conducting MOOTW, suggesting support for Booth and Groves' assertions.

Current capabilities remain more "brown water" than "blue water," indicating that the first layer, Protection, remains intact with an improving and constantly evolving second and third layers. Key factors that limit current maritime capability are self-sustainment and regional interoperability, especially with the GCC. Any desire to move away from a littoral-focused organization must have a cohesive long-range, far-reaching vision to support the UAE's expanding global influence. Maritime security is not just about counter-piracy, and neither is it just about coastal and infrastructure protection. It must be about strategic engagement, international assurance and forward presence as well as inherent naval flexibility and interoperability.

Gulf Cooperation Council (GCC)

The significance that the GCC has played in Arabian Gulf affairs cannot be understated. However, the GCC is, like similar international organizations, severely limited in its critical effect and Alani suggests that there are five significant obstacles to a fully functioning GCC Gulf policy: a permanent legal structure, political unification, inter-state trust, capacity in the maritime domain and internecine territorial disputes. The UAE has healthy relations economically and militarily with a number of European partners including the UK and France, as well as the US and other non-European states, which is at variance with the seeming inability of the GCC as a collective body to do the same. Furthermore, strategic decision-making within the

The UAE's maritime presence has, since its formation, been wholly within the immediate littoral

The most pressing priority of the UAE has been protecting state sovereignty

The UAE has healthy relations economically and militarily with a number of European partners including the UK and France

GCC remains at best embryonic, with matters of foreign policy, maritime security cooperation and closer economic monetary and fiscal union left very much to individual states. The UAE, in common with all GCC states, has sought to improve its individual military and security structures independently, and while it can be argued that NATO member countries generally also pursue independent weapon acquisition policies, there is at least a common doctrine, purpose and structure that the GCC lacks. The UAE must therefore take into account the requirements for regional cohesion through the GCC, and where unity of purpose does not currently exist must drive towards a common goal, thus supporting the second layer of security. Greater maritime cooperation between the UAE and Saudi Arabia, for example, would support the notion of collective defense, and provide for a more rounded organization with a combined maritime strategy, particularly under a unified GCC Command structure. Any GCC mandated maritime strategy would therefore concentrate on the second and third layers of protection.

The Iranian Question

Iranian national and international policies are well known, ranging from unwarranted territorial claims, opposition to the State of Israel, support for the Syrian and North Korean regimes, threats to close the Strait of Hormuz, and harassment of maritime traffic by the IRGCN (Iranian Revolutionary Guard Corps Navy). Of immediate concern to the UAE is the ongoing dispute over the islands of Abu Musa and Greater and Lesser Tunbs, which has been an ongoing source of national irritation, and one that Iran refuses to resolve by international arbitration. The maritime impact to the UAE is obvious, as is the potential for Iran to manipulate and control access to the Strait of Hormuz. Ironically, despite the territorial impasse, sanctions, and Iran's status as an international pariah, 450,000 Iranians currently live and work in the UAE with whom she remains a major trading partner. Most recently, the IRIN (Islamic Republic of Iran Navy) has conducted a number of OOA operations, visiting international allies, especially China, Syria and Sudan as well as permissive visits by Russian naval vessels to Bandar Abbas. With continued international sanctions, these deployments have assumed strategic significance in that Iran is reaching out to its allies politically and tangibly, underlining her desire for international recognition. Thus her maritime footprint now extends far beyond the confines of the Arabian Gulf, a factor that must be at the forefront of a developing UAE maritime strategy.

US Influence

It is undisputed that the United States is the only nation capable of providing a maritime security umbrella that guarantees peaceful operations and monitors Iranian, Chinese, and Indian expansion. The current US-led Gulf maritime security arrangement has evolved to provide stability and collective defense against conventional and asymmetric threats in a permissive, coalition-based environment and has been the central focus of US overseas maritime affairs for some years. Given these conditions of drawdown and relative stability, the UAE must look towards the security layers in developing and supporting its own maritime security model. The UAE has long aspired to full immersion into the coalition environment, but without the necessary force structure, operational capabilities, resources or sustainability, it has yet to be fully realized. As the balance of Gulf maritime security downscales from US involvement and becomes more of a GCC responsibility, these shortcomings will need to be re-evaluated if future maritime security cooperation is to have any meaningful impact.

Greater maritime cooperation between the UAE and Saudi Arabia, for example, would support the notion of collective defense

The UAE must look towards developing and supporting its own maritime security model

China and India

India and China are two further strategic elements that affect the safety and security of trade to and from the Gulf. India's maritime doctrine is "to respond to a range of external threats and safeguard India's economic, political and security interests" using its Navy as its key enabler for its strategic tasks, almost all of which impact on the UAE.

As China expands its already vast economic interests, its resource-led growth has in turn fuelled a corresponding increase in military-maritime capability and blue-water presence. This capability surge has focused US attention and has undoubtedly become the US Navy's Far East center of gravity. Adam MacDonald also points out that China is at the beginning of a shift in focus from inward, land-centrism to a more outward maritime policy driven by two factors: competition for resources and generation of economic prosperity through seaborne international trade. The importance of this trade link to the UAE should therefore be obvious.

Discussion

Non-State Actor Threats

The new Khalifa Container Port in Abu Dhabi is a considerable key infrastructure asset to the UAE. If there were a terrorist attack, a ship hijacking, or an attack on the port's infrastructure—the effect would be disastrous. The UAE's maritime strategy therefore has to be flexible enough to deliver operational effects in the event of hostile actions, and should be robust, far-reaching and rapid enough to deter those elements that are less predictable.

Critical Vulnerabilities

Oil, water, food, fishing, drugs, weapons, human trafficking/illegal immigration; the list of those specific areas of vulnerability that immediately impact the maritime domain are well known. A significant proportion of UAE oil infrastructure lies offshore, while all UAE water production relies on desalination plants on the coastline. All but one of the UAE's major cities lies on the coast, with reclamation developments such as The World extending a considerable distance offshore.

Other Geo-Political and Economic Issues

In order to fully appreciate the impact of piracy and other disruptions to freedom of shipping on the UAE littoral, it is necessary to zoom out and look at the region as a whole. The Strait of Hormuz represents, for many, the single point of failure and therefore is the most strategically important, making the UAE the geographic de facto guardian of this international gateway. Threats by other non-state actors have been subdued by international effort, whilst Coalition Forces have, through unified, permanent regional presence and cooperation, provided an otherwise unachievable level of regional security.

The UAE is geographically pivotal to the security of the southern Arabian Gulf and the Strait of Hormuz. It is also politically and diplomatically key to GCC maritime aspirations and globally significant to economic prosperity. Regional objectives have determined the over-riding need for awareness through information sharing, political and doctrinal cohesion, and inter-operability and compatibility between organizations both military and civilian.

Conclusion

The Arabian Gulf is the most influential and globally important energy hub, and also has become geo-politically, a relatively stable region. Tensions are currently confined mostly to land-based religio-political demonstrations, and due to a combination of factors that include US security, stability within the GCC as well as Iranian quiescence, the maritime domain has achieved a notable, if fragile, status quo.

With the expected dilution of the American presence and the regional desire for self-determination, organizations such as the GCC must become more cohesive in their approach to maritime security, and is something that the UAE should be driving forward. Iranian territorial issues as well as its open flouting of international law and recent courting of China, Russia and other aligned states also raise concerns that the UAE should be able to deal with effectively. Support to coalition operations both within the Gulf and in the Indian Ocean should form the basis of a wider maritime security policy that draws in support to and from nations such as India, not only in support of the free flow of trade, but also to curb the effects of illegal and unlawful activity beyond the immediate littoral.

The UAE is geographically pivotal to the security of the southern Arabian Gulf and the Strait of Hormuz

The Arabian Gulf is the most influential and globally important energy hub

The UAE has risen to a position of global prominence and is a committed supporter of democratic free trade

The UAE has risen to a position of global prominence and is a committed supporter of democratic free trade, another fact that should impel the UAE to develop a maritime strategy that expands its horizons beyond the immediate littoral. While not seeking to project military power, the ability to spread maritime influence and support along the SLOCS is fundamental to ensuring both domestic prosperity and wider regional and global security, although much remains to be achieved in terms of policy and doctrine development as well as tactical fleet sustainability in order to fully support the ambitions and visions of the future.

Therefore, in order to ensure that UAE interests throughout the region are best supported, as well as the need for a cohesive infrastructure protection policy, a coordinated, forward thinking, dual-focus maritime strategy based on the three-layered protection model is the definitive way forward. What is certain is that it is now appropriate for a UAE maritime policy that looks towards a consolidated and coordinated approach to the protection of trade both in and out of the region.

Towards a Sustainable Nuclear Energy Program in the UAE

security, political, economical and social dimensions of the nuclear energy program are the key pillars to achieve long term sustainability

A peaceful nuclear energy program is a major undertaking that requires careful planning, preparation and investment

By:
Ahmed Ateeq Al Mazrouei

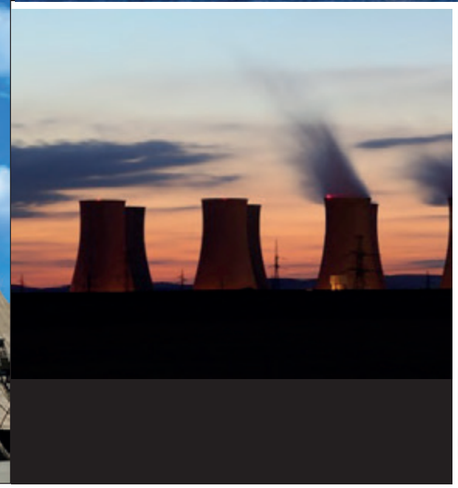
As part of the government's national security planning, the UAE's decision to embark on a peaceful nuclear energy program is motivated by the pressing need to develop supplementary sources of electricity. But the UAE has no experience with commercial nuclear power. So, why would such a decision be made in an oil rich country? Is there a reasonable assurance that the UAE can safely implement a nuclear program in time to meet its energy needs? What assurances will need to be provided to the world community? What activities will need to be undertaken and when? And what resources will be required? All of these legitimate inquiries and others can be summarized in the one single but comprehensive question that I explore in this article: how should the UAE ensure long term sustainability of its peaceful nuclear energy program in order to maximize the energy producing benefits and reduce any associated risks?

Given the scope, complexity, and resources involved, I argue that security, political, economical and social dimensions of the nuclear energy program are the key pillars to achieve long term sustainability. These dimensions are directly driven from the country's four broad categories of national interests, which include physical security, economic prosperity, internal value preservation and external value promotion.

Development of Civilian Nuclear Energy

The UAE's Energy Outlook

Why has a country blessed with massive oil reserves decided to diversify its energy outlook? The country's proven reserves are estimated at 97.8 billion barrels, which accounts for 7.1 percent of the world's total reserves and ranks as the sixth largest in the world after Saudi Arabia, Venezuela, Iran, Iraq, and Kuwait. Being both an energy consumer and producer, the UAE has decided to diversify its energy outlook in order to power its tremendous economic growth and generate the electricity necessary to sustain the desired social development of its people. Analysis conducted by the UAE government in early 2006 and 2007 reached a conclusion that the country's annual peak demand for electricity is expected to rise to more than 40,000 Mega Watts by 2020, reflecting a cumulative annual growth rate of approximately 9% from 2007 onward. The UAE's rapidly



growing population, the high standards of living and the vast water desalination requirements have all led to dramatic rise in oil consumption domestically.

Electricity produced from nuclear energy came out as a compelling, environmentally promising and commercially competitive option. It can produce safe, reliable and significant base-load power contribution for the whole UAE in order to meet its projected development growth in a timely manner in line with the country's future energy security and diversification strategy.

