

III Report on

WEAPONS OF MASS DESTRUCTION IN THE

MEDITERRANEAN 2007:

BEYOND THE NUCLEAR THREAT

BY:

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Introduction

As a continuation of the efforts by the CIDOB Foundation, this third report on *Weapons of mass destruction in the Mediterranean 2007: Beyond the nuclear threat*, is an intent to respond to the central questions that have been raised with respect to the topic of security and defense in the Mediterranean. Similar to the two previous reports – *Weapons on mass destruction in the Mediterranean 2005: Current status and prospects*; and *Weapons of mass destruction in the Mediterranean 2006: An omnidirectional threat* – the present report fits within the annual series of International Seminars on Security and Defense in the Mediterranean, organized since 2003 by the above mentioned Foundation and in cooperation with the Spanish Ministry of Defense.

Following the decision adopted at the closing session of the third of these encounters, these pages are intended to offer those who participate directly in the sessions, as well as the broad national and international security community interested in the issues concerning the region, a document which facilitates an analysis of one of the most ardent problems on the international security agenda. At the same time, it is the aspiration of the authors to encourage a debate and a reflection on the threat posed by the arsenals and nuclear, chemical, biological and missile programs already in existence, as well as the perturbing attempts of various state and non-state actors in acquiring weapons of mass destruction (WMD).

With this intention, the following pages look for ways to consolidate an effort that permits support for political decisions and improves knowledge about the Mediterranean. The image of this region has been characterized – both powerfully as well as negatively – in the past as well as the present by its high level of instability. The region has been characterized by, on the one hand, violent conflicts such as the one between Arabs and Israel and the conflict in Iraq, and, on the other hand, various centers of tension. This makes it difficult to imagine that in the short term anything can be accomplished by the objectives set by the Barcelona Process to create a Euro-Mediterranean region of peace and common prosperity. On the contrary, the main message coming from the region is one of general deterioration. This is not only the case in the North-South sense but also in the more complex South-South relationships, in which the idea of establishing a zone free of weapons of mass destruction does nothing more than fade away in the horizon.

Since the previous report (December 2006) the concern over the presence of WMD in the Mediterranean region – understood from the security standpoint to be the area shared both by the European Union (EU), the Balkans and Russia in the north, as well as the Maghreb, Middle East and Near East in the south and east – has risen. While the resolution to the crisis caused by the nuclearization of North Korea appears to be on track, world attention during the last months has centered on the development of Iran's nuclear program. This has led to efforts by the international community to prevent its continuation to avoid the possession of military capabilities that are perceived to be destabilizing. Leaning in one direction are the International Atomic Energy Agency (IAEA) and the European Union, above all the group of countries led by the United Kingdom, France and Germany, who are attempting to explore all possible ways of dialogue and negotiation. Tipping the scale in the opposite direction are the Security Council of the United Nations and countries like the United States and Israel. They have managed to approve sanctions against the Iranian regime and have notably amplified their aggressive stance as a method of dissuasion. So far this has been without any success.

All this is occurring within the framework of the relentless process of WMD proliferation. From the perspective of regional security, there is elevated tension and, in some cases, even greater than one year ago. This is clearly visible from the disastrous situation in Iraq. This country is entrenched in a conflict to which there is yet to be found a clear way out and in which none of the opposing actors have sufficient capacity to impose their agenda. The same can be said about the conflict between the Israelis and their Arab neighbors. The brutal suffering produced in the Palestinian-Israeli situation - with the additional internal Palestinian rupture between the Islamic Resistance Movement (Hamas) and the Palestinian Authority controlled by Al Fatah - is aggravated by the Lebanese front, in which the wounds from the clash between the Lebanese Party of God (Hezbollah) and the Israeli Defense Forces (IDF) have not had time to heal. Lebanon itself is once again on the edge of an abyss, an image that resembles the beginnings of its long and tragic civil war. Meanwhile, Syria is losing its options in Lebanon by attempting to avoid losing the territory it has always considered its own and, at the same time, trying to escape the strong pressure it feels from Washington and, even more, from Tel Aviv.

The Maghreb cannot be considered a stable region either, albeit in a very different way. It continues to be without any apparent solution to the conflict affecting Western Sahara and keeps blocking any possible advancement in the regional integration of the area. The Arab Maghreb Union has been completely paralyzed, but talks have resumed between the conflicted parties. At the same time, the terrorist threat is taking on momentum not only in Algeria and Morocco, but in the entire region – and even beyond by spilling over into the Sahel – as the rising fear inspires organizations like Al Qaeda in the Islamic Maghreb on both sides of the Western Mediterranean.

With regard to the structures of dialogue and building of trust initiated many years ago and those driven by the sub-regional order – with the Group 5+5 as the most significant – the attained balance is not exactly positive. This has been driven by the North Atlantic Treaty Organization (NATO) – in the framework of the NATO-Mediterranean Dialogue more than a decade ago – and by the European Union through the Barcelona Process. Neither one of them, neither separately nor combined, have managed to reduce the enormous breaches of inequality and high degree of instability which affect the region as a whole. Nor have they served in eliminating mutual mistrust, which over time has seeped into the broader opinion on both sides. There continues to be resistance against the necessary reforms that promote the emergence of open-societies that are well-developed at a social, political and economical level within their respective territories. With regard to the European efforts, a vague French initiative is appearing on the horizon while the European Neighborhood Policy reaches full speed. The Mediterranean Union, which still has not been able to translate words into actions, shows that, all in all, it still has not managed to find the adequate formula to manage Euro-Mediterranean issues.

Together with some changes with respect to the situation from the previous year, it is obvious that other factors and variables remain practically unaltered twelve months later. For this reason, instead of repeating the analysis of the countries and subjects with essential characteristics that have not changed in the area of WMD we refer the reader to the preceding reports. This report (Section IV) provides updates and clarifications related to the data and analysis from earlier work. In this way, and with the intention proposed at the starting point of this series in 2005, this report fills in the gaps which until now had not been given sufficient attention. Therefore, the decision was made to cover in this third issue: 1) an updated review of the nature of the nuclear

threat (Section I), with special attention to the factors that drive the rising overall proliferation in this field, and to the crisis surrounding the Iranian nuclear program and its repercussions for regional security; 2) a detailed regional study (Section 2) about arsenals and programs of chemical and biological weapons; and 3) an examination of the situation in the area of missiles that is related to WMD (Section III). The report closes with appendices (Section V), which include a list of acronyms used throughout the text, a detailed chronology of Iran's nuclear program during the past year, and relevant Internet websites for the subject analyzed. This should all be considered additional information to the previous reports.

As the background for the present analysis, it fits to sum up the panorama in a tone of rising concern. Given the importance that the Maghreb, Near East and Middle East have for international security, the proliferation of weapons of mass destruction is an irrefutable fact. Notwithstanding the significance that a hypothetical nuclear Iran could have, its entrance into the club would be nothing more than an addition to an already destabilizing situation. This is as much due to the already open conflicts as to the race to obtain nuclear weapons that various state actors (and most likely some non-state actors) are involved in. So far, it has not been possible to create a model for regional security that avoids hypocrisy, which produces an air of mutual trust to break the arms race, and that makes the Mediterranean a region in which differences can be resolved by peaceful means.

I. The nuclear threat: a never ending story

Although subject to the volatility of diplomacy, with surprising attention and equally astonishing disregard of the subject, the nuclear threat is one of our world's solid constants. This has been the case since its tragic eruption in Hiroshima and Nagasaki more than sixty years ago. It is not so strange to consider a hypothesis which is limited to the possibility of a non-state actor (a terrorist group, specifically) obtaining radioactive materials or an operational weapon (stolen, bought or transferred directly by its owner). Above all, however, it is a reality derived directly from the danger represented by the 27,000 nuclear weapons accumulated and held by the exclusive group of countries, and the intentions of those who wish to imitate them.

