



מרכז חיפה למחקרי מדיניות ואסטרטגיה ימית Haifa Research Center for Maritime Policy & Strategy

MARITIME STRATEGIC EVALUATION FOR ISRAEL 2016

Chief editor: **Prof. Shaul Chorev** Edited and produced by: **Ehud Gonen**



Conclusions and Policy Recommendations

Shaul Chorev

The Eastern Mediterranean and the surrounding countries continued to be a region of instability in 2016. The security situation in the region remained problematic due to the civil war, the lack of governance and the lack of functioning in several countries, to the point of becoming failed states. Contributing to this situation is the political function that Islam has taken on itself, as well as the unequal distribution of income, the lack of democratic mechanisms, the population flows in the areas of conflict and other factors. As a result of the prolonged fighting, there is increased presence of weaponry that is used in the regional conflicts. With regard to the superpowers, the decline in US involvement in the region continues, which is weakening its position. In addition, the deep structural crisis in the EU is affecting its global status, including in the Eastern Mediterranean. Vladimir Putin, the President of Russia, is correctly reading the geopolitical map in the Middle East and his opportunistic policies are deepening Russia's involvement in the region and filling the vacuum left by the US.

Some of the strategic changes occurring in the region involve risks for Israel, while other are creating opportunities that were not previously open to it. The developing relations with Egypt and Saudi Arabia constitute one of those opportunities, even if they both condition the improvement of relations on finding a solution to the Palestinian problem.¹ Nonetheless, it is worth emphasizing that Israel's military position is favorable and there does not appear to be any significant military threat that in the near future can endanger its existence, including ones that originate from the maritime domain.

The nuclear agreement signed between the West and Iran in July 2015, stopped/ delayed Iran's progress towards achieving nuclear weapons and is creating a certain amount of opportunity in the region. It should be remembered that at the end of the day, Iran remains a country on the brink of nuclear capability (known as nuclear hedging) and that it is continuing to test ballistic missiles that can be used in the future as a means of delivering nuclear warheads. This requires that the international community continue to monitor the situation, in addition to

¹ A speech by Egyptian President Abbed Fattah el-Sisi at Asyut: 'If we could solve the matter of our Palestinian brothers, peace would be warmer...I have asked the Israeli leaders to allow the broadcast of this speech once or twice since it is a real opportunity." Walla News, May 17, 2016, <u>http://news.walla.co.il/item/2962078</u>.

the oversight by observers of the International Atomic Energy Agency over Iran's facilities.

ISIS has during the year managed to occupy territory in eastern Syria and in Iraq, although towards the end of the year, as a result of attacks by Russia, Turkey and the US, it lost its hold over some of these areas. Nonetheless the organization continues to occupy a number of strongholds. ISIS has successfully carried out a number of terrorist attacks in Europe and the US which have undermined the feeling of security among their populations. The refugee crisis is worsening the situation in the region and is complicating immigration policy in Europe. One of the most urgent issues that Donald Trump, the new American president, will have to deal with is the situation in the Middle East. Nonetheless, in view of the fact that the US election campaign focused primarily on domestic issues, it is as yet unclear what the Trump Administration's position will be.

In the maritime domain, this report again stresses the fact that Israel can be viewed as an island, since it is overwhelmingly dependent on maritime trade. On the other hand, there was no significant change in maritime trade with its Arab neighbors in 2016. Nonetheless, Israel has replaced Syria in recent years as the overland bridge between Europe on the one hand and Jordan and Iraq on the other. Cargo arriving at the port of Haifa from Europe is transported from there to the Nahar Hayarden crossing in trucks, including European trucks. In 2015, there was an increase of 25 percent in the number of trucks (to more than 13,000) and this number is expected to grow as a result of the entry of international transport companies, which will add about 150 trucks per month to the traffic between Europe and Jordan by way of Israel, and the inauguration of the Haifa-Beit Shean railway line.²

The dependency of Israel on the sea has increased in recent years, as a result of the discovery of offshore natural gas, the development of desalinization plants that provide most of Israel's drinking water, the expansion of maritime trade with the Far East and the recognition of the importance of the sea as part of Israel's strategic depth. In addition to the contribution of the sea as a component in Israel's security and the welfare of its citizens, there is an increasing need to protect the ecological system of the Mediterranean in order to ensure that these activities do not damage the nature and heritage of the sea and its coasts.