Challenges Facing the Nuclear Industry

A peaceful nuclear energy program is a major undertaking that requires careful planning, preparation and investment of time as well as capital and human resources. While nuclear energy is not alone in this respect, it is considered unique because of the challenges associated with the possession and handling of nuclear materials, the stringent safety requirements to protect against radiation or the inadvertent release of radioactive materials, and the long-term commitment required for waste disposal and decommissioning related activities. In addition, the consequences of these challenges can cause tremendous human casualties, significant environmental harm and contamination.

The Safety Dilemma. The security and safety of nuclear energy make for a never-ending debate. Unsurprisingly, nuclear regulatory agencies, such as the International Atomic Energy Agency (IAEA) and supporters of nuclear energy's potential as a sustainable resources argue that nuclear power is safe, stable and a potentially vital resource. However, others including Greenpeace International and the Nuclear Information and Resources Services highlight instead the dangers involved with its use.

Proliferation Concern. Another major challenge facing the nuclear industry is the political commitments that are required to be made to the world community. Due to concerns over the potential conversion of nuclear fuel to military uses, the prevailing aspect of the global nuclear regime is the commitment to non-proliferation. Therefore, any act outside the international legal framework of operational transparency and oversight is considered to be in contradiction to the interests of the global nuclear community and can create enormous political complications and negative implications for the country's national interests

Economical Competitiveness. Timely construction of nuclear power plants is a significant challenge to achieve economical power generation. Building nuclear reactors involves large upfront capital investments and long construction schedules leading to a substantial period of uncertainty before the power plant begins to generate revenues. Risks associated with schedule delays may cause huge project cost escalations and overruns. Additionally, during the long-term operational phase, load factor and plant life have enormous cost implications that must be considered into the economical competitiveness calculations of nuclear power plants.

Public Acceptance. Most nuclear power programs devote fewer efforts to the social aspects surrounding nuclear energy compared to the technical and scientific ones. In many cases, public perception and concerns have led to postponement or failure to start or expand nuclear power programs.

The Argument

The development of a nuclear energy program is a strategic mission and a unique endeavor. To succeed, the UAE should target a comprehensive balance in all the se-

curity, political, economical and social dimensions of its nuclear program as key pillars for long term sustainability. By focusing on these four pillars, the UAE can achieve its strategic goal to generate nuclear energy, and ensure the continuity of safe and reliable operation for decades.

Towards Nuclear Sustainability in The UAE

Security Dimension

Security is the center of gravity for a long-term sustainable nuclear energy program in the UAE. This is due to its strategic nature both domestically and internationally. It involves protecting the nuclear infrastructures and facilities as strategic national assets for the country against any threat. Additionally, the word "nuclear" has long been associated with fear of nuclear accidents and radioactive contamination, which can cause massive harm to both the public and the environment. Therefore, security also implies freedom of the UAE people from fear as well as safety from danger.

Current Progress. The organization of the UAE's security apparatus and all relevant legislation has been well structured to support the development of a robust nuclear security plan. Furthermore, the development of nuclear security regulatory framework is being organized by the UAE's nuclear authorities and regulators which include CICPA, the Emirates Nuclear Energy Corporation (ENEC) and the Federal Authority for Nuclear Regulation (FANR) along with a strong partnership with the IAEA. The safety within the UAE's nuclear program is also demonstrated by the advanced nuclear reactor technology selected. Needless to say, the Advanced Pressurized Reactor 1400 Megawatt (APR 1400) is a proven third generation technology that was developed by South Korea based on the System 80+ reactor design that was originally certified by the US Nuclear Regulatory Commission (NRC) in 1997.

Moreover, the legal governance structure within the UAE's nuclear program provides for additional fundamental layers of safety. In 2009, the UAE nuclear law was issued which established FANR as the independent regulator charged with regulation and licensing of all nuclear activities in the UAE. In line with international norms, FANR's primary objective is public safety and is enforced by conducting oversight activities and routine inspections of the nuclear facilities, equipments and materials. Additionally, FANR is also responsible to review and grant all "Limited Work Authorizations", the "Construction Permit" and the "Operating License" to ENEC. In addition, emergency response capabilities constitute another key requirement for the safety of the UAE's nuclear program. The governance structure consists of the National Emergency and Crisis Management Authority (NCEMA) with direct reporting lines to the National Security Council (NSC). The Authority has been working diligently with ENEC and other concerned stakeholders to develop a comprehensive offsite nuclear emergency plan and demonstrate successful drills, which is a FANR requirement to issue the operating license.

Areas for Improvement. With the objective to improve the robustness of the security dimension that will contribute to the sustainability of the UAE's nuclear program, the cyber security policy must be balanced in such a way that it doesn't create barriers to innovation and the free flow of information. Based on best practices within the nuclear industry, an information classification program to govern the use of all nuclear related information in the UAE should be established. The main objective of this initiative is to grant the right people access to the right information without jeopardizing any sensitive nuclear related information. Furthermore, the proposed program should put in place specific measures to safely store classified and export controlled information related to the nuclear technology and design. In addition, the National Electronic Security Authority (NESA) as the main regulating and coordinating body within the UAE's cyber space domain should develop a clear governance structure for all stakeholders within the nuclear energy program. This will be highly beneficial at the national level to orchestrate all cyber security activities and avoid the duplication of efforts. At least as important as the culture of safety within the nuclear industry, NESA should develop a set of regulations to foster cyber security awareness among key decision makers in the UAE's nuclear program.

The Political Dimension

Secondly, the UAE's political commitment to the international nuclear regime is a key pillar to ensure the sustainability of the country's nuclear program. It includes obligations related to non-proliferation, operational transparency, safeguards and export controls, which are all critical mandates for the UAE to demonstrate its peaceful intention towards nuclear power generation.

Current Progress. Since adherence to the highest standards of non-proliferation goes hand by hand with the security of the nuclear program, the UAE has spared no efforts in demonstrating full compliance with its international obligations stated in the Non-Proliferation Treaty (NPT), IAEA safeguard and export control signed agreements. As part of the bilateral agreement with the US signed in 2009, the UAE has decided to procure enriched Uranium fuel from the international market instead of producing it locally and has committed to forgo reprocessing of spent fuel. Additionally, the IAEA has conducted several support missions to review the UAE's progress in construction, operational readiness and the export control program in accordance with IAEA and Nuclear Suppliers Group (NSG) guidelines. The UAE's commitment to the highest standards of non-proliferation must also be synchronized with its commitment to the highest standards of operational transparency. In addition to NPT, safeguard and export control agreements, transparency in the UAE's nuclear program is also illustrated through the involvement of foreign joint-venture partners and expertise from responsible nations in the construction and operations of the power plants. Such involvement provides additional transparent windows into the UAE's nuclear program.

As a member of IAEA, World Association of Nuclear Operators (WANO) and Institute of Nuclear Power Operations (INPO), the UAE is continuously seeking guidance and cooperation from an extensive network of well-established global nuclear organizations. Furthermore, the International Advisory Board (IAB), which was established in 2009 as part of the UAE's legal framework structure, "provides the program with the benefit of the experience and knowledge of a highly selected group of internationally recognized experts in the fields of peaceful nuclear energy." The Board issues regular reports to the government which are made public in order to ensure both domestic and global stakeholders are able to keep an eye on the program's performance against the highest international standards.

Areas for Improvement. In August 2007, the UAE adopted a national export control law but had yet to issue implementing regulations for the law. As a wider initiative to manage all nuclear information in the UAE, it is highly recommended to fully staff a national export control body to enforce this mandate in line with the country's non-proliferation commitments.

Economic Dimension

As a new and unique source of electricity in the country, the nuclear program is considered an integral part of the UAE's energy security and diversification plan. Starting in 2017, nuclear generated electricity will be a major enabler of the

UAE's economic development by providing the vital energy to power the growth of industries and businesses.

Current Progress. It is remarkable to note that the overall construction schedule is on track to operate unit one by 2017. So far, the UAE has managed to reduce risks associated with schedule delays that can cause huge project cost escalations and overruns unlike many other nuclear construction projects around the world. This is crucial for the UAE to ensure that the nuclear power continues to be a commercially competitive alternative that could make a major and timely base-load contribution to the UAE's economy and future energy security.

As a new hi-tech industry in the UAE, the nuclear program continues to provide new job opportunities for UAE nationals. So far, the program has created many new job opportunities and attracted young UAE professionals to the industry. ENEC, the nuclear plant's owner, targets to attract and train the most talented science and engineering graduates, offering them a career in the emerging nuclear industry. In addition, the UAE is also working diligently to facilitate the development of a robust local supply chain infrastructure for the nuclear industry. The aim is to ensure local companies are qualified to meet strict quality and technical standards and, consequently, are able to support the program's development.

Areas for Improvement. To ensure economic efficiency, a regulatory body should be established to oversee the energy sector in the UAE. This new governance structure would improve alignments and coordination among all the energy entities as well as provide strategic views for the country's decision makers. The nuclear program has also the potential to be one of the major enabler for Abu Dhabi 2030 plan related to the development of the western region.

Social Dimension

Finally, the social dimension is one of the most important pillars to ensure successful and long-term sustainability of the UAE's nuclear program. This dimension represents two of the most significant objectives for the program. These are gaining the UAE's public acceptance and for the nuclear program and developing the UAE's nuclear human resources

Current Progress. The development of a nuclear program is grounded in the acceptance of its citizens. Nuclear programs benefit from having an informed and supportive populace. Making the case for the UAE's nuclear energy requires a comprehensive approach to provide information and materials that can best inform all levels of the society and respond to their questions and concerns. The strategic objective is to build up trust and confidence in the UAE's nuclear energy program as well as the people and organizations running it.

Both the owner and regulator of the UAE's nuclear program, ENEC and FANR, have been actively engaged in a continuous open dialogue with the public. On a regular basis, experienced teams from ENEC present an overview of how nuclear energy works and provide insights and answer questions about a wide range of topics.

The second objective of the social dimension is the capacity building of the UAE's human resources within the nuclear industry. Since no economy can flourish without its people, the development of national human resources is a vital objective and constitutes a key foundation of the critical infrastructure necessary to sustain the UAE's nuclear program. The UAE has developed a strategic plan that includes academic nuclear programs for education, scholarships and accredited training to qualify UAE nationals capable to lead and operate the program in all its different milestones.

Areas for Improvement. The vision to develop a safe nuclear energy program should be associated with the development of a robust and quality crises management system. As an integral part of this system, it is highly recommended that a proper media plan be established in order to deal with the public and social media. In addition, a visitor center at site should be set up to receive students from elementary schools up to universities and business delegations as well as international organizations.

Conclusion

As analyzed above, there are great opportunities to turn the UAE's nuclear energy program into a key instrument of national power to support the country's national interests. A nuclear energy program that takes into consideration all the security, political, economical and social dimensions could contribute significantly and competitively to the UAE's vital power requirements for decades, ensure the continual improvement of safety practices and security in according to best global standards, retain the continued support of international community, generate sufficient revenues, create new job opportunities for Emiratis, gain the country's public support and position the UAE as a model for others in quality, openness and efficiency.

Compulsory Military Service: Some Lessons from History

On January 19, 2014, the government of the UAE announced a national military service law. This law would require all Emirati males between the ages of 18 and 30 to serve in the military for 9 or 24 months, depending on educational background. As government officials decide how to implement this law, it is worthwhile to ask, "What lessons does history teach about compulsory military service?"

By:
Nathan W. Toronto Ph.D.

There is a long tradition of scholarship on compulsory military service; how a country generates military manpower cuts to core questions in society. At the same time, military service is different for every country, so what works in one place may fail in another. If history has shown one thing, however, it is that the details of compulsory military service determine its success. Scholarship on compulsory military service suggests five lessons for building a successful UAE national service program.

Lesson One: Compulsory Military Service Is a Form of Taxation.