The present situation is far from being reassuring in that; a) there are no signs that those who possess the weapons are seriously considering to renounce them, and some are even intend to convert them into tactical weapons; b) the control mechanisms have been surpassed by technological development that offers more options for proliferation; and c) very distinct countries (and, potentially, non-state actors) are giving in to the temptation of emulating nuclear powers. If the process in which Iran is immersed is added to this scenario, it gives a fuller and more exact idea of the severity of the threat is represented by weapons capable of annihilating all traces of human life on the planet.

1.1. Nuclear Proliferation, the permanent concern

Once more, and as a sign of hardly veiled frustration, it is necessary to point out that 2007 is coming to an end without there having been put in place any regional initiative in the subject of nuclear non-proliferation. The Mediterranean continues to exist as an excessively militarized area, both in the conventional sense as well as with regard to weapons of mass destruction. There is a constant arms race accelerated by the recent announcement made by Washington to re-arm their associates in the region, beginning with Israel¹. In these conditions it is an illusion that there is a place for initiatives like the Nuclear Weapon Free Zone (NWFZ) in today's regional agenda. It is

¹ An initial analysis about this subject can be found in Jesús A. Núñez, "Venta de armas, estabilidad y democracia en Oriente Medio", El País, August 9, 2007.

so often included within the international framework, but at other times simply abandoned due to the unwillingness to explore the option.

The military tendencies that dominate the region, far from increasing the security of the group of countries, continue to be obsessively focused on global re-armament that derives from the insecurity of each actor. The Arab-Israeli confrontation is – by a wide margin –the factor that most directly contributes to this dynamic. It also serves as a justification to defend other interests with respect to the enhancement of security capabilities against both internal threats as well as those from other neighbors.

An additional element worthy of similar attention is the multiplier effect, of which Iran serves as an example. Traditionally, the Israeli posture has received a lot of attention, both as a proliferator as well as an actor on the margins of any kind of international regulation. This serves as the main argument for its neighbors who try and justify their more or less sincere intentions to enhance their own chemical, biological or nuclear capabilities. For this reason, Israel has still not been accepted as a legitimate actor within the region. Without losing sight of this factor, it is the Iranian program which is taking on momentum down the proliferation path in the Muslim world.....even in Turkey. In its continuous search for regional leadership, the Shia regime of Iran is provoking rising fear among its neighbors (Muslims, but predominantly Sunni, and not only Arabs but also Turks), that will not accept that Teheran obtains such a powerful tool of dissuasion. As a consequence, favorable views on the development of nuclear energy are beginning to emerge within the region, which open the door for greater future instability.

At a more general level, other factors that further contribute to the explanation for the arms drive is the continuation of the “War on Terror”, which Washington insists on pushing forward despite the clear evidence of its counterproductive effects, not only in this region but in the entire world. From that perspective, and one that affects the proliferation of WMD, it is obvious that the main focus is geared towards counter-proliferation. This approach relies on one’s own strengthening and the reinforcement of military allies as essential components for the destruction of the capabilities or programs of adversaries² and is detrimental to non-proliferation. As a result, there is an

² In 1981 Israel had fulfilled this task, destroying what was to be the first Iraqi nuclear reactor in Osirak. Now (September 6th of this year), all indications are that its combat planes have returned to do the same in the Syrian territory.

increased feeling of mistrust about the possibilities of the frameworks, such as the Non-Proliferation Treaty, that are of such importance. This also leads to constant criticism of the inspection work by the IAEA. Moreover, this destabilizing tendency increases when it becomes clear that potential nuclear powers tend to react to the behavior of the United States and adjust their own nuclear strategy in order to develop tactical nuclear weapons.

A final element of concern in this area is one that affects the state of the current system of non-proliferation. It seems ages ago that the decision was made in 1995 to make the NPT effective indefinitely and an agenda - which sounded realistic at the time - was put forth to make this instrument more efficient. So far, it cannot be considered a great historical success³. After this milestone, which appeared to inaugurate a new phase in the intentions to one day liberate the world of nuclear arms, everything changed rapidly: There was incorporation of India and Pakistan into the club in the spring of 1998, the disaster of 9/11, the North Korean crisis (withdrawing from the NPT and exploding their first nuclear device in the autumn of 2006), and there was the ongoing crisis with Iran.

Looking at it today, one gets the impression that no one is sincerely defending the non-proliferation regime. Those who have always moved at the margins of the system (Israel, India and Pakistan) obviously do not. The five countries officially recognized as nuclear powers are not ready to defend it either. They use the NPT in a selective way: To condemn some potential proliferators (while supporting others), too easily forgetting about their own obligations not to facilitate the transfer of those materials to their allies and, above all, failing to meet the mandated reductions and to eliminate their own arsenals⁴. Leaving aside those countries that consider themselves to be out of the race, and limit themselves to act as mere signatories that do not have ambitions to become regional leaders and/or do not feel threatened by others, there is a large number of local and regional powers left (among which Iran seems to stand out most) that view the nuclear arms as a desirable resource (even indispensable) for their strategic calculations.

³ Nothing less than compel the five nuclear powers to reduce, and even eliminate, their arsenals and the other 188 signatories to renounce the acquisition of nuclear capacity.

⁴ Great Britain is the only member of this exclusive group that has dared to, at least theoretically, develop a plan that envisions the renunciation of the arsenals it possesses.

In other words, the demand for nuclear weapons will not diminish as long as states which already possess them continue to portray them as emblems of great powers⁵. On the basis of the behavior of those who possess them, those who do not choose to accept the current *status quo* will resolutely try (or with a sufficiently strong incentive) to increase their international weight, defend themselves against close threats or compensate for their neighbor's superiority by means of nuclear devices.

In as far as this pattern consolidates the necessity to strengthen the NPT loses support as it is of no service to practically any of the relevant actors or to those who aspire to be one. In order to change this tendency it would be necessary, above all, to count on actors truly convinced of the advantages of having a world free of nuclear arms, in which the search for own security would not be based on the accumulation of more and better weapons. Similarly, it would be necessary to “dispel the perception that illegalizing nuclear armament is a utopian goal”⁶.

In a brief panoramic overview of the current situation – keeping in mind that only the United States has the capacity to carry out a task of such nature – we find that the world's main nuclear power (behind which others hide themselves through policies of pure imitation) neither wants nor is able to do so. As its actions reveal, it is obvious that it relies on further strengthening of its military power and, as a consequence, does not feel bound by any treaty when it comes to national agreement. This is the case of the Anti-Ballistic Missile Treaty (ABM), the NPT, or the never ratified CTBT. Even if it would like to, it cannot do so after having squandered its unquestionable political capital on such affairs as the manipulation of statements in order to launch the highly criticized invasion of Iraq (nor should the falsified/false debate about the alleged WMD of Saddam Hussein's dictatorship be forgotten). At this point, who can have confidence in Washington as a non-proliferator and as a defendant of the NPT, IAEA and of the international legislation concerning non-proliferation in general? Which other actor or organization has the capacity to lead such a process?

The problem derived from this situation is not simply about the constant weakening of the non-proliferation regime, but also about the surfacing of new

⁵ George Perkovich analyzes this with great precision in “The End of the Nonproliferation regime?”, *Current History*, November 2006.

⁶ The Commission on Weapons of Mass Destruction (2007): *Las armas del terror; librando al mundo de las armas nucleares, químicas y biológicas*, UNESCO Etxea/Asociación para las Naciones Unidas en España.

countries expressing their need to revise their traditional nuclear standpoints. The fact that South Korea and, even more symbolically, Japan are following this dynamic should serve as a warning in order to avoid falling into the abyss that we are dangerously approaching. If the attitude becomes “save (defend) yourselves”, we cannot avoid the growing risk of these weapons ending up in the wrong hands and that, in a tragic moment, someone may consider using them.