² Yisrael Katz, the Minister of Transportation: "We will transform Israel into a land bridge between the Mediterranean on the one hand and Jordan and other Middle Eastern countries on the other – a process that is already happening." Jerusalem Post Conference in New York, May 23, 2016.

Based on the evaluation that was carried out, attached are ten recommendations, all of which are on the level of government policy in the maritime domain. The order of the recommendations is not necessarily an indication of their importance or their level of urgency. Many of them are based on the joint report of Haifa University and the Hudson Institute that was published in September 2016.

First recommendation – Formulation of a maritime strategy for Israel

A formal process should be initiated that will begin with the identification of Israel's interests in this domain and the formulation of policy on all aspects of the maritime domain. Following that, it will be possible to formulate a maritime strategy that will include defined targets and the ways to achieve them.

At the same time, the awareness of the maritime domain should be increased among the citizens of Israel. This should be done by means of a Maritime Domain Awareness Plan that will provide a better understanding of the issues that relate to the maritime domain and which can affect security, safety, economics and the environment.³ In this context, the definition of the maritime domain includes all of the ocean territory and the surrounding regions, including the activities of people, infrastructure, cargo and the means of transporting them.

The creation of such a plan must take into account the unique situation of Israel in the Mediterranean and its special interests in the region. Many of the components of a Maritime Domain Awareness Plan have been described already in the work of the Technion group.

The second recommendation – Protecting essential shipping to and from Israel

The factors should be identified that are essential to protecting the sea lines of communication, both in times of peace and in times of war, in the Eastern Mediterranean and in the southern Red Sea, in view of the maritime terrorist threats in these regions.

³ International Maritime Organization (IMO), AMENDMENTS TO THE INTERNATIONAL AERONAUTICAL AND MARITIME SEARCH AND RESCUE (IAMSAR) MANUAL, P. 4, Ref. T2– OSS/1.4, 4 ALBERT EMBANKMENT LONDON SE1 7SR, 24 May, 2010.

The need for designated ships to be used for transport in times of emergency (the "golden share holding within ZIM") should be assessed, as well as the method for putting them into operation if the need arises.

A policy should be formulated for operating the ports in times of emergency, under the threat of rockets and precise missiles, and consideration should be given to the capabilities necessary to accomplish this.

An analysis should be carried out in the cyber domain and a plan for the protection of the Israeli commercial fleet, the ports and their infrastructures against cyber attack should be formulated.

Third Recommendation – Integration of the Mediterranean as part of Israel's strategic depth

The strategy according to which the Eastern Mediterranean provides Israeli with additional strategic depth should be developed further. An evaluation should made of the capabilities and infrastructures that are needed in order to solidify this strategy.

A feasibility study is needed for the creation of artificial islands, pursuant to Government Decision 4776 from June 17, 2012, and a long-term plan is needed for the transfer of hazardous infrastructures (facilities and testing grounds) to artificial islands that will be built within Israel's coastal waters. In this context, it is possible to implement the plan of the Water Authority, which has recommended the establishment of desalinization plants out at sea. This will make is possible to desalinize without taking up valuable land along the coast.⁴

Fourth recommendation – Development and utilization of offshore energy resources and protection of the environment

An analysis is needed of the strategic implications of the offshore resources recently discovered (natural gas and later on also oil) and also the resources that exist with a high probability and which will be discovered in the future within Israel's economic waters.

It should be decided how to optimally develop the energy from offshore natural gas, including how to use the profits.

⁴ Establishment of Desalinization Plants in the Open Sea, Water – portal of the Water Authority.

The decision should be based on the experience of other countries with regard to best practices in order to achieve the targets that have been set.

The full array of geopolitical and geostrategic considerations (opportunities and risks) should be looked at in the context of countries to which Israel is interested in exporting gas, with the goal of strengthening its diplomatic and economic status.

Policy should be decided on that will incentivize foreign investors to invest in the development of the gas fields and will reduce the economic risk that Israel is exposed to. It should be ensured that the principles of this policy will be transparent to the public.