Compulsory military service does not require citizens to make a direct monetary payment to the government, but it does require a direct payment in time and an indirect payment in wages given up by serving in the military instead of taking a better-paying job elsewhere. Depending on security conditions, there could also be a very real threat to life and limb,

as well.

As a result, any universal national military service program, like the UAE's, should take into account the monetary and non-monetary costs imposed on individuals. If there is a great difference between the wages that those performing service receive as compared to the wages they could have received elsewhere, then it will make national service more difficult to implement. By the same token, since the main aims of the UAE program are to provide job skills and increase social cohesion and national feeling, if individuals do not perceive these benefits, then national service will be more difficult to implement.

Given that compulsory military service is a form of taxation, it would be worthwhile for program officials to ask those who serve what they feel they are giving up or gaining from service, and to communicate the social benefits of service to the citizenry as a whole. This is especially important for a country that has historically had a very light tax burden.

Lesson Two: Exceptions Are a Source of Conflict.

Exceptions to universal male military service are unavoidable, so the question is not whether a national service program in the UAE will have exceptions to service or not, but what the exceptions will be and how the resulting conflict will be managed. In fact, expecting those with a secondary education to serve less than those without a secondary education is an exception, albeit a relatively mild one. Perhaps more important in a rank-conscious and family-oriented society is what obligation those who are married or those from prominent families will have to serve, or whether the conditions of their service will be different. In addition, if an individual cannot meet the military's physical standards, will he be obligated to serve in other ways? Also important for military planners is how the first few cohorts will enter the military; most militaries cannot handle all of a country's eighteen-to-thirty year old males entering the military at once, so if there is a lottery to reduce cohorts to a manageable size, then who will serve first?

History suggests strongly that exceptions like this matter a great deal. After Brazil began conscription in the late nineteenth century, the conditions of service became so unequally distributed across society that many Brazilians viewed the army as a penal system for wayward youths. When the US introduced conscription during the American Civil War, the government allowed the well-to-do to pay to let others serve in their place, which led to a disproportionate service burden on the poor. In Israel, which has peacetime compulsory military service, ultra-Orthodox Jews for decades have not been required to serve, but the decision to remove this exception has led to heated political debate.

So, while the UAE may choose to reduce exceptions as much as possible, exceptions are inevitable. The UAE can manage these exceptions by offering alternatives to military service or providing reasonable justifications for not serving. For instance, in Israel there is an option for civilian national service, and during World War II independent Selective Service Boards in the US determined whether conscripts were best used in the military or in their civilian jobs.

Most militaries cannot handle all of a country's eighteen-to-thirty year old males entering the military at once

Lesson Three: International Perceptions Matter.

Despite the societal and defense focus of the UAE's national service program, there is still a chance that neighboring countries will regard an increase in the UAE's military manpower as provocative. For example, in the nineteenth century France and Prussia competed with each other to build the most efficient and capable military reserve system, so when reserves were mobilized it was viewed as an escalation, which contributed to the outbreak of the 1870–71 Franco-Prussian War. Since the end of the Cold War, almost all European countries have given up conscription and reduced the size of their armed forces, which suggests that the size of an armed force influences perceptions of a country's foreign policy intentions.

Where can the UAE look for ideas on making its neighbors comfortable with its national service program? One example is Switzerland, which has had a long history of neutrality based on military strength. In Switzerland, even officers are conscripted, and reserve training is consistent and widespread; the Swiss military is not meant to invade other countries, but to make it difficult for an enemy to take and hold Swiss territory. Switzerland is not necessarily a perfect model for the UAE, but it is prudent to give neighbors confidence in the peaceful intentions of any compulsory military recruitment scheme.

It is prudent to give neighbors confidence in the peaceful intentions of any compulsory military recruitment scheme

It is a tribute to the UAE's innovative spirit that it is enacting a national military service law

Lesson Four: The Conditions of Service Set the Tone.

If military service is perceived highly among the population, and if soldiers are treated relatively well, then it will contribute to the overall success of the national service program. The key here is what level of esteem that those serving feel regarding their work. In Russia, for example, conscripts have historically been treated poorly, with harsh hazing practices and beatings. In some countries, the poor conditions of military life have led to soldiers being held in low regard in the surrounding community. In nineteenth-century Prussia, for instance, some businesses had signs that read, "No Dogs or Soldiers Allowed."

If the organizers of national service in the UAE succeed in branding the program as a worthwhile, positive pursuit, then service can become a source of national pride. Generally speaking, nine months is just enough time to develop the most basic soldiering skills, so if those in the UAE's national service program are given only dull, repetitive tasks—commensurate with their training—then it will be more difficult to generate this sense of national pride. In addition, military life is not glamorous, or even comfortable, but motivating soldiers to serve by tying the quality of their service to later career benefits and continuously polling them to find out how soldiers view their work could contribute a great deal to the success of national service in the UAE.

Thinking Ahead to National Service

In an age when most countries are doing away with conscription, it is a tribute to the UAE's innovative spirit that it is enacting a national mili-

tary service law. If history is a guide, there are likely to be challenges, but not insurmountable ones. The key is in the details of the program. By examining the history of compulsory military service, the organizers of national service can build a program that fits with the culture, tradition, and national goals of the UAE.

Dr. Toronto is on the faculty of the UAE National Defense College. He thanks Drs. Daniel Baltrusaitis, Samuel Green, and Gerard Hall for helpful comments on earlier versions of this article.

Bibliography

Anderson, Martin, ed. 1982. The Military Draft: Selected Readings on Conscription. Stanford, CA: Hoover Institution Press.

Ash, Colin, Bernard Udis, and Robert F. McNown. 1983. "Enlistments in the All Volunteer Force: A Military Personnel Supply Model and its Forecasts" in American Economic Review 73(1) March 1983: 145-55.

Beattie, P. M. 2001. The Tribute of Blood: Army, Honor, Race, and Nation in Brazil, 1864–1945. Durham, NC: Duke University Press.

Botero, Juan C., Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2004. "The Regulation of Labor," The Quarterly Journal of Economics, 119(4): 1339-1382.

Clemente, Steven E. 1992. For King and Kaiser!: The Making of the Prussian Army Officer, 1860–1914. Westport, CT: Greenwood Press.

Cohen, Eliot A. 1985. Citizens and Soldiers: the Dilemmas of Military Service. Ithaca, NY: Cornell University Press.

Cohn, Lindsay P. 2013. "Who Will Serve? Labour Markets and Military Personnel Policy," Res Militaris 3(2), available at http://resmilitaris.net/index.php?ID=1017610.

Cohn, Lindsay P., and Nathan W. Toronto. 2014. "Markets and Manpower: The Political Economy of Compulsory Military Service." Manuscript.

Duindam, Simon. 1999. Military Conscription: An Economic Analysis of the Labour Component in the Armed Forces. Heidelberg: Physica-Verlag.

Edmunds, Timothy. 2006. "What are Armed Forces for? The Changing Nature of Military Roles in Europe." International Affairs 82 (6): 1059-1075.

Forster, Anthony. 2006. Armed Forces and Society in Europe. New York: Palgrave Macmillan.

Flynn, George Q. 1998. "Conscription and Equity in Western Democracies, 1940-1975," Journal of Contemporary History 33(1): 5-20.

Gilroy, Curtis, and Cindy Williams. 2006. Service to Country: Personnel Policy and the Transformation of Western Militaries. Cambridge, MA: The Belfer Center.

Greenwood, Phoebe. 2012. "Israeli Coalition Split by Demands to Make Ultra-Orthodox Jews Serve in Army." The Guardian (July 14). http://www.theguardian.com/world/2012/jul/14/netanyahu-coalition-split-draft-orthodox (accessed April 9, 2014).

Grieves, Keith. 1988. The Politics of Manpower, 1914-18. New York: St. Martin's Press.

Guardian. 2014. "Israel Passes Law to Conscript Ultra-Orthodox Jews into Military" (March 12). http://www.theguardian.com/world/2014/mar/12/israel-passes-law-conscript-ultra-orthodox-jews (accessed April 9, 2014).

Haltiner, Karl W. 1998. "The Definite End of the Mass Army in Western Europe?" Armed Forces and Society 25 (1): 7–36.

Horeman, Bart, and Marc Stolwijk, eds. 1998. Refusing to Bear Arms: A World Survey of Conscription and Conscientious Objection to Military Service. London, England: War Resisters International, 1998. http://www.wri-org.org/co/rtba/index.html.

Horowitz, Michael C., and Matthew S. Levendusky. 2011. "Drafting Support for War: Conscription and Mass Support for Warfare." Journal of Politics 73 (2): 524-34.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny. 1998. "Law and Finance," Journal of Political Economy, 106(6): 1113-1155.

Leander, Anna. 2004. "Drafting Community: Understanding the Fate of Conscription." Armed Forces and Society 30 (4): 571-599.

Lee, Dwight R., and Richard B. McKenzie. 1992. "Reexamination of the Relative Efficiency of the Draft and the All-Volunteer Army," Southern Economic Journal 58(3): 644-654.

Levi, Margaret. 1996. "The Institution of Conscription," Social Science History 20(1): 133-167.

Levi, Margaret. 1997. Consent, Dissent, and Patriotism. Cambridge, UK: Cambridge University Press.

Lincoln, Abraham. 1989. "Opinion on the Draft." In Lincoln: Speeches and Writings, 1859–65, 504–509. New York: Library of America.

Mulligan, Casey B., and Andrei Shleifer. 2005. "Conscription as Regulation," American Law and Economics Review 7(1): 85-111.

Nickerson, Hoffman. 1942. The Armed Horde, 1793–1939: A Study of the Rise, Survival and Decline of the Mass Army. New York: G.P. Putnam's Sons.

Pfaffenzeller, Stephan. 2010. "Conscription and Democracy: The Mythology of Civil–Military Relations." Armed Forces & Society 36 (3): 481-504.

Posen, Barry R. 1993. "Nationalism, the Mass Army, and Military Power." International Security 18 (2): 80–124.

Poutvaara, Panu, and Andreas Wagener. 2011. "Ending Military Conscription." DICE Report 9 (2): 36–43.

Prasad, Devi, and Tony Smythe. 1968. Conscription: A World Survey: Compulsory Military Service and Resistance to It. London, England: War Resisters' International.

Robson, Leslie Lloyd. 1982. The First A.I.F.: A Study of Its Recruitment, 1914–1918. Carlton, Australia: Melbourne University Press.

Ross, Thomas W. 1994. "Raising an Army: A Positive Theory of Military Recruitment." Journal of Law and Economics 37(1): 109-131.

RT. 2011. "Serving to Death in the Russian Army" (April 30). http://rt.com/news/serving-army-crimes-two/ (accessed April 9, 2014).

Salem, Ola. 2014. "UAE Cabinet Introduces Mandatory Military Service for All Emirati Males." The National (January 19, 2014). http://www.thenational.ae/uae/government/uae-cabinet-introduces-mandatory-military-service-for-all-emirati-males (accessed April 9, 2014).

Tollison, Robert D. 1970. "Political Economy of the Military Draft," Public Choice 9(Fall): 67-78.

Toronto, Nathan. 2005. "Military Recruitment Data Set," version 2005.1. http://leav-www.army.mil/fmso/documents/mildat/RecruitmentCodebook.pdf.

Warner, John T., Curtis J. Simon, and Deborah M. Payne. 2003. "The Military Recruiting Productivity Slowdown: The Roles of Resources, Opportunity Cost and the Tastes of Youth" in Defence and Peace Economics 14(5): 329-342.

Proliferation of Violence and Terrorism in the Region

A Perspective for UAE's National Security

Since its foundation, the United Arab Emirates has successfully managed to maintain its national security through an approach of diplomatic wisdom and balanced security when dealing with regional security issues that might influence its national security, yet it cannot be isolated from the growing threats that are emerging from the recent swift of violence spreading across the Middle East and North Africa Region, in the forefront are the threat of terrorism and sectarian violence.