At this point it is important to add to the complication of the increasing significance of nuclear energy as an alternative to the growing concern about climate change through the use of fossil fuels as the driving force of the world economy (although the argument that these latter fuels are being exhausted may carry more weight). Without having improved the security issues that go along with the use of this type of energy materials nuclear energy is once again endorsed, as it is presented as the best way to comply with the Kyoto Protocol. From the simple observation that nuclear facilities may be seen as the preferred objectives for all kinds of violent groups to the lack of technical safety and the radioactive residue of the used and stored materials, alarm bells should be ringing. Unfortunately, if this way of thinking becomes widely accepted, and there are many indications that it is⁷, the 442 nuclear reactors currently active in the world may seem like only a few in several years time.

This means that in terms of geo-economical interests and the technological advances already in place, it will be much more difficult to control and regulate the use and transfer of such a delicate material. The development of this unstoppable process is not going to be slowed down – in fact it is not – for a regulatory framework to come into existence that could eliminate the security problems that can presently be foreseen. If we do not establish a more efficient non-proliferation regime, do not give more power to the IAEA in its capacity to conduct inspections, and do not look for multilateral means of management that would suit our irreversible reality, we should not be startled if our own security, and that of others, becomes more uncertain in the near future.

⁷ It is sufficient to point out that Morocco announced in March its decision to construct a nuclear base (a contract desired by Russian, American and French companies) or the accord signed between Libya and

1.2. Evaluation of the crisis surrounding Iran's nuclear program and its repercussions to regional security

In the 2006 Report, we stated that “the major part of the discussion about the Iranian crisis and its possible nuclear proliferation is burdened by the obstacles that represent a considerable number of hypotheses, falsely converted in unquestionable facts of commonly accepted knowledge. For instance, it is already assumed that Iran has a sophisticated program for the development of nuclear weapons, despite of the lack of definite proof”. One year later, the same can be argued⁸, but with one important and alarming difference to keep in mind while considering the volatile context of the Middle East: the constant exchange of accusations between the main actors, the evidence indicating Iran's continued effort at furthering its nuclear program (including uranium enrichment), the lack of effective dialogue, and an air of overall mistrust, are all factors that have created a highly explosive situation in which one cannot rule out the possibility of military actions.

We find ourselves at a point where the fulfillment of a prophecy seems inevitable – Iran's access to nuclear arms – and where all possibilities of resolving the crisis through diplomatic means have been exhausted. The world mistakenly seems to interpret the situation as one in which some seem obliged to attack – once they have realized the ineffectiveness of (political) pressure and sanctions; while others are determined not to turn back – as the only way of reaching their goal of regional leadership. This type of thinking does not allow for the possibility that Iran's regime may be using its nuclear program as negotiating tactic. Iran might simply want to receive recognition of its regional status and, at the same time, use the nuclear card as an instrument to defend national security against those who wish to see an Iranian collapse. This type of thinking also does not take into account that those who threaten with military intervention are currently not in the position to move from statements to actions. This is not due to the lack of willingness but rather mere absence of the necessary means to carry out a successful plan of attack.

United States, also in March, which deals with the development of nuclear activities for peaceful purposes.

⁸ During an IAEA meeting, its director, Mohamed El Baradei from Egypt, declared that, despite four years of inspection Iran's nuclear ambitions, his organization is unable to state with certainty that the Iranian nuclear program is of a peaceful nature. *USA Today*, March 5, 2007.

Adding the possibility that, according to some sources, there are between three to five years left until Iran is in a position to enrich uranium on an industrial scale⁹, we can conclude that there is time left – although each side can use it in diverse ways – in order to steer the process towards a satisfying solution..... or towards disaster.

Development of the “Iran Case” in 2007

The year 2007 began in a similar way as the previous year had finished: a gradual rise in tensions about the nuclear activities of Iran, and with the IAEA attempting to act as the honest broker between the United States and Iran. As the continuation of Resolution 1696 (from July 31, 2006) by the UN Security Council, on December 23, 2006 the Council unanimously approved Resolution 1737. This initiated a sequence of international sanctions against the Iranian regime. In its text¹⁰, and following the confirmation of the unwillingness of Iranian authorities to suspend its uranium enrichment activities and the reprocessing of nuclear material, the idea was put forward to allow 60 days for Iran to cease these actions. This was considered an initial condition to begin the negotiations to find a definite resolution to the crisis that had started because of a previous failure to comply. Simultaneously, sanctions were imposed on individuals and Iranian organisms linked to the nuclear program.

In an atmosphere where allusions were being made about the need to use force as a way of avoiding what was considered completely unacceptable (Iran controlling the complete nuclear cycle), the facilities in Natanz received most of the international attention at the beginning of the year. The main goal was to find out which parts of the Iranian regime’s statements, including those by President Mahmoud Ahmadinejad himself, were actually true. Special attention was given to the claims about the existence of a cascade of up to 3,000 centrifuges as an initial step before the implementation of about 54,000 (the ultimate objective leading to large scale production).

Although the start of the year may have given the impression decisive phase of the crisis was quickly coming closer, the following months began to show a different dynamic: while President Ahmadinejad and his government continued its troubled and

⁹ This point, in a worst case scenario, would not be more than a middle phase. It would be relevant, however, in the process of acquiring military capacity in the nuclear field in years to come.

¹⁰ <http://daccessdds.un.org/doc/UNDOC/GEN/N06/681/45/PDF/N0668145.pdf?OpenElement>

defiant rhetoric, the attitude of the United States and the European Union seemed to be losing its previous intensity. This was even true after the events which occurred during the first trimester, on March 23, when 15 British Marines were captured by the Iranian forces in the Persian Gulf ¹¹. Besides some less important issues, there are two reasons that explain this change in the attitude of the West: the lack of effectiveness in the strategy used up to this point and the weakening position of the United States in the international arena.

With respect to the first one, it seems each time more undeniable that the recent White House policy – which adds to the policy of “containment” of the previous administration the idea that the regime will not fall if it is not directly pressured by force – does not work. As for the European Union, despite all efforts made to prove otherwise, its weakness as an outside actor and, above all, the impression that all its possible offers and proposals are dependent on the last word from Washington, take away their power of conviction and operational capacity in the eyes of Iran’s regime.

Both with Mohamed Khatami in power before and with Ahmadinejad in power now – without forgetting that the real power without a double rests in the hands of the Supreme Leader of the Revolution, Ali Khamenei – Iran has continued to rise strategically, converting itself into a potential regional power that is sure of its own destiny. The relative weakness in its foreign policy is more related to the complexity of its internal politics rather than on any possible foreign pressure. None of this, however, has hindered its process of becoming a nuclear state, its ambition for more than twenty years.

Teheran has managed to play its cards well, whereas the United States and the European Union have wasted time on a game in which they have not managed to reach any basic agreement. Moreover, their behavior has revealed the unquestionable divide that exists within the Security Council. Particularly, Russia and China have served as the pro-Iran voice, and thereby halting the demands of those who argue for a harder line. Whereas their nuclear arguments remain relatively consistent, Iran has been playing with an extremist rhetoric accompanied by conciliatory actions. Basing themselves on a realist approach to the forces in the international arena, Iranian leaders

¹¹ The Marines were freed three days later, as an “Easter present” – in the word of President Ahmadinejad himself – who did not fail to use this brief crisis as way to regain prestige with respect to his internal

seem confident of their current position. This makes their search for international recognition and guarantees for their internal security based a position of power, rather than weakness.

The second of the reasons mentioned above – the weakness of the US – is directly linked to this increased status of Iran. In a game where the two teams (Iran and US/Israel) are looking to set up their territorial hegemony, the success of one, invariably, means the failure of the other. In terms of the development of recent events, this game has evidently favored Teheran. Israel's failure in Lebanon, demonstrating the limits of traditional military power, the growing strength of the Shias and Islamist political parties in the region, and, obviously, the grave situation in Iraq and Palestine have all contribute to this outcome. Consequently, Iran feels strengthened in the same way that Americans and their Israeli partners are not able to impose their agenda on the region.