The regulatory system should be directed toward the protection of the ecological environment, including protection of the heritage sites and archaeological sites.

Fifth recommendation – Development of professional human infrastructure in order to deal with Israel's new maritime challenges

It should be decided what public resources are required for investment in the social systems in Israel (education and higher education) in order to build an economic, social and human/professional infrastructure that can deal with the challenges and opportunities in the maritime domain. This includes energy production and development, protection of the ecological system, etc. and the infrastructure needed to deal with these issues. It also involves the creation of a maritime forum for Israel that will serve as a platform for discourse among parties with an interest in the maritime domain.

Sixth recommendation – Formulation of Israel's foreign policy in the Eastern Mediterranean and the Red Sea

Israel's interests in the Eastern Mediterranean should be identified and the best policy for protecting those interests —and those of its closest ally, the US— should be adopted. To this end, common allies should be identified and the opportunities and risks of the growing Russian presence in the Eastern Mediterranean should be examined.

The domains in which it will be possible to continue collaborating with Russia should be identified, as well as cases, if there are any, in which the US also has joint interests.

It is worthwhile, following the reconciliation agreement with Turkey, to examine the long-term geopolitical interests of Israel and Turkey, including in the export of gas.

The interests of China that motivate their activity in the Mediterranean and the Red Sea, as defined in China's strategic document "The Maritime Silk Route", should be assessed, in view of its increased maritime presence in the region. We must ask ourselves how Israel should respond to this presence, including the Chinese investments in the building of essential infrastructure in the ports of Haifa and Ashdod and China's involvement in the operation of these infrastructures.

Seventh recommendation – Dealing with terror organizations in the maritime domain

The security threats from non-state organizations in the maritime domain should be identified, as well as the capabilities these organizations are likely to target.

We should examine the likely implications of the actions of such organizations that originate from the coastal waters of Syria, Lebanon or Libya or from the coastal waters of the southern Red Sea.

We should understand the implications of the possible connection between international terror and the proliferation of weapons of mass destruction and advanced weaponry.

The implications of the growing involvement of Iran in Syria in the maritime domain should be evaluated.

The effect of recent events in Lebanon should be assessed, as well as the implications of the presence of advanced Iranian naval weaponry in Lebanon.

The relations with Egypt and the implications of the arming of the Egyptian navy with cruise missiles and advanced weaponry (and in particular a fleet of submarines) should be evaluated.

Eighth recommendation – The promotion and enhancement of maritime law

The conditions under which Israel is prepared to sign the United Nations Convention on the Law of the Sea should be examined.

Professional manpower that is capable of representing Israel in maritime international organizations should be nurtured.

Training programs should be developed on matters of international law in all aspects of the Eastern Mediterranean, including the freedom of navigation, littoral rights, exclusive economic zones and the Law of the Sea.

The most appropriate model should be adopted for the resolution of the maritime boundary dispute between Israel and its northern and southern neighbors (whether or not by means of the Law of the Sea).

A mechanism that is designed for maritime activity opposite the Russian navy should be developed.

A mechanism for deconfliction should be established.

Existing practices and methods in the West with regard to the development of offshore energy infrastructure should be adopted. These should allow a democratic country to find the correct balance in the exploitation of its energy resources, the correct use of the profits in order to strengthen its economy and education system (emphasis on development that is related to the maritime domain of energy production and development) and protection of the ecological system.

A program should be created that will train military personnel and government officials who are involved in maritime strategy and international maritime law, which will be based on teaching methods such as simulations and models, including the use of roundtable exercises.

Ninth recommendation – Exploitation of the opportunities created with the discovery of offshore natural gas in order to strengthen Israel's international and economic status

Geopolitical opportunities provided by the discovery of natural gas should be identified in order to develop regional cooperation with neighboring countries (Turkey, Egypt and Jordan) and with gateway countries to Europe (Cyprus and Greece).

The possibility should be investigated of using the natural gas resources in the coastal waters of Gaza in order to promote relations with the Palestinians, including the development of a civilian port in Gaza.