By:
Staff Col. Ali Alneyadi

Since its foundation, the United Arab Emirates has successfully managed to maintain its national security through an approach of diplomatic wisdom and balanced security when dealing with regional security issues that might influence its national security, yet it cannot be isolated from the growing threats that are emerging from the recent swift of violence spreading across the Middle East and North Africa Region, in the forefront are the threat of terrorism and sectarian violence.

In a strategic context, what approach can the UAE adopt to mitigate such risks emerging from the security instability in the region?

Since its operational defeat in Afghanistan, Al-Qaida was able to strategically and ideologically survive and expand. Its structure became more decentralized and was able to create subsidiaries and networks in Iraq, Saudi Arabia, Yemen and North Africa. The deteriorating security situation in countries like Yemen and Iraq allowed AQ to establish safe heavens and gain freedom of movement.

Following the indiscriminate violence against civilians sponsored by AQ groups in Iraq, the reputation of such extremist groups declined rapidly in the Arab and Muslim World, and AQ suffered badly in gaining more recruitment from the Muslim and Arab societies.

The Arab Spring initiated a primary – perhaps immature – sign of optimism that Al-Qaeda ideas are diminishing. In Egypt, Ayman al-Zawahiri had long encouraged the overthrow of the Mubarak government. "The young men and women who had filled Liberation Square," wrote John Hopkins University Professor Fouad Ajami, "wanted nothing of that deadly standoff between the ruler's tyranny and the jihadists' reign of piety and terror." This was especially true of Za-

wahiri, he argued. "No one was paying heed to Zawahiri's odyssey; his sojourn in faraway Hindu Kush was of no interest to this revolution."

But a growing body of research conducted by scholars such as David Laitin and Jim Fearon, both at Stanford University, has found that "weak and ineffective governments are critical to the rise of insurgencies – and, ultimately, fertile ground for terrorist groups. Weak states do not possess sufficient bureaucratic and institutional structures to ensure the proper functioning of government. Their security forces often lack legitimacy and are unable to establish basic law and order". This should give pause to optimists. The unfortunate truth, at least for the moment, is that the Arab Spring has weakened a handful of regimes across the Arab world. In the end, the Arab Spring has created a fluid situation. If it continues to weaken governments in the region, it may serve as a boon for some religious terrorist groups. Al Qaeda's leaders certainly hope so, and this is certainly true when it comes to the current situation in Yemen.

The Syrian's conflict also represented a fertile ground for extremist religious groups, a progress that has a strategic advantage for Al-Qaeda and an opportunity to further market its false religious appeal and has restricted the possibility of a peaceful solution to the conflict. In February 2012, AQ Emir Ayman Zawahiri called upon "every Muslims and every honourable and free person in Turkey, Iraq, Jordan and Lebanon to go to aid his brothers in Syria." This statement came just days after a U.S official said that "Al-Qaeda in Iraq (AQI) had a hand in the two bomb attacks against Syrian intelligence facilities in Damascus", and Iraqi Deputy Interior Minister Adnan Al-Assadi said that "Iraqi jihadists were moving fighters and weapons into neighboring Syria".

In the recent past, the AQ's subsidiaries and agenda has had limited plead in Syria and the recent unrest in the Arab region has further underscored the impoverishment of extremist ideology in the Arab societies. Though, given Syria's strategic geolocation and geopolitical position, the collapse of the Syrian State could leave a vacuum and create a wider conflict that would allow groups such as Al-Qaida more freedom of movement and will be able to solidify their presence in Syria.

The presence of AQ elements and Sunni jihadists in Syria has led to the rise of the Shi'ite sectarian jihadism which is an extension of unprecedented pan-Shi'ite phenomena that has for the first time in modern history of the region led to a massive flow of foreign Shi'ite jihadists into Syria to fight. Their participation in the conflict is on behalf of a narrowly defined Shi'ite theological-political vision and to avenge Imam Husayn's legacy. This in return led to the more flow of Sunni's jihadists and Al-Qaida fighters into Syria to counter the Shi'ite influence, ultimately allowing AQ to estab-

Weak states do not possess sufficient bureaucratic and institutional structures to ensure the proper functioning of government

It is vital that the UAE continue its multiple efforts in supporting the multilateral and diplomatic efforts in bring peaceful solutions to the regional conflict areas

The education tool applies to strengthening the security of the UAE's population, key infrastructures, and economies

lish more sanctuaries and more public support and deepened the Sunni-Shi'ite schism and increase the risk of more failing states. This violent struggle, if not contained, will most likely spillover to the rest of the countries in the Middle East including the GCC States and will inflame the sectarian violence; ultimately, will contribute to the proliferation of the religious radicalism phenomenon, thus, increase the instability of the region.

Given the UAE's diverse population, its geopolitical proximity, and its connectivity and engagements with such countries in the region, it is safe to argue that its national security will be challenged by such growing threats of regional terrorism and sectarian struggle. A recent attempt of kidnapping of the UAE's Ambassador to Yemen sponsored by Al-Qaida in the Arabian Peninsula (AQAP), and the earlier rocket attack on the UAE Embassy in Libya prove that the threat of terrorism possesses a serious risk to the UAE interests and if it continues to grow its operational capabilities in states such as Yemen, Syria and Libya, most likely will have direct threat to the internal security of the UAE.

As this situation represent a threat to the UAE's interests, it also represents an important opportunity for the UAE to project to the international community its determination and capacity to contribute positively to the international efforts in bringing peaceful solutions to the current conflicts in the region, in addition, demonstrate to the terrorists groups that the UAE have very capable tools and strong cohesion in facing the threat of terrorism.

It is vital that the UAE continue its multiple efforts in supporting the multilateral and diplomatic efforts in bring peaceful solutions to the regional conflict areas, but it is also in the UAE national interest to continue pursuing its unilateral and bilateral efforts in supporting its brother states such as Yemen, Egypt and Libya in building up their security capacity in fighting terrorism.

Theses unilateral and bilateral efforts should be augmented by employing more military, information, diplomatic and economic tools internally and externally.

Internally, the greatest tool to protect against terrorism and its ideology is for the UAE to mobilize its information and education tools to spread moderate religious ideas and tolerance. These tools should be focused towards targeting young generations at every level of educational institutions; doing so will help in building mental self defense mechanisms that terrorism will have a greater challenge to defeat. It will create great resilience against terrorism and provide an opposing psychological force within the society against any invading extremist ideology that can feed the roots of terrorism. These efforts can be best implemented through empowering the moderate religious institutions and moderate religious scholars.

Similarly, the education tool applies to strengthening the security of the UAE's population, key infrastructures, and economies against potential terrorist or cyber attacks, where this can be done through developing national awareness and resilience programs and the establishment of educational institutions that can develop good security practices and standards that benefit all sectors of society.

Externally and complementing the current UAE's diplomatic efforts, economic and military aid should be focused to rapidly buildup the security capacities of brother states; Yemen, Egypt and Libya in fighting terrorism through providing specialized military equipments and advanced counter terrorism training programs and building military alliances. Through enhancing the counterterrorism capacity of their Security Forces, these states should be able to project more decisive fight against the terrorist's networks and sanctuaries, ultimately, can improve their security environment and reduce the proliferation of terrorism.

In conclusion, by owning essential tools and resources, and in dealing with the volatile regional security environment leading to the proliferation of terrorism and sectarian violence, the UAE can implement an effective strategic framework that best employ its tools of power in assisting regional states facing increasing terrorists threats and in building its internal resilience against terrorism, ultimately, protect its national interests.

Fouad Ajami. "Politics Review Resources Volume 22, Number 2, November 2012 Global politics." http://politics-blog.ashbournecollege.co.uk/unit-4-extended-themes-in-political-analysis/route-d-global-political-issues/conflict-war-and-terrorism/ Last accessed 11 April 2014.

James D. Fearon and David D. Laitin. "Neotrusteeship and the Problem of Weak States." International Security, Vol. 28, No. 4 (Spring, 2004), pp. 5-43

Jason Burke, "al-Qaida Leader Zawahiri Urges Muslim Support for Syrian Uprising" The Guardian, February 12, 2012. http://www.theguardian.com/world/2012/feb/12/alqaida-zawahiri-support-syrian-uprising. Accessed 25 Dec 2013.

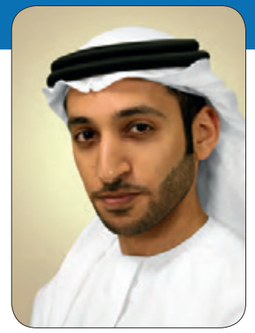
Kamran Bokhari, "Jihadist Opportunities in Syria," Stratfor, February 14, 2012. http://www.stratfor.com/weekly/jihadist-opportunities-syria. Accessed 25 Dec 2013.

http://www.thenational.ae/thenationalconversation/comment/the-rise-of-Shi'ite-jihadism-in-syria-will-fuel-sectarian-fires. Last accessed 10 May 2014.

Abu Dhabi-WAM/SABA. "Yemen Ministry of Interior: Interdicted a kidnapping attempt of the UAE ambassador to Yemen" 30 April 2014. http://www.emaratalyoum.com/politics/news/2014-04-30-1.671710. Accessed 10 May 2014.

By Ghaith Shennib and Marie-Louise Gumuchian, TRIPOLI Thu Jul 25,2013. "UAE embassy compound attacked in Libyan capital" http://mobile.reuters.com/article idUSBRE96O04J20130725?irpc=932. Accessed 10 May 2014.

UAE Water Security: Building a Strategy for a Sustainable Future



By:
Saud Abdulaziz Alshamsi

"And We have made from water every living thing." (Holy Quran: Chapter 21, Verse 30)

Water security is by no means a novel concept regionally or globally. The importance of water as a natural resource has been recognized for centuries. It is only recently however, that population and industry growth has reached a level whereby demand for water has started to place a great enough stress on the world's water sources to warrant global concern. The United Arab Emirates (UAE), being located in one of the most arid regions in the world, and having a minimal supply of renewable water sources, needs to tread carefully over the coming years to ensure the availability of water to sustain the needs of population and economic growth.

In light of the above, it is imperative that we find a suitable answer to the question: "How can water security be sustained in the UAE given the combination of social, economic, and environmental pressures?" This paper will argue that a balanced strategy, combining supply side measures with demand side management and centered on the pillars of technology, policy, and awareness, will ensure that the UAE remains able to successfully respond to and overcome its water security challenges.

The UAE's arid climate, rainfall shortages, and scarcity of renewable water resources create significant water security hurdles for the country. The water poverty line is measured by the United Nations at 1000 cubic meters of renewable water per capita per year. Even if we were to include water from desalination activities, the UAE would still sit at a paltry 320 cubic meters per capita per year. These conditions are exacerbated by the effects of climate change, as global warming is causing increased water evaporation rates and reduced rainfall in the region, which is bringing about a further decline in water availability.

However, water consumption per capita in the UAE is one of the highest in the world at over 350 liters a day. At 550 liters of water per person a day, the Emirate of Abu Dhabi alone consumes almost three times the world average of 180-200 liters. The agricultural sector is the highest consumer of water in the UAE, using approximately 35% of total supply and 95% of available groundwater sources. It is also a prime cause of depletion and quality deterioration of groundwater, given reports of extraction being up to ten times the natural replenishment rate. Moreover, a surge in population

The UAE's arid climate, rainfall shortages, and scarcity of renewable water resources create significant water security hurdles for the country

Water consumption per capita in the UAE is one of the highest in the world at over 350 liters a day

Desalination is the most developed and relied-upon technological capability to address water concerns in the UAE today

(from approximately 1M in 1980 to 7.5M in 2010) and a rapidly developing economy continue to drive up water demand in the country. Finally, generous water subsidies combined with a lack of notable public awareness concerning the severity of water shortages are hampering the government's ability to drive down consumption to more sustainable levels.