One additional effect to the notoriously lost credibility of the current US administration, both domestically as at the international level, is that the alternatives available to Washington to act against its rival are increasingly limited. Without the support of the main European countries, other powers and the regimes of the region the possibilities to stand up to the Iranian perseverance become smaller as time goes by¹². At the moment, none of the main nations concerned shows guaranteed support, except for Britain, Saudi Arabia and Jordan. Furthermore, the difficult relationship with the IAEA¹³ has also become a mayor obstacle for the US ambitions. On the other hand, it is becoming more irrefutable every day – even for the US - that Iranian partnership is absolutely necessary in confronting the challenges of regional security. In the search for solutions in Iraq, the structure of a regional security framework in the Persian Gulf, and the fight against international terrorism, Teheran turns out to be an unavoidable partner.

In short, all this provides the Iranian authorities with a wide range of maneuvers to carry on with their agenda. In this case that means to proceed with their nuclear program without much external interference. Clinging to their constantly reiterated argument that their goal is strictly focused on providing the country with alternative

rivals, very critical of his management and who had grown in influence after the negative results of his allies in the municipal elections last December.

¹² This is the way the little impact of the sanctions approved by the UN Security Council has presented itself until now.

sources of energy to the oil and gas they possess, Teheran continues walking to walk a tightrope by continuing to engage in activities which leave the door open for future military development. Within this scope, President Ahmadinejad announced in March 2007 that Iran had begun the construction of a new nuclear facility (with a capacity of 360Mw) in Darkhovin. The following month he added that the facilities in Natanz already have the capacity to produce enriched uranium at an industrial level¹⁴.

The Resolution 1747 approved unanimously by the UN Security Council on March 24¹⁵ does not seem to have changed the direction in a significant way. Once again the Resolution calls on Iran to suspend all its activities connected to enrichment and reprocessing within a maximum period of 60 days. This time, the sanctions have been broadened to include new actors (the state bank Sepah and the leaders of the Guards of the Islamic Revolution). At the same time it places an embargo on arms and blocking access to credit for the export of Iranian goods. However, it offers Iran the option of lifting all sanctions if Teheran suspends the enrichment and reprocessing activities. Whereas before this moment the only conciliatory action by Iran was the proposal announced by the chief negotiator, Ali Larijani¹⁶, to establish a moratorium of 30 days to simultaneously lift the sanctions and suspend nuclear activities, following this new resolution nothing substantial has been noted that could unblock the diplomatic process.

Faced with Iran's position, the international community officially still continues to believe in the diplomatic option to resolve the crisis. Washington is trying to convince others in the UN Security Council of the necessity to approve the new resolution. Among the warmongering, other actors like Russia try to play on both fields, attempting not to make enemies of their Iranian clients¹⁷ while maintaining their official image as defender of international legitimacy. In this way, what would be the third –

¹³ According to BBC, on July 7, 2007, Mohamed El Baradei made statements against “the new madmen who want to bomb Iran”, ”, http://news.bbc.co.uk/2/hi/programmes/nuclear_detectives/6707457.stm

¹⁴ Although all evidence reveals that the quantity of the installed centrifuges is not yet enough to reach this point and, on the contrary, technical problems have occurred when attempting to reach optimal performance with those already connected.

¹⁵ <http://daccessdds.un.org/doc/UNDOC/GEN/N07/281/43/PDF/N0728143.pdf?OpenElement>

¹⁶ After various failed attempts to resign, he finally left his position on October 20th 2007 and was replaced by Saeed Jalili, who, until then, had been Deputy-Minister of Foreign Affairs for Europe and America.

¹⁷ It is interesting to observe Moscow's game, as the main supplier of the Busherh reactor. It does not want to lose the balance between preserving its links with Teheran but is, in practice, repeatedly delaying the delivery, especially of the nuclear fuel necessary to begin its production.

and likely tougher - wave of sanctions is being postponed, and any possible military attack is pushed further into the future given that currently (end of November 2007) the necessary conditions do simply not exist.

It needs to be concluded that not all the right pieces have been put together to reach an immediate end to the crisis. There is strong resistance from the outside (if not outright rejection as in the case of Washington, Tel Aviv and even Riyadh) to accept as that Iran has already converted into a regional leader. To reinforce this position, Teheran may believe it needs the access to nuclear energy (civil and, most likely, military). This is precisely what is tried to be avoided at the moment by imposing the prohibition to enrich uranium (an activity, as it is widely known, permitted to any signatory of NPT like Iran). Like it or not, it is a weak strategy to try to bar Iran from something which is perfectly legal. To create an exception to a general norm¹⁸ and, additionally, to attempt to make it into an initial condition to any negotiation does not seem a sufficiently consistent posture to mobilize the international community (and even less Iran) beyond the current political balance.

A chronology of the most important events during the period analyzed in this report (October 2006 to October 2007) can be found in Appendix V.2.

Deterioration of the nuclear security situation

The anxiety that a possible Iranian nuclear arsenal could create in a country like Israel – which until now has controlled the nuclear monopoly in the region – is easily understandable. For other regional neighbors and the international community the problem is of no lesser value. It derives from the overall process of world proliferation and, in particular, the Iranian case – where there is widespread nuclear insecurity due to the lack of state control. In fact, if Iran does come into possession of a nuclear arsenal, the threat would most likely not come from the regime using it voluntarily – as it is all too well aware of the rules of engagement in this field and the prestigious role of nuclear arms as a dissuasive mechanism. The greatest threat would come from an accidental error that could produce a cataclysm, or the possibility of terrorist groups gaining access to these kinds of weapons.

¹⁸ This worked, in fact, during the period of 2003-05, when Iran responded positively to Germany, France and Great Britain's request to start negotiations.

In the 2006 Report, we concluded that what occurs in the region could trigger the presence of illegal networks that traffic these materials – the example of the Pakistani Abdel Qadeer Khan is still fresh in our minds. This could also facilitate non-state actors with access to these types of weapons. We also declared that “it is important to highlight that this latter problem is not directly attributable to the Iranian regime. To the contrary, it is highly improbable that any state would be interested in sharing its “national treasure” with actors that are so difficult to control. Rather, the reasons for this hypothetical increase in illegal activity are the imperfections of the current non- and counter-proliferation systems. The mechanisms that are insufficiently able to avoid the emergence of new nuclear states and, even more so, to ensure transparency, security and maintenance of existing arsenals and the most sensitive materials that are necessary in their production.” One year later, it seems fitting to repeat that we do not possess the tools necessary to prevent this hypothesis from becoming a somber reality.

Iran surely does not feel the need to receive approval from the West in order to follow its path to nuclear energy. However, due to the frustration it suffers from not being recognized and respected as a reliable actor – at least in administering regional issues – it would hardly be willing to collaborate with the international community on an issue that affects us all. At the same time, a combination of Iran’s reluctance and aggression by some important nations leave the IAEA in a difficult position to fulfill its duties of inspection within the region. This way, attempts to improve the channels of cooperation which would increase transparency in dealing with arsenals and nuclear programs – especially in relation to Iran and its program – are constantly being blocked.

In an atmosphere of mistrust and apathy among international cooperation, any nuclear program – whether civilian or military, Iranian or any other – by definition becomes a threat to security. This is not as much due to the fear of unleashing an interstate war as it is to possible accidents or personal aspirations impossible to control or manage. Absolute secrecy, the intention to bend the rules and lack of transparency, combined with the explicit willingness to gain an advantage by any means necessary all contribute to illegal trafficking and make inspection by IAEA impossible to perform. In the case of Iran, this problem becomes even more serious as a consequence of its scarce democratic nature – in terms of the control available to the public over the actions and decisions of the various power resorts. The problem worsens with the internal

complexity of the country, where it is difficult to find a consensus among the various actors whose agendas often diverge. The permanent struggle to prevail above all others does not make it easy to fit the interests of the religious hierarchy with those of certain political figures or the military establishment. Therefore, it is easy to imagine that the ever present disparity also permeates the nuclear program, which is what intensifies the fear with in respect to the level of control in this matter.