It would be worthwhile to formulate an environmental policy in order to protect the ecological system. This should be accomplished by means of a plan that will identify the environmental elements that are to be taken into account in the context of offshore natural gas, including readiness for disasters, the measures that should be adopted in order to prevent/deal with such events and the bodies that should be active in this sphere.

Tenth recommendation – Inclusion of the Research Center for Maritime Policy and Strategy within national research

The activity in strategic and diplomatic aspects of the maritime domain requires special multidisciplinary knowledge that is currently not to be found in Israel.

The Haifa Research Center for Maritime Policy and Strategy is, among other things, a center for multidisciplinary and independent knowledge in the area of maritime strategy, in the broadest meaning of the term, with emphasis on Israel and its maritime environment in the Eastern Mediterranean and the Red Sea.

Over the years, the Center has developed extensive relations which can contribute significantly to the strategic international maritime discourse that Israel is a part of.

This situation creates the opportunity for the State of Israel to exploit the professional and scientific knowledge that exists at the Center and to invest the necessary resources in order to enable researchers in this field to optimally carry out future applied research in relevant fields and in this way to continue contributing and strengthening Israel's maritime status.

The Authors (according to the order of the chapters)

Shaul Chorev (Chapter 1: Global Maritime Developments and the chapter on Conclusions and Policy Recommendations). Professor Shaul Chorev, Rear Admiral (Ret.) served as the commander of the submarine fleet, commander of the missile boat fleet and the assistant commander of the Navy. During the period 2007–15, he was the head of the Atomic Energy Commission and was also responsible for the Special Weapons Branch in the Ministry of Defense. He has a doctorate from Bar Ilan University and is currently the Director of the Haifa Research Center for Maritime Strategy at Haifa University.

Benny Ben Ari (Chapter 2: The Red Sea and the Persian Gulf, and influences from the Indian Ocean). Dr. Benny Ben Ari (Lieutenant Colonel res.) served for about 14 years in command positions (including command of a missile ship), as well as headquarters and training positions. In 1978, he joined the Elbit company and for 38 years has served in management and marketing positions in the area of naval systems and marketing to the Far East. He today serves as the assistant head of the Chaikin Chair and as a research fellow of the Haifa Research Center for Maritime Strategy at Haifa University. He has a PhD from the University of South Australia in military industries and defense marketing.

Aviad Rubin (Chapter 3: Israel and the Eastern Mediterranean). Dr. Aviad Rubin is a senior lecturer in the Center for Public Management and Policy in the School for Political Science at Haifa University and the cofounder (together with Dr. Ehud Eran) of the Haifa Research Center for Maritime Strategy at Haifa University. In addition, Dr. Rubin is a graduate of the seaman's course and was the founding director of the academic program for sea cadets which was established within the School for Political Science. Dr. Rubin holds first degrees in Law and Political Science from Tel Aviv University and a masters degree and doctorate in Political Science from McGill University in Canada. Prior to his joining Haifa University, Dr. Rubin served as a Rabin Fellow at the Hebrew University and as an Azrieli post doctorate at Tel Aviv University. Dr. Rubin specializes in the connection between collective identities and political regimes, particularly in the context of the Middle East and the Israeli-Arab conflict. In the current year, he is on sabbatical at the Center for Middle East Studies at Chicago University.

Ehud Eran (Chapter 3: Israel and the Eastern Mediterranean). Dr. Ehud Eran is a lecturer in International Relations at the School for Political Science of Haifa University and is a cofounder (together with Dr. Aviad Rubin) of the Haifa Research Center for Maritime Strategy at Haifa University. Eran has degrees in Law and Political Science from Tel Aviv University, Cambridge and Brandeis and serves as a research fellow at the School for Law and the Kennedy School of Government, both at Harvard University, and as a guest lecturer at the Department of Political Science at MIT. Before entering academia, Eran served as, among other things, Assistant Political Advisor to the Prime Minister and worked in the office of the Attorney General. His book "Essence of Longing: The Story of Erez Gerstein and the War in Lebanon" (Hebrew) was on the bestseller lists of the Israeli newspapre Yediot Aharonot.