The UAE, for the better part of its history, has relied on supply-side measures (mainly desalination) to tackle water security concerns. This approach, however, only addresses one half of the equation. The fact that the majority of water resources that the UAE relies on are non-renewable and that the paltry renewable sources are being depleted at rates vastly above their replenishment capacities present an issue that cannot be fully addressed solely through resource diversification. Moreover, total water demand in the UAE is expected to rise by 50% by 2030 as a result of continued population and industry growth. In short, a strategy that depends on supply is extremely costly and, in the long run, unsustainable. This is where demand management comes into play as a critical complement to the previously discussed measures. To be successful in the long run, the UAE's strategy needs to bring together both the supply-side and demand-side of water security. More specifically, given the complexity and severity of its water security challenges, the UAE needs to adopt a multifaceted response strategy that combines technology, awareness, and policy measures.

Technology

Desalination is the most developed and relied-upon technological capability to address water concerns in the UAE today. Ranked second worldwide (behind Saudi Arabia), the UAE's desalinated water production supplies approximately 40% of the country's total yearly demand. While none can deny the criticality of desalination activities, especially in providing the lion's share of water to the UAE's domestic and industrial sectors, the associated costs are quite high. The UAE spends nearly Dh12 billion yearly on water desalination. This figure does not even take into account the associated environmental costs. Furthermore, the increased salinity of Gulf waters caused by the desalination process is a great concern, but so is the issue of carbon emissions generated from traditional fossil fuel-based plants as well as the brine waste released back into the sea as a byproduct of the desalination process.

Nonetheless, it is more than likely that the UAE will be required to build additional desalination plants in the years to come, both to replace current ageing ones and meet growing demand. It follows that technological improvements to the desalination process will play a key role in ensuring the sustain- »

able development of the country's water resources. The UAE should target developments and efficiency gains that will help reduce water contamination and overall operating costs. Additionally, alternative, clean energy sources, such as nuclear and renewables, could reduce climate change related effects and long-term costs.

Wastewater treatment is another important technological capability in the UAE's arsenal. Unlike desalination, however, this valuable resource is relatively untapped and needs to be further developed in order to reach its full potential as an effective countermeasure to water-related challenges. Today, the UAE's wastewater treatment plants supply approximately 12% of the country's total yearly water demand. Usage, however, is limited to landscaping and irrigation of parks as well as, to a much lesser degree, certain plantations. Additionally, nearly 40% of treated wastewater is discharged into either the Arabian Gulf or the desert. The UAE should strive to increase the usage percentage of treated wastewater through continued development of existing collection, treatment and distribution infrastructure. Another focus needs to be on the development of cost-effective treatment technologies that produce a higher quality of water in order to overcome current usage limitations.

An example of a success story in the area of wastewater treatment is Singapore's "NEWater" initiative. NEWater is a term coined by Singapore's national water agency to denote high-grade reclaimed wastewater. One of the main lessons learned from Singapore's experience is that treated wastewater can be a reliable alternative water source for water-scarce countries such as the UAE. This is exemplified by the suitability of NEWater for drinking and industrial use. Additionally, the NEWater case clearly illustrates that the initiative's success was dependent on a comprehensive strategy that combined technology, awareness, and policy measures. In order to tackle the issue of public opinion, widespread education campaigns were initiated to raise awareness and alleviate fears and apprehensions surrounding the use of treated wastewater. The government also worked on policy schemes to increase public adoption. Overall, the Singapore experience presents an invaluable opportunity for the UAE, specifically in reaffirming the potential of wastewater treatment as an effective response to water security challenges, as well as incorporating lessons learned into its own strategy in order to minimize costs and capitalize on a valuable alternative water source.

Awareness

Water scarcity is a critical problem that, historically, has not garnered enough public or media attention in the UAE. The heavily subsidized water industry combined with a history of reliance on supply-side measures has led to ignorance on the part of the masses with regards to the severity of the water issues and irresponsibility in consumption. An approach that relies solely on government obligation and funding is extremely costly and not sustainable in the long run, especially if water demand continues to escalate at its current rate. As such, the previously discussed technological solutions need to be married to an awareness strategy that targets over-consumption behavior and stresses the whole-of-nation response to water security concerns.

The UAE has witnessed some developments in recent years with regards to increasing awareness of water-related concerns. There are, however, important challenges and considerations to be noted, one of these being that providing information alone is not always enough to spur a change in behavior. For example, given the large water subsidies, there is very little incentive to examine a bill for a free (or very cheap) utility. The absence of a stricter pricing policy diminishes the effectiveness of certain awareness initiatives. Similarly, the messaging in the various government websites, while useful, is not always consistent nor is the information always evident or easily accessible. In this case, a policy of coordination at the national level would help with consistency and unity of messaging as well as standardization for ease of access to valuable information.

A large part of any awareness program is formal education. Educational institutions provide an excellent platform to ingrain the values related to conservation as well as the dangers of overconsumption into the minds of the youth. In this manner, future generations can benefit from an early and recurring exposure to the gravity of water scarcity matters, helping to shape their attitudes and actions in ways that will promote a culture of efficient and sustainable consumption. If interests are sufficiently peaked, these efforts could also lead young, aspiring engineers, economists, and policymakers to careers in water-related fields.

It is evident from the analysis that awareness and education initiatives need to reach a large and diverse

audience, including producers (owners and operators of water utilities), policymakers, water consumers (industrial, household, commercial). We also need to keep in mind that the UAE has a very large number of expatriate workers that come from a variety of different backgrounds, and that a substantial percentage have limited to no formal education and literacy. Consider that these latter groups share usage of public water (such as ablution stations at mosques) or, in some cases, are responsible for water consuming activities in the domestic or commercial setting (such as manual car washes, irrigation). The messages, as such, need to be crafted in a manner that resonates with diversity of the stakeholders involved.

Policy

Technology and awareness alone, however, do not constitute a complete solution for an issue as complex as water security. They require the support, coordination, and direction derived from the third and final piece of the puzzle, namely policy.

Pricing controls have been a staple of demand-side water management policies around the globe. Studies have shown that, generally, countries charging the highest water tariffs tend to have the lowest consumption and vice versa. The UAE's case, however, is fairly unique when it comes to water pricing. Although water remains a subsidized resource in the UAE, the fact that water management and distribution activities may fall under local government jurisdiction means that pricing policies can vary dramatically from one emirate to the next. Using the domestic sector as an example, the Dubai Water and Electricity Authority (DEWA) currently charges both UAE nationals and expatriates residing in the emirate for water usage, albeit at different rates. In Abu Dhabi, on the other hand, only expatriates pay (a highly subsidized rate) whereas nationals continue to enjoy the luxury of free usage. The aforementioned differences in approach create some important questions surrounding the future of water pricing in the UAE. On one hand, water pricing is, undoubtedly, a very sensitive and controversial issue, especially given the historic precedence of the government providing water free of charge (in all emirates). On the other hand, there are clear benefits to shifting some responsibility and accountability over to consumers.

Those who doubt the effectiveness of the pricing tool in the UAE need only review published reports showing that, for the first time, peak water demand in Dubai fell by 2.5% in the year following the emirate's decision to charge nationals, even in the incidence of population and economic growth. While one needn't rush to conclusions given that other factors were likely at play, it is not far-fetched to assume that the water tariffs served as a wake-up call for those that took water availability for granted, especially given that, historically, 50% of water consumption was attributed to nationals. Although detractors have long argued that a departure from the established social contract (of free provision of basic utility services to nationals) would cause instability and unrest, the Dubai experience as well as the reductions of subsidies in electricity across the UAE in the last decade seems to indicate otherwise. As such, a UAE national standardized pricing system with a built-in ratchet effect that rewards consumers at lower usage brackets and penalizes those at the higher end would serve, not only as a way to lift some of the burden from the government's shoulders, but, more importantly, as a tool to incentivize conservation and achieve consumption rates closer to sustainable targets.

Beyond pricing, there exist other important elements of policy that the UAE can capitalize on to bolster water security efforts, a prime example being the setting of relevant laws and standards. Federal bodies such as the Ministry of Environment and Water (MoEW), in coordination with various local entities, are responsible for ensuring that the overall regulatory framework is conducive to the sustainable development and consumption of the UAE's water resources. As such, policymakers should focus on promoting appropriate, tools, standards and best practices to support efficiency and curb overconsumption. These include advanced water-saving irrigation systems and greenhouses for agriculture, efficient water taps and fixtures in residential and commercial buildings, and the use of drought resistant plants for parks and landscaping.

Another key element of policy that hasn't yet been fully addressed has to do with the issue of governance. As previously stated, a critical obstacle to effective water resource management in the UAE is the divide between federal and emirate level government organizations. The current interplay of federal and local authorities lends to the absence of a consistency in policymaking, which, in turn, sends mixed signals to the general public. This lack of clarity on the respective roles and responsibilities, while certainly not unique to the water sector, only serves to exacerbate security related issues. In order to streamline water resource management in the UAE, a single federal entity will need to be empowered to act as a focal point that oversees and coordinates all related activities, be them with other federal entities or relevant local organizations. Emirate level organizations would be tasked with executing the federal strategy and enforcing regulation and directives.

Water security remains a critical challenge to the UAE's national security, especially as the young country continues on the path of growth and development. The rapid pace of population and economic growth, combined with generous subsidies and overconsumption practices, has placed great stress on the country's dwindling water resources. The UAE must focus on three main areas that to be covered in tandem in order to maximize the effectiveness of a comprehensive water security strategy, these being technology, policy, and awareness. Investment in technology developments will ensure that the UAE's capabilities continue to be strengthened and that resources are efficiently utilized, taking into account energy and cost implications. Awareness and education will enable the masses to better understand and appreciate government water policies, help ensure water consumption is aligned with sustainable targets, and prepare future generations of technologists, educators and policy makers for the growing challenges ahead. Policy tools will help support the above areas of focus and ensure prioritization of resources, clarity of vision and objectives, alignment of activities at the federal and local levels, and promotion of tools and techniques that will ensure the sustainable development of the UAE's water resources.

Wastewater treatment as an effective response to water security challenges

The water tariffs served as a wake-up call for those that took water availability for granted

A Tale of Two Reactors: The Security Spiral and Nuclear Power in the Middle East

By:
Daniel Baltrusaitis, Ph.D.

The security spiral is a structural notion of state insecurity in the international system. An increase in state security, regardless of intention, causes rising insecurity for others as the measures are seen as potentially threatening. The most notable example of this spiral is the approach to World War I where European states engaged in an arms race culminating in the rapid mobilization of military forces in response to the assassination of Archduke Ferdinand. Military leaders argued in favor of declaring war and launching an offensive, believing they could cripple their opponents, and fearing that if they waited, they in turn would be defeated. We are currently experiencing a similar dilemma in the Middle East. Iran's leadership sees Tehran's development of a nuclear capability as essential for security and stability, but this action is seen as very threatening by the other Gulf States.

The good news is that states are not doomed to competition by the security dilemma, but may choose to overcome this structural tendency for insecurity. This essay is a story of two nuclear programs; one instituted by the Islamic Republic of Iran that exacerbates the security dilemma, and the other by the United Arab Emirates that advocates international cooperation with the aim of defusing the dilemma. Monitoring regimes, through regional or international organizations, help to support cooperative solutions because they make it easier for countries to accept that their competitors are following international agreements. Understanding the security dilemma can also help to mitigate cooperation problems because statesmen will realize how their actions affect their neighbors' perception of security.

Iran's Pursuit of Nuclear Power

Iran's efforts to develop nuclear energy go back to 1957 as part of an internationally recognized effort led by the United States called "Atoms for Peace." The goal of this program was to encourage the peaceful use of nuclear energy while at the same time controlling the proliferation of nuclear weapons materials and technology. In effect, this effort provided the ideological foundation for the creation of the international monitoring regimes, the International Atomic Energy Agency and the Treaty on the Nonproliferation of Nuclear Weapons, aimed at allaying the security fears of the international community.