The conditions under which Iran is developing its nuclear program leave little room for comfort given its rising dependency on providers with questionable credibility. On the other hand, it cannot be said that their official sources (mostly Russian companies and the Chinese government) are models of transparency.

For neighboring countries and others alike, these facts represent an alarming level of concern that should lead to a global reassessment of the policy towards Teheran. In many ways, the “Iran case” is not any different to other challenges facing security these days, where the geo-strategic thought process used in the previous century is quickly diminishing. Instead of focusing almost exclusively on restraining the military power of a possible rival, it seems more practical to think about creating regional and global security through long-term perspectives with diverse and multilateral capabilities. Reiterating a previous point in respect to Iran, an alternative way to reduce the threat of its current tactic would be to offer guarantees to its internal security (as in the case of North Korea) and accept its importance as the key actor in the region. Unless we believe the current regional *status quo* can be maintained indefinitely – clearly in favor of Western interests, which intend to maintain control over the region without considering Teheran.

The impact on the region

With respect to WMD, the air of uncertainty surrounding Iran’s true ambitions and the ability to actually attain a nuclear program is currently the main perturbing factor in terms of regional security.

Israel is growing more insecure about its own position – to some extent due to the situation in the Palestinian Territories and in Lebanon – but especially due to the possibility of losing its nuclear monopoly in the region. Recently it has made it clear

that it would not accept the nuclearization of Iran and, in tandem with the United States, remains the most likely actor to use force in order to prevent this.

As for Saudi Arabia and many other countries in the region with a Sunni majority, they are not willing to passively accept the consolidation of leadership in the hands of a Shia regime. Some countries make claims – directed at Teheran and, most of all, at Washington – about alleged decisions to start their own nuclear programs (in a vain attempt to paralyze Iran’s program and with the intention of provoking an effective reaction from the US, which would put a stop to what they (US) also consider unacceptable). Others prefer to directly activate their own allies in Iran and in those places where their influence is greater, to create problems for the Iranian regime, and thus to force Iran to redefine its agenda.

The countries most likely to contemplate this situation would be Turkey and Egypt, although they publicly deny this. If Teheran finally does what is has been anticipated (full command over its nuclear cycle) it would indirectly fulfill its wishes of putting an end to a long period of Israeli monopoly. In the end, however, this would not be good news for any country. To start with, not for the current Turkish government, which appears to be in the process of rethinking its strategic relationship with Tel Aviv (and Washington), something which has been the cause of various problems in the Arab world. Egypt is not likely to be very concerned in the short or long term over the Persian expansion. In fact, there are indications that Egypt could be secretly supporting Teheran, with the idea of creating a counterweight to Israel¹⁹. Nonetheless, it still seems difficult to imagine that it would end its campaign to create a nuclear weapons free zone in the Mediterranean in order to embark on a nuclear program that would bestow it the possession of this kind of armament.

For countries outside the region the opinions about this process vary tremendously. While for its Pakistani neighbor the process does not create a noticeable concern (the ties between the two countries in terms of nuclear material have been known for years), for Russia the impact seems acceptable. Russia, not by coincidence, is the responsible for the construction of Iran’s main nuclear project (the Bushehr facilities) and is also an important arms supplier (including a modern system of anti-air

¹⁹ D. Dassa Kaye & F.M. Wehrey (2007): “A Nuclear Iran: The Reactions of Neighbours”, *Survival*, 49 (2), pp.111-118.

missiles precisely designed to protect the headquarters). Russia's attempt to regain the influence it lost during the last 15 years is creating more problems for the United States – bogged down and at the limits of its capabilities in Iraq and Afghanistan. At the same time that an effort is being made to keep the process under certain control, Russia continues to supply the promised fuel to the Iranian facilities, and insists on the future obligation for Iran to send back the nuclear materials already used in that center. Moscow realizes that it can improve its chances of opening new doors of opportunity in an area where it has already established itself, increase its presence in the Middle East – a region with special geo-economic importance – , and trigger a change in the *status quo*. All this would only be the minimum within the regional framework, and can prove to be profitable in the future.

The US has a very different view. What Iran is questioning, in an up-front manner, is the regional framework controlled by Washington for decades. It is the kind of control that has been based on the direct presence and support for some regimes which have accepted their subordination, without much protest. This was also the case in Iran until the “Khomeini” revolution broke out in 1979. Since then, the direction taken by the new Iranian politicians has led to the direct examination of some of the regimes in the region and the leadership of the United States. Together with other decisions, the commitment to the nuclear program – if it is finalized – would consolidate Iran's role as the regional leader. It would create a new game with new rules and put Washington, Tel Aviv and Riyadh, along with others, in a fairly uncomfortable situation.

Without a doubt, everyone is concerned about the ramifications of a possible loss of control of the process that would bring about even more tension – in which Iran continues to move forward in its plan to control the nuclear cycle. Meanwhile, the international community has not found an effective method to bring it to a halt and discussions continue about a possible attack against the Iranian territory. This goes without saying that in a climate of zero transparency there remains the possibility of an accident or the “loss” of nuclear materials. This could have the weapons end up in the hands of individuals less likely to accept the rules of such a complex nuclear game.

Reasons for hope

Although conscious of the seriousness of the crisis, we understand that the point of no return has not been reached yet. It is safe to assume that if there is true political willingness on both sides, it is still possible to accommodate the interests in order to reach an agreement – without the need to reach for solutions involving brutal force. At present, there is a certain level of optimism – not very well-founded – about the effectiveness of diplomacy in the apparent success in North Korea in terms of its nuclear program. It would be erroneous to assume that what has occurred there could automatically be applied to the situation in Iran, since the internal and external situation in both countries is simply incomparable. However, there are two elements laid out in the Korean case that may prove advantageous in the search for possible solutions.

The first deals with the structural weakness of the Iranian economy. Although Iran is obviously economically more prosperous than North Korea, it faces an economic crisis that affects a significant percentage of the population – which stirs up criticism and growing dissatisfaction with the regime. It also embodies the paradoxical situation of being an oil and gas producer of global importance, but continuing to exhibit significant foreign dependence on refined and distilled products. In sum, although circumstantially the world prices of these products seem to be favorable, Iran realizes that its own financial and technological potential is not enough to satisfy the demands for the greater well-being of its population and to fully exploit its immense oil and gas resources. It needs foreign investment and technological assistance at a much higher level than what it has now. It is in this area where most possibilities exist to reach an agreement that would satisfy the conflicting parties.

The second element to consider, following the experience of Korea, is the importance of the involvement of other regional actors with interests in the matter and with direct means of communication with Iran. China, despite being Iran's industrial partner, has already made clear its concern about the Iranian program. Russia holds considerable weight to tip the scale to one side or the other. Even Pakistan would have enough to contribute to a possible strategy for the peaceful resolution of the problem. On these grounds, the United States and the EU should give their efforts a new direction in order to create a multilateral dynamic that would enable coordination among all these

countries – as an alternative to the existing approach of imitating the hostile rhetoric and actions by Washington and Teheran.

II. Chemical and biological weapons: a strategic tool in the 21st Century?

To a certain extent it seems logical to dedicate significant attention, in terms of media and research, to the subject of chemical and biological weapons. The idea of an international terrorist group using, for instance, sarin gas in a metropolitan center is one of the nightmares haunting any responsible politician and those in charge of national and international security. However, from a strategic point of view and without the slightest disregard for its destructive potential, it is important to admit that these weapons have lost a great part of their historical value as possible weapons to be used on the battle field and in the area of deterrence – just as the WMD are viewed with respect to the confrontation between national actors. Despite the fact that many countries in the Mediterranean maintain chemical and biological arsenals and continue research in these areas (see Table 2), it is widely believed that their existence and possible use during a hypothetical war pose a greater danger, rather than an advantage.