Oded Gur Lavi (Chapter 4: A Grand Maritime Strategy for Israel and Chapter 8: Building the Israeli naval force against terrorist and other threats).Rear Admiral (res.) Oded Gur Lavi served for about 30 years in the Navy and in the IDF. His last position was head of the Strategic Task Force in the Planning Branch (after the Cast Lead operation). He also served as commander of Sea Operations and commander of the submarine fleet. Oded holds an MPA from the Kennedy School for Public Policy at Harvard and has an electronic engineering degree from the Technion in Haifa.

Tzevy Mirkin (Chapter 5: The Russian Navy's Strategy in the Mediterranean Sea – Current Operations in Historical Perspective). Tsvi Mirkin is a historian of the Russian Navy. In 2014, he taught a course on the History of Russian Foreign Policy in the Faculty of Government at the IDC in Herzliya. In the past, he has served as a researcher at the Center for Political Research in the Foreign Ministry and as a political advisor to the Israeli Embassy in Russia.

Yoram Laks (Chapter 6: Iran – the Maritime Involvement and Influence in the Red Sea and the Eastern Mediterranean Sea). Rear Admiral (res.) Yoram Laks' last position in the Navy was head of the Intelligence Department (2011–15). Prior to that, he was Naval Attaché in the US and commander of the Ashdod arena. He has a BA in Economics from Haifa University (1993); he is a graduate of the Interservice Senior State Intelligence Course (2003) and of the US Naval College (2005). He has an MBA from Salve Regina University (2011).

Eitan Yehuda (Chapter 7: The maritime aspect of cyber warfare). Eitan Yehuda is the CTO and Director of Business Development in the E-Med (Mediterranean Basin) region for Hitachi Data Systems (HDS). Lieutenant General (res.) Yehuda was head of the Computer Infrastructure Branch in the Navy and following that served as the head of the Basic Infrastructure Branch in the Center for Computing and Information Systems. Before joining HDS, he was CTO and Director of the Infrastructure and Business Continuity Department at Isracard. Eitan holds a first

degree in Computer Science and Statistics from Haifa University, a second degree in Statistics (specialization in Applied Statistics) from Haifa University and an MBA from Derby University.

Eyal Hayut-Man (Chapter 9: The geopolitical aspects of the gas reserves in the economic waters of Israel). Eyal Hayut Man has a BA in International Relations from the Hebrew University and an MA in History and Philosophy of Science and Ideas from Tel Aviv University. He served as Assistant Director of Foreign Relations on the Atomic Energy Commission and as Academic Secretary of the Joint Hudson-Haifa Committee on the Eastern Mediterranean.

Elai Rettig (Chapter 9: The geopolitical aspects of the gas reserves in the economic waters of Israel). Elai Rettig Phd candidate at the School for Political Science at Haifa University and is a guest researchers at George Washington University. He research issues of energy policy and security in Israel and the Eastern Mediterranean. His doctorate, supervised by Professor Brenda Sheffer, was on the use of energy resources as a foreign policy tool and how the large oil exporters use it to increase their military power. He received a scholarship from the Ministry of Infrastructures, Energy and Water, a President of Haifa University scholarship and a doctoral scholarship from the Chaikin Chair for Geostrategy.

Aryeh Rona (Chapter 10: Shipping and Ports). Rear Admiral (Ret.) Dr. Aryeh Roneh was a senior commander in the Navy. He was the Director of the Shipping and Ports Authority (1994–2009). He is a graduate of the Naval Officers School in Acco (1961); he has a BA in the History of the Middle East and Geography from the University of Tel Aviv (1977); and he has an MA in Management from the US Naval College (1983). He is a graduate of the Division Commander Course in the IDF (1984). He has an MA in History with specialization in the Middle East from Tel Aviv University (1992) and a PhD from Bar Ilan University.

Orin Shefler (Chapter 11: The Status of Offshore Gas Field Developments, the "Framework" and Other Alternatives). Attorney Oren Shefler is an expert in law and is a business consultant in hi-tech and energy. He also advises Israeli and foreign companies in business development, project management and operations. Oren has an MBA from the Technion in Haifa, an LL.M. from the school of Law at Boston University and a BA and LL.B. from the IDC in Herzliya.