In March 1957, after two years of negotiations, the U.S. and Iran signed the Agreement for Cooperation Concerning Civil Uses of Atoms. Two years after the agreement was made public, Shah Mohammed Reza Pahlavi ordered the creation of the Tehran Nuclear Research Center (TNRC) as an institute at Tehran University, and negotiated with the United States to supply a five-megawatt reactor. Over the next decade, the United States provided nuclear fuel, equipment, and technical support that Iran used to create an indigenous nuclear program. In 1967, the U.S. supplied the TNRC with a small 5 megawatt research reactor, fueled by highly enriched uranium (HEU). During this period, the cooperation was intended to assist Iran in developing nuclear energy while steering Tehran away from indigenous fuel-cycle research.

Iran's steps to demonstrate that it was not pursuing nuclear weapons capability allowed it to pursue all the elements of nuclear energy production. In 1968, Tehran signed the nuclear Nonproliferation Treaty (NPT) on the day it opened for signature, and also submitted a draft resolution to the U.N. General Assembly in 1974 calling for a nuclear-weapons-free zone in the Middle East. Due to the confidence in the oversight of the program, and Iran's peaceful intentions, the U.S. supported enrichment within the country. In 1975, U.S. National Security Advisor Henry Kissinger released National Security Decision Memorandum 292, which authorized "U.S. material to be fabricated into fuel in Iran for its own reactors and for pass-through to third countries with whom we have Agreements." Additionally, NSDM 292 authorized discussion of a multinational reprocessing plant in Iran. Clearly the U.S. leadership was comfortable with Iranian stewardship of nuclear materials even though several U.S. intelligence reports voiced concern that Iran might be pursuing a nuclear weapons program. A 1974 Special National Intelligence Estimate, Prospects for Further Proliferation of Nuclear Weapons, and a 1975 U.S. Department of State memorandum referred to the "uncertainty over" Iran's "long-term objectives despite its NPT status."

UAE has made it a top priority to assure the international community of the peaceful intentions of its nuclear program

The Islamic Revolution and seizure of U.S. hostages precipitated the end of western support to the Iranian nuclear program. The U.S. not only stopped cooperation with Iran, but also pressured other governments to stop cooperating with Iran's nuclear power development. Both France, which signed a 1973 deal to build two reactors, and Germany, who began building a pair of reactors at Bushehr in 1975, cancelled their projects due to U.S. concerns. Additionally, the U.S. blocked nuclear deals between Iran and Argentina, China, and Russia. According to Mohammad Javad Zarif, the former Iranian ambassador to the United Nations, Washington's active interference with Iran's nuclear energy program left Tehran with little choice but to "refrain from disclosing the details of its programs."

Since the Iranian Revolution, Tehran has continued the development of enrichment capability to fuel its Bushehr reactor and ostensibly for nuclear weapon development. International suspicion of Iranian intentions was first raised in August 2002 when the National Council of Resistance of Iran revealed the existence of undeclared nuclear facilities in Natanz, a heavy water production plant under construction at Arak, and the names of various individuals and front companies involved with the nuclear program. The IAEA conducted numerous inspections of Iranian facilities between September and October

of 2003 and conducted interviews with Iranian officials to determine the scope of the nuclear program. While the IAEA has never found concrete evidence linking Iran's nuclear program to weapons development, their concealment of their enrichment activities has led to concerns about the intent of the program. IAEA inspectors concluded that Iran had failed to meet obligations under its Safeguards Agreement signed in 1974. Failures included withholding construction and design details of new facilities, and not reporting processed and imported uranium.

The discovery of a covert enrichment program has increased the perception that Iran is actually supporting a weapons development program. Although Ambassador Zarif's arguments are plausible that Iran needed to hide its nuclear energy program due to derailment by the U.S., the fact that the program was not under the supervision of the IAEA has caused regional and international rivals to question Iranian motives and call for regional nuclear weaponization if Iran does not open up to international inspection.

UAE and Peaceful Nuclear Power

The UAE's pursuit of nuclear energy has been much shorter, but presumably had the same motivation as Iran—energy. Although UAE is an energy exporter, its energy needs are projected to outstrip local natural gas production. The UAE estimates that peak demand for electricity will double to 40,000 megawatts by 2020. According to Jean-Francois Seznec, a visiting associate professor at Georgetown University, "Abu Dhabi needs nuclear energy because it is short of natural gas, which they have to import to fuel their industry plans. It makes sense to keep their oil for exports, their gas for their petrochemical projects and use nuclear energy for electricity generation."

Recognizing the international pressure against the proliferation of nuclear weapons technology, the UAE government made its peaceful objectives unambiguous. According to a government policy document, "the Government of the UAE desires to make clear its peaceful and unambiguous objectives in respect both of its current evaluation of a peaceful nuclear energy program as well as the potential future deployment of actual nuclear power generation facilities." To gain international acceptance, Abu Dhabi's nuclear strategy states that, "a commitment to complete operational transparency is essential to gain domestic support and assure the international community, potential bilateral partners and international nuclear supervisory bodies of the peaceful intentions of any nuclear program undertaken by the UAE."

These policies are enshrined in a number of mechanisms, including the UAE Federal Nuclear Law signed in October 2009. The UAE Nuclear Law takes into account all obligations and commitments that stem from international instruments and obligations. The UAE views the application of a comprehensive safeguards agreement, bolstered by the IAEA Additional Protocol, as an important component of its model for the adoption of peaceful nuclear energy. The purpose of the Additional Protocol is to enable the IAEA to provide assurance about both declared and possible undeclared nuclear development activities. Under the Protocol, the IAEA is granted expanded rights of access to information and sites. Additionally, the UAE has accepted additional oversight to demonstrate to the non-proliferation community that it is meeting the standards of its nuclear policy. The UAE signed an agreement with the U.S. in 2009 that has become the non-proliferation gold standard. In the U.S.-UAE 123 agreement, the UAE voluntarily renounced pursuing enrichment and reprocessing technologies and capabilities. Finally, the UAE has submitted to independent external inspection in the form of the International Advisory Board (IAB). The IAB is an independent oversight board led by Dr. Hans Blix, the former Director General of the International Atomic Energy Agency (from 1982-1997). The IAB is charged with conducting semi-annual reviews of the UAE's entire nuclear energy program reporting to the UAE government and the IAEA, on areas of nuclear safety, security and non-proliferation, as well as regulation, quality assurance, operations, human resource development and waste management associated with the construction, operation and decommissioning of civil nuclear power plants. The UAE has been active in supporting the international monitoring and control of nuclear material. In August 2008, the UAE pledged U.S. $10 million to support an IAEA-administered international uranium fuel-bank initiative. The IAEA fuel-bank is designed to provide assurances against supply disruptions, while strengthening the nuclear non-proliferation regime. Finally, the UAE is also a member of the International Framework for Nuclear Energy Cooperation (IFNEC) as well as the Global Initiative to Combat Nuclear Terrorism.

Security Spiral Tamed?

The UAE, under the 2009 Federal Nuclear Law and its numerous international agreements, has given transparency a priority in its nuclear program over sovereign rights. Learning the lessons of the Iranian effort, the UAE has made it a top priority to assure the international community of the peaceful intentions of its nuclear program. In contrast, Tehran's campaign of deception has hurt itself more than anyone else. While there is no definitive proof that Iran is trying to assemble a nuclear weapon, its assertion of sovereign rights over all aspects of the nuclear program is actually blocking its ability to provide cheap power for its citizens, while at the same time causing the potential for a military response from regional powers.

Bibliography

Bruno, Greg. "Iran's Nuclear Program," Council on Foreign Relations, 10 March 2010. Accessed April 13, 2014. http://www.cfr.org/iran/irans-nuclear-program/p16811.

"Country Nuclear Power Profiles—Iran, 2013 Edition." International Atomic Energy Agency. Accessed 15 April 2014. http://www-pub.iaea.org/MTCD/Publications/PDF/.

Hurz, John H. Political Realism and Political Idealism. Chicago: University of Chicago Press, 1951.

"Iran Nuclear Profile." Nuclear Threat Initiative, November 2013. Accessed 13 April 2012. http://www.nti.org/country-profiles/iran/nuclear/

Jervis, Robert. "Cooperation Under the Security Dilemma." World Politics 30, (1978): 167-214.

Kerr, Paul K. Iran's Nuclear Program: Status [RL34544]. Washington D.C.: Congressional Research Service, October 17, 2012.

Kibaroglu, Mustafa. "Good for the Shah, Banned for the Mullahs: The West and Iran's Quest for Nuclear Power." The Middle East Journal 60, (2006): 207-232.

Kimball, Daryl. "The U.S. Atomic Energy Act Section 123 At a Glance." Arms Control Association. Updated March 2013. Accessed April 15, 2014. http://www.armscontrol.org/factsheets/AEASection123

Kissinger, Henry. "U.S. – Iran Nuclear Cooperation." National Security Decision Memorandum 292, April 22, 1975. National Security Archive, George Washington University.

UAE Federal Authority for Nuclear Regulation. Policy of the United Arab Emirates on the Evaluation and Potential Development of Peaceful Nuclear Energy, April 2008. Accessed 13 April 2014. http://www.fanr.gov.ae/En/Documents/whitepaper.pdf.

Urban, Mark. "Saudi nuclear weapons 'on order' from Pakistan." BBC News, November 6, 2013. Accessed April 15, 2014. http://www.bbc.com/news/world-middle-east-24823846.

Van Evera, Stephen. "The Cult of the Offensive and the Origins of the First World War." International Security 9, 1984: 58–107.

Governance in the Digital Age

Throughout history, humans have invented things that have changed the way we live our lives. These inventions will gradually impact a larger number of humans as they become an integrated part of life. Things like electricity and nuclear power have changed life beyond what mortals can comprehend. Some will argue that such inventions elevate the human race to a new level, and accordingly new dimensions are added to the way we live, that make us wonder how we lived prior to these inventions.

By:
Ali Abdulla Al Ahmed

The internet is one of these things. It may have started as a new tool of digital communication technology but it took us by surprise realizing the number of people it can reach, how fast it can reach and what implications it can bring or even impose on our lives. It created a new world beyond the traditional definition of society, government and law. The internet has created a situation that neither humans nor government can entirely control.

If we think of the internet as an ocean, then digital content will be the waves. Yes, digital technology is not the first technology invented by humans, yet the uniqueness comes from the possibility that it can be produced and consumed by everybody. So how much digital content is available on the internet? “Today, there is enough information in the world to give every living person 320 times as much of it as historians think was stored in Alexandria’s entire collection - an estimated 1,200 Exabyte worth. If all this information were placed on CDs and they were stacked up, it would form five separate piles that would all reach to the moon”.

Connectivity to the internet frees you from the law of gravity where your physical presence is not a factor anymore. You truly become a citizen of the world connected with more than 2 billion humans on planet earth. The first decade of this century witnessed an explosion in the number of people connected to the internet increased from 350 million to 2 billion. Also, more than 50 percent of the world’s population has access to some combination of cell phones (five billion users).

The Internet will not exclude any level of society. Growing affordability of smart mobile phones will further expand the reach of the internet. The functions of these devices also become greater, especially speed of accessing digital data. In fact, the speed of the processor chips in mobile phones doubled every 18 months. If we compare speed increase of digital world to the real world, then a flight from Abu Dhabi to Washington will be reduced from 12 hours today to 3 hours after 3 years.