In other words, there is no longer a coherent argument for maintaining these weapons. From this derives the argument that instead of insisting on the immorality of their use, it would be more beneficial if the international community paid more attention to the debate over the logic of their existence. Today, none of the national governments in the Mediterranean benefit from the existence of these types of arsenals, and this factor alone gives the opportunity to aim toward their absolute elimination.

The current international framework on this subject is defined by the Chemical Weapons Convention (CWC) and the Biological and Toxin Weapons Convention (BTWC), which aspire to eradicate these kinds of weapons from the global scene. Even though both have managed to maintain a constant pace in terms of implementation (Table 4 highlights the most significant results), in practice there remain factors that hinder their fulfillment and widen the gaps for the danger of proliferation to still get through. Special attention should go to the provisions in their respective (treaty) texts, which create a grey area in terms of the meanings of “arsenals” and “capabilities”²⁰. The second problem stems from the fact that often other priorities and agendas for international negotiation are established and provoke very different results to those

²⁰ It remains difficult to distinguish between scientific reasons and military activities, as it is clearly demonstrated by the ambiguities of *General Purpose Criterion* in the CWC – where the products that are

originally pursued by these Conventions, allowing certain elements in exchange for certain achievements in other areas. Likewise, the constant poisoning of the nuclear subject makes moving ahead in this matter a difficult task. The traditional view of these ingenuities, like “nuclear weapons of the poor”, in effect creates more resistance to disarmament by those who wish to maintain a certain misleading idea of a balance against the nuclear powers that they perceive as a threat (the Arab-Israeli case being the most obvious example of this). In the same way, the final element to consider is the poor example that powerful players like the United States and Russia convey to the rest of the international community through their behavior²¹.

In sum, despite appearances there are still many countries that are not willing to pay the necessary diplomatic and economic price to make the world free of biological and chemical weapons.

II.1 Chemical and Biological proliferation in the Mediterranean

In terms of what concerns the region, and what is displayed in Table 2, the situation according to each country is very mixed in respect to the level of its fulfillment of both Conventions (see Table 5) and to the proliferation power in the same areas (see Table 2).

With regard to chemical weapons, Libya, Syria and Iran have known programs, although it should be noted that Libya has cooperated with the US and the United Kingdom to dismantle their capabilities for three years. Furthermore, it seems likely that both Egypt²² as well as Israel still have some kind of military program in progress that involves these weapons, while doubts continue to exist about the conduct of Algeria and Saudi Arabia. Israel has signed but not ratified the CWC, while Egypt, Iraq²³, Lebanon and Syria have not even signed the Convention.

prohibited include “toxic chemicals and their precursors, except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes”.

²¹ It is enough to mention that when the CWC went into effect (1997), between them they had accumulated 98% of the existing chemical weapons. Today (2007), with the prospect of eliminating all chemical weapons by April 2012, the US has destroyed only 40% of its arsenal and Russia just 20%.

²² Egypt has a clear profile of a proliferator in the area. It has been documented that it used mustard gas during the Yemen War between 1963 and 1967. It also seems likely that just before the Yom Kippur War (1973), it transferred chemical weapons to Syria.

²³ Iraq has had arsenals and development programs in this field and has used in the war against Iran (1980-1988) and against its own Kurdish population. Presently (November 2007), its integration into the international process is being negotiated with the OPCW.

In terms of biological weapons, no country admits to having active arsenals. There are some, however, that have traditionally been the ones to have developed programs along this line (like Egypt, Iran, Algeria, Israel and Syria). The majority have signed and ratified the BTWC, but a couple, like Egypt and Syria, have not taken the final step, and others have not even signed (as in the case of Israel and Mauritania).

In the present international panorama there are obvious public relations reasons to avoid being seen as a country that has opted to openly join the biological game. However, there are several countries in the Mediterranean which have at least maintained their interest in exploring the possibilities of these weapons. The convention prohibiting biological weapons leaves the door open for research and peaceful civil development of techniques associated with their use. This allows countries to steer towards military ends given that there does not exist any specific provision to detect, control or verify whether the final step has been taken. Besides that, the necessary equipment for research and production of possible biological weapons are apparently less complex. This allows it to be hidden or disguised easier than, for example, the systems required for nuclear development. At the moment, the three countries that appear to be linked to the possible production of these weapons are Iran, Israel and Syria.

II.2 The threat of chemical and biological weapons

As farfetched as it may seem, one of the reasons that explains the continued concern about the proliferation of biological weapons is one that gives rise to the possibility of future technological advancements making the current theories about controlling the basic functions of human beings a reality, starting with the wide range of possibilities genetic engineering has to offer. In addition to this, there remains the strong possibility to transfer capabilities between States and non-governmental groups, more specifically, terrorists. Contrary to nuclear weapons, it is difficult to precisely identify the origin of biological weapons, in terms of the specific laboratory and country in which they were produced. Under these circumstances, the hypothesis of this kind of exchange – from a national State, with or without explicit governmental consent, to a violent group – becomes a potential reality. Meanwhile, these actors are still able to escape the accusations of guilt, and the likelihood of reprisal.

Although the dismal panorama painted by some possible developments of the technology applied in this field should not be disregarded, its current abilities fit better into the world of science fiction than the analysis at hand. In short, it is highly unlikely that the use of real biological and chemical weapons gives a substantial tactical advantage to their owner; strategically, both continue to be eclipsed by nuclear arms. On the other hand, even on a small scale their use is extremely complex. This was revealed in the repeated failures of the Aum Shinrikyo (Supreme Truth)²⁴ sect – in their intention to sow panic and destruction using the framework of their violent agenda carried out in Japan – despite having more than enough financial and technological resources to carry out their plans.

As previously mentioned, chemical weapons have a lot in common with biological ones, especially in reference to their “dual use” and “traceability” in order to identify the origin of their production and, thus, the responsibility of their use. They also suffer from a negative image that adds to the secrecy and lack of transparency, present in other categories of armament. This makes public scrutiny more difficult and thus hinders the international community in gain the necessary means to control them or, better yet, eliminate them. In all cases, although chemical and biological weapons are more widespread than WMD – mainly due to technical reasons (they are accessible to actors with average technology and economic resources) – their military use continues to be highly complicated. As a consequence, it is very unlikely that they would play a decisive role in determining the course of a violent conflict, as would the case with nuclear weapons.

The impact of chemical and biological weapons may be very serious, both in terms of direct victims as well as the psychological effects on the affected population. From a state point of view, however, there are few strategic reasons today to invest large quantities of resources into these programs. Keeping in mind the complexity of their use and the resulting danger to the troops themselves, their tactical effectiveness is very low especially in comparison to conventional alternatives. Their strategic importance is not much either – as has been demonstrated in the various wars where they have been employed (they did not have much impact on the dynamics of the

²⁴ After ten failed attempts, their only “successful” attack occurred in July 1995 when they used sarin gas in Tokyo’s metro.

conflict neither in WWI nor in the Iraq-Iran war of the 1980s). Finally, their power of dissuasion is minimal or inexistent.

Consequently, the idea that these weapons are a cheap alternative to nuclear arms does not hold: while nuclear weapons have served as an absolute dissuasion mechanism in terms of state conflicts, chemical and biological weapons have simply been an alternative to use on the battle field. In a globalized world, where the pressure of public opinion and other actors is each time more decisive for the successful resolution of violent conflicts, the cost of using these weapons within a “hot” conflict will always be higher to any potential benefit in relation to the direct enemy. This argument may also be used, even more convincingly, on a domestic scale – as illustrated in 1988 with the failed attempt by Saddam Hussein to control the Kurdish population through the use of chemical weapons.