Motti Klamer (Chapter 12: Artificial Islands for Energy Infrastructure). Motti Klamer has an MSc from the University of Michigan in Architecture and Marine Engineering and Aeronautical Engineering. He is a Lieutenant Colonel (res.) in the

Navy and is a graduate of the seaman's course. He served in the Navy in a number of senior command and professional positions in the area of marine engineering, including characterization, planning and shipbuilding. He has held executive positions in the defense industries. He is a consultant in architecture and marine engineering to government ministries and various government companies and in the private market.

Assaf Yasur-Landau (Chapter 13: Marine Archaeological Assets). Professor Assaf Yasur-Landau (PhD from Tel Aviv University in 2003) specializes in Mediterranean marine and coastal archaeology and has participated in archaeological excavations and research in Greece, Turkey and Israel. After his doctorate, he did post-doctoral research with the support of the Fulbright Foundation and the Rothschild Foundation at Harvard University (2006–7) and taught in the History Department of the University of California in Santa Cruz (UCSC, 2008–9). Since 2009, he has taught at Haifa University in the Department of Marine Civilizations and founded there the Laboratory for Coastal Archaeology and Underwater Survey. He currently serves as the co-manager of the excavations at Tel Kabri (a Canaanite palace with a wine cellar) and the Tel Dor excavations (survey and underwater excavations). His book on the Philistines (The Philistines and Aegean Migration in the Late Bronze Age, Cambridge University) was printed in English in two editions and was translated into Spanish. He is currently writing another book on the Canaanites as a Mediterranean society for Cambridge University Press.

Dror Angel (Chapter 14: Israeli marine ecosystems: interactions between humans and marine biota – state of the sea 2016) Dr. Dror Angel (1989) is a marine biologist/ecologist in the Department for Marine Civilizations at Haifa University and is Director of the Applied Ecology Laboratory. His research group is looking at various environmental issues that have implications for man, such as marine agriculture, invasive species (such as jellyfish), marine pollution, climate change, fishing and others. Dr. Angel believes in the interdisciplinary approach to the management and research of the ocean and involves the public in his research as part of citizen science projects.

Nadia Zimmerman (Chapter 15: Management of Israel's maritime territory – a review of the legal situation). Attorney Nadia Zimmerman is Assistant Director of Legal Clinics. She is an academic and legal advisor to the Applied Research Center for Marine Environmental Resources, Law and Policy at Haifa University. She has an LL.M. from Harvard University (2008) and an LL.B. from Haifa University (2005). She has a BA in Economics from Haifa University (2005).

Yael Taf-Seker (Chapter 16: Marine Planning in Israel). Dr. Yael Taf-Seker has a doctorate from the Hebrew University in Jerusalem (2013) in Conflict Research. She is a research fellow at the Haifa Research Center for Maritime Strategy and Policy at Haifa University and a researcher for the Israel Maritime Plan led by the Technion in Haifa. Dr. Taf-Seker is involved in the research of maritime policy and the role played by the sea in conflict and the achievement of peace.

Edward R. Lucas (Chapter 17. Maritime Piracy and Armed Robbery at Sea). Dr. Edward R. Lucas is a post-doctoral research fellow at the Haifa Research Center for Maritime Policy & Strategy. He completed his PhD. in International Relations at American University in 2016. He also holds an M.A. in International Conflict Studies from King's College London and a B.A. in History from the Royal Military College of Canada. Dr. Lucas's articles and reviews have appeared in International Interactions, the Journal of Strategic Security, the Naval War College Review, and Jane's Defense Weekly. Prior to entering academia, he served for ten years as an officer in the Royal Canadian Navy.

Ehud Gonen (editor and producer of the Maritime Strategic Evaluation for Israel – 2016). He has an MA in International Relations from the Hebrew University and a BA in Economics and Psychology from Haifa University. He is a senior research fellow in the Harold Hartog School for Government and Policy at Tel Aviv University (2015). He is a graduate of the cadet course of the Ministry of the Economy and served as the commercial attaché in the Israeli Embassy in Singapore (2000) and in Australia (2008) and as Chief Economist in the Foreign Trade Authority of the Ministry of Economics. Ehud has published two books in Hebrew: "December", a historical novel about the period of 'aliyah' from the USSR and "The Tea Book" on the culture of tea.