There is no doubt today that data collection has become inevitable. People are willingly providing personal data on daily basis to many commercial companies. Some people also provide data to governmental entities. In addition to the data provided by people, there is great amount of data passively collected by same or different entities. A smart phone user will most likely have their GPS enabled while changing locations. Thus, data is provided without a deliberate act by the user sending information about his location. Because people are so attached to their handset devices, data is constantly collected by internet service providers, telecom companies, and social media players as well as governmental entities. Once data is collected it gets stored and then moved to powerful computer servers for processing and analysis.

Sensors are used to be able to collect data passively without permission from mobile data owners. While driving, mobile phone towers identify the user’s location in order to handover mobile signal and ensure continuity. Retailers can follow shoppers through store cameras with the ability to detect gender. Regulating data collection is very challenging for various reasons. Facial recognition technology is already available and can be linked to a shopper’s social media profile. A sales person may walk to a first time shopper and greet him by his or her first and last name.

Using huge storage data capacity has enabled commercial companies to create a personal preference map

for individuals based on the collected data. This map has a value by itself which can be exchanged between companies in different territories. For example, if your data reveals that you are a frequent perfume buyer, then a perfume store in UAE can sell such data to another perfume store in a different country. As a result, personal information would not be anonymous. Even if companies have partial personal information, it is becoming increasingly easy to put small amounts of data together until a company builds an individual preference map. Most people are uncomfortable with the fact that data is being collected, stored and analyzed without their consent. It is understandable why people feel that their privacy has been violated. Even if the personal data is not being abused, people feel helpless to stop collection of their personal data. Moreover, people are unable to know who collected the data and whether such data is used in a proper way.

In order to empower individuals, policymakers need to be more focused on how data is used rather than data collection only. People don't consider every bit of information related to them as important and private. Sharing selective information with the outside world may bring a great deal of convenience to our lives. What matters most is how personal data has been used, by whom and for what purpose. The future of the internet will influence and shape our future. New dimensions will be added to our lives and we need to be ready for it.

Online Identity might be the most challenging issue. "In the next decade, the world's virtual population will outnumber the population of Earth".

In future, our online activities, information and pictures we post on the internet will become an integral part of our identity. In fact, we won't be able to separate the two. A person's real identity is incomplete without his virtual identity. To succeed and be able to influence others or even get promoted at work will depend on the strength of both sides of your identity, real and virtual. You may think of t it as a coin having two sides. There is no value for the coin, if one is missing.

It is common among internet users to create multi-faceted identity. This is the beauty of the cyber world; you can be whoever you want to be. Multi-faceted identity can be useful to segregate work and play. But make no mistake, whatever you post and communicate will be there forever. Therefore, there will be substantial increase in companies that cater for privacy and reputation concerns. Multi-faceted identity could also be a way to hide or cover up certain behaviors. WikiLeaks co-founder, Julian Assange, said: "When things become more open, then they start to become more complex, because people start hiding what they are doing – their bad behavior -- through complexity".

Privacy and security will constantly look for the breakeven point, a point of no loss and no gain. Governments will continue trying to balance the two. However, the amount of data available in the cyber world is more than what companies and governments can digest. The so-called Big Data is mainly Raw Data which needs to be analyzed and converted to useful information. Only then can governments and companies use such data. Governments and private companies will be racing to acquire latest technologies to better predict what their citizens' or customers' next action will be. The technology is called "Predictive Analytics", a combination of intersection of statistics, data-mining and computer modeling. Companies can target customers with new products while governments will know trends in public opinion and can identify citizens with criminal behavior.

The future of the internet will influence and shape our future

In future, information and pictures we post on the internet will become an integral part of our identity

Connected citizens will demand more protection from their governments

Connected citizens will demand more protection from their governments. "State and citizens both gain from connectivity, but not in the same manner. People empowerment comes from what they access, while state can derive power from their position as gatekeeper". Some experts warn that an authoritarian government may end up breaking away from the World Wide Web (www) and create more of separate locked-in networks. The World Wide Web will then be fragmented and we might witness Chinese Internet or Russian Internet.

Technology has the power to change the way we live. Communication and engagement in the digital age will also redefine the relation between state and citizens. There will be a period of adjustment as more citizens are moving online. While some governments will accelerate reforms and developments, others will find new methods to suppress and control.

However, both types of governments will be required to build a new police force based on digital state capabilities. Software and data mining are examples of the new digital tools that will enable governments to gather real-time monitoring data of citizens. Companies are building more software for data mining with greater capabilities to analyze a citizen's behavior and sentiments. Governments will be the targeted customers for selling such software. Surveillance cameras will also be more sophisticated and might be traded like arms and only governments have the financial capability to acquire such technology with advanced features.

Governments will also go beyond collecting data from social networks like Twitter and Facebook. Online citizens can create multi-identities and huge volume of data which have no value to governments. Therefore, biometric data will most likely be used by governments to identify citizens based on unique individual physical and biological elements. Voice recognition, fingerprints and pictures will all be included in this formula to define an individual's DNA. These tools will increasingly be used by the government to achieve a top priority objective which is linking citizens' virtual identity to actual identity. Once governments achieve a high level of accuracy to link both virtual and real identities, the more they will know about citizens. Such information can either be used to fulfill citizens' demand or to suppress their freedom.

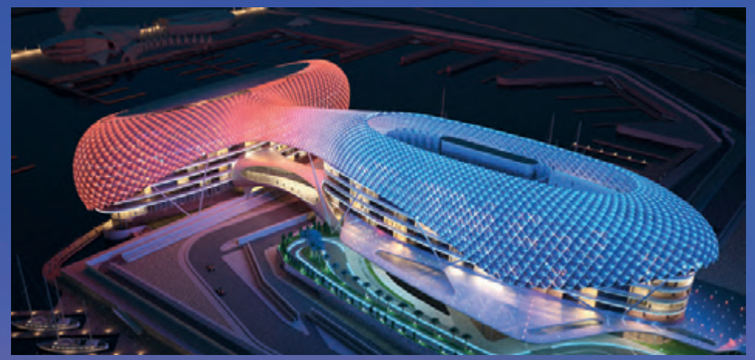
Another factor related to technology is mobility. According to Henry Kissinger, former American secretary of state, "The empowered digital citizens know the technique of getting people to the square, but they don't know what to do with them when they are in the square". Digital opposition groups are mostly young and inexperienced in the political field. They can mobilize citizens and make them stand up to reject dictatorship but they fail short to provide alternatives. Subsequently, citizens who got drawn to public squares get marginalized and even disappointed due to lack of vision for what will come next.

Technology will keep evolving to change our lives. No government has the power to slow it down. More people will be connected and more ideas will be shared. Leaders will be pressured to address what truly matters to citizens. The availability of information regarding peoples' hopes and pains will help leaders to set up plans bridging present to future.

Who Are We? The Importance of Nation Branding in the Information Age

Media is an important instrument of the information age because it plays a highly influential role in changing people's perceptions. Joseph Nye and William Owens have argued, "Just as nuclear dominance was the key to coalition leadership in the old era, information dominance will be the key in the information age."
Media goes beyond film and TV programs; it is about shaping narratives, ideologies and loyalties. It is an "[a]rena where imagery becomes a supplement or substitute of force." New media and digital technologies have made the production and distribution of news and culture easier and cheaper, which means that information on these media can be spread and shared extremely fast.

By: Mansoor Ibrahim Al Mansoori



Today, there are a substantial number of people who only watch or read stories about how rich Arab states have little freedom and low regard for human rights. In addition, many people are not even familiar with the UAE as a country; they have only heard of Dubai, which is one of the UAE's seven Emirates. This paper argues that the UAE is not using media effectively to leverage its international position and enhance its image. The country makes strong strategic investments, but to get the benefits it deserves from them it needs to develop and implement a well-studied communication strategy with defined ownership in order to build a strong nation brand. According to Simon Anholt, the only remaining superpower is public opinion. He introduced the term "nation brand," which relies on brand strength, image and reputation. Anholt explains that the fate of nations does not only depend on their relationships with the governments of other nations; it depends more than ever before on their relationships with international publics.

Lack of Synergy in UAE Branding

The United Arab Emirates has set an ambitious vision for 2021: "We want to be among the best countries in the world by 2021," with a "competitive knowledge based economy and strong global standing." Given its record of achievements, the UAE has what it takes to become a top country. For example, the UAE won the bid to host Expo 2020 in Dubai, and it won the right to host the International

Renewable Energy Agency (IRENA) in Abu Dhabi, making it the first Middle-Eastern country to host an international body.

TheUAE's information strengths and capabilities are important to its international media strategy. According to the 2014 Arab Youth Survey, a growing number of young Arabs are turning to online and social media news, in the belief that they are more trustworthy than government-controlled sources. As international broadcasters continue to set up regional headquarters in the UAE, this asymmetry in credibility will become even more important.

The UAE is not leveraging these opportunities and strengths to build its nation brand. The UAE's media initiatives have not combined the strengths and experiences in each Emirate to develop a strong media power for the country as a whole. Emirates also compete with each other to become the most prominent media hub in the region, hampering strategic effort for the nation as a whole. When Hollywood's popular "Fast and Furious" franchise considered Abu Dhabi and Dubai as possible shooting destinations, the two Emirates competed against each other. The key is to create a more holistic, richer enterprise that places all Emirates' merits together and sends up stronger unified media messages to represent the country as a whole.

The combination of low credibility and internal competition has weakened the government's ability to communicate its messages to wider international audiences. Figure 1, which is excerpted from the 2013 IPSOS Report, compares TV channels in the UAE by Share of Access (SOA), Reach and Target Rating Point (TRP). International channels (MBC, Aljazeera) have a higher reach than local channels (Abu Dhabi Media and Dubai Media Incorporation " DMI "). The UAE needs to restructure its media internally and develop a holistic international media strategy.

The Need for Attractive Stories

If the UAE does not tell its story, then someone else will do it using key messages that the UAE does not have control over. Therefore, the UAE should not stay idle. Recently, the Muslim Brotherhood broadcasted messages that insinuated that while Turkey was providing aid to Syrian refugees, the UAE was busy celebrating the New Year, when in reality the UAE has been one of the biggest aid providers to the Syrians.

Even without a collective nation branding effort, the UAE is already in a top position in the Arab world. Arab youth see the UAE as a role model that they would like their countries to emulate, ahead of the US, France, Turkey and China. This is an opportunity to facilitate nation branding efforts. The UAE needs to start working on generating positive stories to be placed in movies, stories and games. The UAE has all the ingredients to be a leading country in economic prosperity, peace, and innovation.

Improving the UAE's International Image, Attractiveness and Likeability

The UAE has an array of assets to positively influence public opinion. The UAE has invested internationally in many areas, most prominently in providing humanitarian aid, supporting education and health, and developing infrastructure around the world.

Current Situation and Challenges

According to the Minister of International Cooperation and Development (MICAD), poor public relations efforts have hampered the effectiveness of the UAE's international initiatives. The initiatives aim to raise the UAE's international profile but the results have not reached their potential. The UAE has begun to overcome this by establishing MICAD in March 2013, with the mission to "support international development through UAE foreign-aid policy; development programs which maximize the impact of the country's foreign assistance; and enhanced cooperation with national, regional, and international actors." MICAD is working on a foreign aid policy to pinpoint the countries of most importance for investment and aid; this policy will include a communication strategy that aims to highlight the UAE's initiatives more effectively.

Humanitarian Aid Initiatives

Despite these failings, the UAE was the world's largest donor country for official development assistance (ODA) in 2013, with a value of $5.2bn, leaping from nineteenth place in 2012. The late Sheikh Zayed, founder of the nation, repeatedly stated his vision to assist less fortunate countries. These humanitarian efforts can create strong positive messages that show the UAE's generosity and sense of responsibility to the world.