On the contrary, non-state actors, for whom public opinion has little or no importance, may find the use of these kinds of weapons beneficial. This applies to combat situations – for instance, and hypothetically, in a new confrontation between Hezbollah and Israel – as well as for terrorist attacks. Even so, going back to the argument made previously with respect to nuclear arms, it is difficult to imagine that there would be governments willing to offer tactical possibilities to groups beyond their control – in the case of Hezbollah, for instance, it seems correct to assume that the use of chemical weapons by the Shia militia would cause immense damage to Syria and Iran.

With regard to terrorist activities on an international scale, it is not easy to imagine that there would be a state – although there may be some elements within the government apparatus – willing to face the consequences of being directly involved in an attack of this kind. As was mentioned above, although the possibility of verifying the origin of these weapons is not as straightforward as it is with nuclear arms, it remains unlikely that any current government – the Taliban regime was a clear exception – would be willing to invest serious resources only to supply terrorist groups with something that is accompanied by such danger to the national security of that state itself.

In parallel, the risk of losing control of the process is also rising. This comes as the result of the unstoppable technological advancement, which allows terrorist groups to consider the use of these arms in certain cases. In fact, the less advantageous the

weapons become on the classic battle field, the more attractive they are for the terrorists. The emergence of “radiological terror”, for example, clearly shows how weapons developed through government programs may end up being used by groups beyond the control of the state²⁵.

All in all, despite the strategic importance of nuclear weapons being a decisive factor in the current systems of security and global defense and, therefore making it difficult to imagine the world free of these tools of massive destruction – there are real possibilities of mobilizing the political willingness of the international community to eliminate these types of arms (chemical and biological) from the WMD category. Some of the main reasons are:

- They are difficult to manage on the battle field.
- From a strategic perspective, they do not guarantee the survival of the State.
- They have a relatively small impact during a war.
- The political and diplomatic price is very high and, in contrast to nuclear arms, they are not a sufficient deterrent to prevent the outbreak of war.
- The risk of accidents or access by non-governmental groups is very high. Therefore, they increase the risk for the original weapon’s holder to suffer retaliation.

II.3 The future of chemical and biological weapons

The possibility of getting rid of chemical and biological weapons, in a global-scale process that would have great importance for the Mediterranean, is currently considered a realistic option. The motor behind such steps is not so much fear that these weapons induce, but rather the contrary, i.e. the lack of fear that surrounds them: the strategic benefits for any holder to maintain these arsenals are not enough to justify the costs that would have to be endured if regional powers and the international community increased their pressure in pursuit of this goal. For the international community, the importance of eliminating them from the Mediterranean scene is mainly linked to the fear represented by international terrorism and its ability to gain access to these

²⁵ J. Acton, M. Brooke Rogers & P. D. Zimmerman (2007): “Beyond the Dirty Bomb: Re-thinking Radiological Terror”, *Survival*, 49(3), pp.151-168.

weapons. For the region as a whole, the elimination of these kinds of WMD would contribute considerably to the improvement of trust and cooperation, barely present today.

On the other hand, research programs in these fields are of great complexity. They not only have an impact on activities of a strictly civil and commercial nature – oriented towards the peaceful use of the acquired technologies – but also some actors from the region (like Israel and Iran, for example), would like to permanently maintain the possibility of reentering the game. This would be the case if new technologies were available, which they would see as advantageous for their respective strategies or, more worrisome yet, if they detected that the opposite can provide certain advantages in this field. Even so, it is feasible to improve the cooperation in this area – at least in terms of increasing transparency and cooperation among the related activities.

The bases on which the process of total disarmament of these weapons may be founded have already been established by the set of norms and guidelines agreed upon during the last decade²⁶. Adding to that all that was established in the Sixth Review Conference of the BTWC, held in 2006²⁷, assuming that it deals with relatively modest agreements, but with a clearly promising orientation.

However, on a wider scale, the big challenge for the international community would be to take advantage of the fact that these weapons no longer have the same strategic importance as in previous times and establish an international consensus for their complete eradication. Led by the principal European countries, the international community would have to be willing to pay a high price – economically and diplomatically – to reach its final objective, defeating the resistance that still manifests itself among the different national actors. Apart from other international security problems, it is highly recommended to avoid the high level of misunderstanding in other areas (as the one that affects Iran), which ends up blocking possible exit ways that are now present in the chemical and biological sphere. For this, it is equally essential that

²⁶ For an outline of the current situation see Graham S. Pearson (2006): “The Importance of Implementation of the General Purpose Criterion of the Chemical Weapons Convention”, *Kemijau Industri*, 55(10), 413-422, <http://knjiznica.irb.hr/hrv/kui/vol55/broj10/413.pdf>. Also, Nicholas A. Sims (2007): “The Future of Biological Disarmament: New Hope After the Sixth Review Conference of the Biological Weapons Convention”, *The Non Proliferation review*, 14(2), <http://cns.miis.edu/pubs/npr/vol14/142toc.htm>

²⁷ http://www.opbw.org/rev_cons/6rc/6rc_press.htm

the existing hostility – for instance, between the United States and Iran – does not infiltrate all multilateral conferences – as it has, unfortunately, been happening recently.

Against this ambition goes the fact that this subject is not being given the necessary priority. Therefore, there is a risk that the existing window of opportunity ends up closing itself in the short-term and other actions will continue to fuel the tension. Given that state use of these weapons is becoming less likely, the countries that are still involved in chemical or biological proliferation are not doing so out of necessity, but because they do not see enough reasons and incentives to quit doing so. To encourage a change in this matter, it is necessary that the international community accepts the goal as a priority of its agenda. That it makes it clear there will be diplomatic costs for those who do not cooperate and offers important incentives in order to stimulate interest to incorporate in the process of disarmament. The mechanisms to reach this already exist; what must come next is not to lose the opportunity.

In addition to signing the two conventions, remaining loyal to the obligation to destroy the arsenals and close programs, there are other necessary steps to be taken in order to consolidate the process with real possibilities of success: a) manage to get the conventions universally adhered-to; b) eliminate the grey zones that can hide the desire to deviate from the text and spirit of these norms; c) improve the mechanisms of control and inspection to keep non-state actors away from gaining access to these materials; and d) strengthen the legislature of the signatories, with the creation of national authorities that serve as the international point of liaison and collaboration to avoid unwanted use of the arsenals or programs that still exist or could be devised.

III. Missiles: the fourth type of WMD

Contrary to chemical or biological weapons, military missile programs are a key component of any WMD strategy, even though they are frequently omitted in the analysis of crisis situations. The most important aspect of this principal, albeit not only²⁸, delivery vehicle is its ability to project power (according to its range) for those who possess them. They harbor significant destructive power when armed by conventional payloads, but their full strategic importance can only be realized when carrying nuclear, chemical or biological warheads. It is because of this that missile programs generate so much anxiety throughout the Mediterranean security agenda. However, it should also be noted that non-proliferation attempts, both at a regional as well as at an international level, are halfhearted or non-existent.

Within the framework of a “preventive war” that was developed in Washington, concepts from the Cold War – such as “preemptive” attacks - have grown in importance once again. This disquieting approach permits a nation to take anticipatory action by means of an attack in response to a hypothetical threat that has not materialized yet. Israel has adopted exactly this strategy, as was shown, for example, by its strike on an alleged terrorist camp in Syria. Another element to consider when attempting to understand the growing importance of missile technology is the gradual development of the US strategic defense system (popularly known as anti-missile shield). Other actors are increasingly searching for ways to overcome this development by increasing payload capacity and range of their own missile systems.