Education and Health

With regards to education, there have been multiple investments and donations made to institutions to assist in academic entities, whether through direct assistance to educational programs or developing entirely new programs. In the United Kingdom, Dubai has catered the Al-Maktoum College of Higher Education, and Sharjah has contributed to the University of Exeter's Gulf Studies School. In the People's Republic of China, the founder of the UAE contributed towards building a center for Arabic and Islamic studies which was renovated in 2012 after donations from Abu Dhabi. Moreover, the Dubai Cares charity organization has contributed to building many schools in poor nations. However, most international audiences have never heard of these efforts.

The UAE also invests in the medical field, such as the John Hopkins Hospital Sheikh Zayed Cardiovascular and Critical Care Tower. In addition, donations have gone to the MD Anderson Cancer Centre in Houston, Texas, for its Ahmed bin Zayed Cancer Centre and Sheikh Khalifa bin Zayed Al Nahyan Institute for Cancer Therapy. The size of these contributions was an opportunity to position the UAE as an international player in improving health, but the media presence was quite weak and the UAE's efforts were relatively unknown.

Infrastructure

The UAE has also supported the development of infrastructure around the world. These projects usually only get coverage from local media, however. The Masdar company has provided assistance to states like Morocco, the Maldives, Afghanistan, and Mauritania to benefit from solar technology. The Masdar initiative, although enjoying a stronger media presence, is still not represented as part of a grander UAE vision to assist others.

Qatar's Public Diplomacy

Qatar is a small Arab state and one of the leading exporters of liquefied natural gas. Qatar is known as a mediator in international conflicts and as a provider of humanitarian aid and educational support. Qatar's public diplomacy depends on three main pillars: humanitarian aid, education and Aljazeera. Aljazeera is a government-sponsored news outlet that many see as a political tool to disseminate messages and government propaganda. Hans Taush has defined public diplomacy as "a government process of communicating with foreign publics in an attempt to bring about understanding for its nation's idea and ideals, its institutions and culture as well as national goals and policies." The key element in Qatar's public diplo-

macy is Aljazeera channel, which was launched by the Qatari government in 1996 but markets itself as an independent channel, aiming to showcase all sides of a conflict. It was the first 24-hour news channel in the Arab World, and it has become a regional competitor to CNN and other western news agencies. Moreover, Aljazeera is often referred to in international news because of its proximity to the region. In 2006, Aljazeera launched Aljazeera English, with the purpose of reaching a global audience.

Qatar has used Aljazeera as a successful public diplomacy tool, contributing to Qatar's international status and influence. The channel is seen as a credible source of Middle East information to international audiences, and no other regional channel is as strong a competitor. However, Aljazeera is also a good example of how media can have a devastating impact on a country's reputation if not managed well and with good faith.

Strategic Recommendations

The UAE supports world peace and contributes to humanitarian aid, but it needs to build a strong media strategy to serve its international political agenda. According to the International Institute of Management Development's World Competiveness Index for 2013, the UAE is the eighth-most competitive nation in the world, ranking higher than Germany, Denmark, and Luxembourg. However, the UAE falls well behind these countries in its global reputation (figure 3). Therefore, the UAE has a communication opportunity to sell its story.

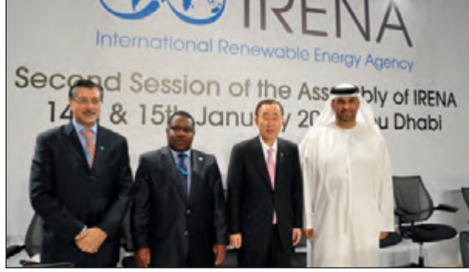
How can the UAE sell its story?
Here are ten ideas for using the media sphere to develop a strong nation brand:

1. Establish a dedicated media authority, 2. Develop key messages, 3.Conduct perception surveys, 4. Establish a public diplomacy office in the Ministry of Foreign Affairs, 5. Establish an independent news platform, 6. Develop a strategic communication plan, 7. Establish an Office for Nation Branding, 8. Broadcast the flag, 9. Tell the Sheikh Zayed story, 10. Host international events.

Even without a collective nation branding effort, the UAE is already in a top position in the Arab world

The late Sheikh Zayed, founder of the nation, repeatedly stated his vision to assist less fortunate countries

In the United Kingdom, Dubai has catered the Al-Maktoum College of Higher Education, and Sharjah has contributed to the University of Exeter's Gulf Studies School



Conclusion

There is social power in media. While there are no doubt some negative perceptions of the UAE, effectively using media can change this. While the UAE's media strategy is currently disjointed and lacks synergy, the UAE has invested in strong infrastructure, has access to strong media outlets in its free zones, and has delivered on world class projects like Formula 1 in Abu Dhabi, IRENA, Masdar, Burj Khalifa, the Expo 2020, FIFA Youth World Cup. However, the country does not have the media planning it needs to leverage these initiatives to gain international recognition.

To be more effective, the UAE needs to implement a unified media strategy that promotes the UAE as one nation, promotes successful stories and starts measuring effects through global public polling in specified markets. Moreover, the UAE should emphasize its social cohesion; multiple nationalities live here, representing the country's tolerance. This message is not well understood in the world. The UAE has taken the right step in developing a National Media Council, although there needs to be more attention on the role of the council, on establishing a unified media strategy and on planning to make it a means of gaining soft power.

Middle East Implications of American Pivoting or Re-Balancing into the Asia-Pacific

By: Robert A. Sharp

A document signed personally by President Obama on January 3, 2014, titled "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense" articulated a need for change in American strategy. America found itself at a strategic inflection point, at a collision between national ends and fiscal means, driving a need to change ways. Having been at war in Iraq and Afghanistan for a period three times longer than America's active commitment to World War II, a re-think was needed. The sustained effort by the military had expended resources, in both materiel and morale, at a higher rate than was anticipated pre-9/11 and the additional supplemental funding provided by Congress had to be controlled as a result of national debt increases.

Not only was America draining money to support a fight in two countries with diminishing domestic and international support, but equipment and people were also being damaged at a higher rate than anticipated. This drove up the cost still further for new technologically advanced equipment acquisition and both long-term and more expensive medical as well as physiological care for fallen warriors. Getting the Defense Sector back to the pre-9/11 fiscal spending norms required drastic budgetary cuts rather than just fiscal cosmetic surgery. Something had to change.

Americans saw progress in their campaign to defeat Al Qaeda; they had implemented a workable – viewed as good enough by some – drawdown in Iraq and were setting conditions for an enduring relationship with Afghanistan. Such a strategic pause – maybe accidental – offered America, time to review its National Security interests. Although these interests remain unchanged at their core as originally articulated in the Declaration of Independence of July 4, 1776, as Life, Liberty and the Pursuit of Happiness, the American Democratic Administration of 2012, then in its second term in office, appears to have unusually switched gears, maybe seeking the Administration's enduring legacy to shift focus from the Atlantic into the Asia-Pacific (or better named) the Indian Ocean region. Referred to as a pivot and/or rebalancing, the strategic change is worthy of further study not only to understand what America is doing and why, but also to evaluate the necessity for national strategic adaptation.

In the common view, a world map has either the Greenwich Meridian, and thus London, England in the middle, or America. Viewed this way the Pacific and Atlantic seem logically of more importance than the Indian Ocean and its region. This area is the third largest ocean after the Pacific and Atlantic. It represents 20% of all water on earth with about 67,000 kilometers of coastline. It is 5.5 times larger than the United States and stretches across 7 time zones.

Some argue that the strategic change and thus the essence of strategic thought for the "Priorities for 21st Century Defense" paper is vested in Robert D. Kaplan's book Monsoon: The Indian Ocean and the Future of American Power published in 2010. It is a book that should be essential reading for all strategists, defense scholars and even geography students. It vividly describes a region across which monsoon winds and currents historically enabled trade flows of spices, slaves and handicrafts linking Indian Ocean ports.

Four major choke points sit along its commercial sea lanes. These are: the Bab el Mandeb between Djibouti and

The resources to feed the future will be drawn across the Indian Ocean region from the Middle East and also Africa

America has been actively engaged in the Middle East region since the end of World War II and nothing in any likely future suggests that that will change

Yemen, access to the Suez Canal via the Red Sea between Saudi Arabia and Egypt, the Strait of Hormuz between Oman and Iran, and the Strait of Malacca between Malaysia and Indonesia. Kaplan states that today and in the future (as Asia rises) the money is in resources because 40% of seaborne crude oil passes through the Straits of Hormuz in the West and 50% of world merchant fleet capacity is hosted at the Strait of Malacca in the East. The Indian Ocean, he states, is the globe's busiest and most important trade highway, and will remain so as rising Indian and China draw resources to feed their ever growing economies and populations. Kaplan concludes that the Indian Ocean region will become the nexus of world power interest in the coming years as nations compete for influence. Eighty-five percent of China's in-bound oil will pass across the Indian Ocean region.

The necessity for change and thus Obama's paper is best explained by viewing a world map with the Indian Ocean region at its center. The increasing energy needs of India and China will accelerate the flow of goods on both land and sea. It will mean multi-billion dollar investments into resource-providing countries, including countries of the Middle East. Kaplan states that world energy consumption is predicted to rise by 50% by 2030. Because ten of the fifteen fastest growing economies are in Asia, within that same timeframe Asia's regional economy may outstrip that of the United States and Europe. Rising Asia is not likely to invest its wealth in unstable countries.

The resources to feed the future will be drawn across the Indian Ocean region from the Middle East and also Africa. China already gets one third and India one fifth of its oil from Africa and both are investing there heavily. Kaplan asserts the region is like the "New York taxi cab system – no central dispatcher – no UN or NATO – maritime security is driven by market forces; coalitions appear where shipping lanes need to be protected just as more taxis show up in the theatre district before and after performances."

Kaplan describes how China seeks to expand its influence, vertically reaching southward to the warmer waters of the Indian Ocean, the so-called String of Pearls strategy. They have a large port and listening post at Gwadar, Pakistan on the Arabian Sea to monitor the Straits of Hormuz, and a coaling station for their ships in southern Sri Lanka, a container port facility on the Bay of Bengal and commercial and naval bases being upgraded in Myanmar; unlike the hardened military bases of the Cold War, these will be dual-use, civil-military facilities. China's defense budget has been increasing for two decades, even though its own economy will only expand by 8% to 10% annually in the coming years.

Kaplan believes that India seeks to expand its influence horizontally reaching eastwards and westward. Although the ratification of the deal is pending, there is a multi-million dollar deal for Iran to provide India with 7.5 million tons of liquefied natural gas annually for 20 years in the works. India is expanding its military and economic ties to the East with Myanmar. By 2025, India could have the world's third largest economy, after the US and China; 20% of India's defense budget is for the navy, half on new ships.

When the United States first announced the new strategy it caught most of the Middle East region by surprise. There was much confusion about what it all meant. Initially the Obama Administration used the word "pivot" which suggested to many that America was turning its back on other crucial parts of the world. However that is not the case; the best way to describe what America intends to do is to use a basketball analogy wherein the player keeps one foot static as the other foot is pivoted forward. With this view America will keep its foot firmly invested in the Middle East as it moves the other foot from the Atlantic to the Pacific to engage the Indian Ocean region.

Middle Eastern countries should not consider the strategy suggests American disengagement. Far from it; America has been actively engaged in the Middle East region since the end of World War II and nothing in any likely future suggests that that will change. The Middle East will benefit enormously from rising India and China; the more stable the region, the more profit for all can be made. Helping unstable countries become stable is a logical way that Middle Eastern states can support friends and ultimately benefit the whole region.

American officials are now using the word "rebalancing" in preference to "pivot." Words matter, but the intent for America to shift emphasis from the Atlantic to the Pacific remains unchanged. Notwithstanding the recent spoiler of Russia's annexation of Ukraine, recent American meetings with both Japan and Australia follow the same theme of the shift. A rising tide lifts all boats and Indian and Chinese investment for resources in the Middle East is welcome revenue that can benefit all.

تخريج دورة الدفاع الوطني الأولى 2014/2013
الخميس 2014/6/5