Although this process has so far been unstoppable, there seems to be an increased unease about the blatant and continuous interest in developing these weapons and the apparent difficulties in halting their proliferation. In any case, any WMD program requires the parallel development of delivery systems. Of these, missiles – typically ballistic, but increasingly cruise missiles - are the most common. While at a global level countries such as Pakistan, India, China and Japan are in the process of updating and expanding their land-based cruise missile (LACM) capabilities, in the Mediterranean Israel’s monopoly in this area is being threatened by similar programs in Iran. Teheran is not only looking to attend to its own necessities, but is also reinforcing

²⁸ This category also includes various types of aircraft, unmanned aerial vehicles (UAVs), space vehicles and land-based platforms such as nuclear mines and even “nuclear suitcases”.

its alliances. Recent proof of this is the supply of new generation missiles and even unmanned airplanes to the Lebanese group Hezbollah.

Globalization and new technologies have augmented the possibilities for the diffusion of knowledge and information, and thus offer new ways to develop weapon systems. Nonetheless, missiles remain an area accessible to only few nations. The development of the Iranian LACMs, for example, is almost completely dependent on information and material imports from Russia, Chinese, North Korean, German and French sources. Even Israel, which has a significant capacity to research and develop its own missiles, relies on other nations for its medium-range program. Its most recent version, the Jericho-3²⁹, is based on knowledge transferred from the French company Dassault (who cooperated in developing the Jericho-1 version) and the US government (in the case of the Jericho-2, which is similar to the MGM-31 Pershing). With respect to the other countries in the region, any missiles that exist in their arsenals have been directly purchased from foreign suppliers.

This dependency on the international market for the development of missile systems has not led to better control systems to avoid proliferation. This is mostly due to the way in which the nature of these arms has been viewed. Traditionally they have been considered conventional weapons, and as such their stockpiling and development never received the public or diplomatic attention that non-conventional weaponry got. Because of this, for decades there was no significant effort to better define the grey areas which have permitted the trafficking of regular materials (parts and subcomponents) and complete systems. As in other areas, commercial interests have become intertwined with political ones, and the focus has become the reinforcing of allies while denying access to all others. Stated differently, policy has not been based on a genuine impulse to adhere to non-proliferation. Instead, it has focused on selective criteria that are not so much based on the intrinsic dangers posed by these developments but rather on avoiding that it would go against the specific interests of the producer or seller.

In any case, during these past years there have been various attempts to strengthen the non-proliferation regime with respect to missiles and related technologies. This dynamic has been driven, in part, by the conviction, that missiles are

²⁹ Probably operational since 2005.

essential elements of WMD proliferation. The most important reason, however, has been the acceleration in the spread of new technologies since the Cold War, and, especially, the concern about the nuclear programs of Iran and North Korea³⁰.

The clearest result of this newfound willingness to take action has been the Missile Technology Control Regime (MTCR) that was set-up in 1999. It includes 34 nations that commit to avoid uncontrolled diffusion of these devices and related technology (Table 6 contains a list of participants and its principal objectives). In November 2002 the work done within this framework led to the approval of the International Code of Conduct against Ballistic Missile Proliferation. This integrates 119 members and established restrictions similar to those of the MTCR, albeit more general and limited. Oddly, even though the MTCR includes both ballistic as well as cruise missiles, the 2002 code of conduct does not mention cruise missiles. This omission has, voluntarily or not, contributed to convey a certain sense of legitimacy upon the acquisition of LACM over the past few years³¹.

III.1. Israeli Missile Capabilities

Israel (see Table 3) has the most advanced missile program in the Mediterranean region with the exception of France. It has its own capacity as both a producer as well as an exporter in this terrain, but the program is still based in large part on the close relations it maintains with the US. The two central elements of its program are the already mentioned Jericho missiles and submarines equipped with the cruise missiles (SLCM) Popeye Turbo and Harpoon which have the possibility to carry nuclear loads and thus represent “second strike” capability.

There is – similarly to its nuclear program – a thick cloud of secrecy surrounding its missile capabilities and its volume and characteristics. It is therefore only possible to base one’s analysis on rough estimates rather than exact figures, but there seems to be a consensus on the existence of roughly 50 Jericho-2 missiles with a range of between

³⁰ It is shocking to note that there does not seem to have been serious concern about the combination of missiles with chemical or biological weapons. After all, it was exactly this combination that caused an increased global interest in the subject of missile proliferation after the Iraqi attacks on Israel with Scud missiles in 2003. Seemingly without a just cause, chemical and biological weapons continue to be associated with terrorist activity whereas missiles tend to be almost exclusively linked to nuclear weaponry.

1,500 and 4,000km. It is also assumed that Jericho-3 is already operational and that its range could be as far as 7,800km. This would mean that Israel's missile reach covers all its possible strategic targets.

Furthermore, through close cooperation with the US, Israel has developed the Arrow system which is capable, at least in theory, of destroying Scud or similar ballistic missiles in full flight. This would convert its antimissile program in one of the most advanced on the planet.

Similarly to Iran, the main objective of the Israeli missile program remains the defense of its territorial integrity. This explains why its weapon systems are mostly defensive rather than offensive. However, in contrast to Iran, Israel has shown that it has a particular interpretation of what "territorial integrity" means, something which has led to the various preventive or preemptive strikes that it has carried out against its neighbors.

III.2. Iranian Missile Capabilities

After Israel, the Iranian missile program is beyond any doubt the most sophisticated of the region (see Table 3). Its sustained efforts – economic, technological and political – come from the experiences of its own history (such as those gained through its conflict with Iraq between 1980 and 1988), Iran's desire to enhance its position as regional leader, and the will to secure its territorial integrity. Its current calculations seem to consider open warfare initiated by its main military rivals – especially Israel and the US – to be highly unlikely. This possibility seems to have become even less likely since the Israeli military failures in Lebanon and the difficulties that Washington is facing in Afghanistan and Iraq. At the moment, Iran seems to be most concerned with the threat of preemptive attacks against its military or energy facilities.

A crucial step in dealing with this perceived threat is to develop effective defense mechanisms while at the same time having retaliation capabilities in case of an attack. From this perspective, missiles have become a fundamental asset given the obvious air of superiority that Iran's opponents possess. Although the ability to retaliate does not completely guarantee one's own safety, it does complicate the plans for any

³¹ This is the – critical and concerned - view of Dennis M. Gormley, in "Missile Defence Myopia: Lessons from the Iraq War," *Survival*, vol. 45, no. 4 (Winter, 2003-04), pp. 61-86.

potential aggressor. This is especially the case when nuclear weapons are part of the equation. Perhaps this explains the recent acquisition by Iran of eighteen BM25 missiles which can threaten any country of the region as well as some European nations thanks to its mobile platforms and 2,500km range.

The core of the Iranian program consists of the Shahab series, of which the Shahab-3 is the most advanced. Its latest version, the Shahab-3ER, has a range of 2,000km, which means that it can reach Ankara, Alexandria and Sanaa without the need for mobile launch platforms. In fact, there have been unconfirmed reports that Iran is investing in the construction of missile silos instead of opting for the traditional mobile platforms³².

In March 2006, Iran revealed that it had added the Fajr-3 ballistic missile (MIRV) to its arsenal which has the ability to overcome certain antimissile defense systems. This should be interpreted as a response to the recent Israeli and US programs, especially the already mentioned missile defense shield.

It can be concluded that in the same way that Israel justifies its efforts with respect to missiles, Iran explains all its actions in this field as purely defensive. In practice, both nations have capabilities to defend themselves against potential adversaries, but at the same time the means to attack if that is deemed to be in their interest. An unstoppable weapons race is continued in this way. As such it is creating ever greater instability in the Middle East, and there seems to be no end in sight.

III.3. Other missile capabilities in the Mediterranean

An overview of the region shows that from this perspective the quantity and variety of missile arsenals is considerable. Moreover, with the absence or ineffectiveness of mechanisms against their proliferation (Turkey is the region's only MTCR member), there are various programs underway to improve missile capabilities. Three of the most active countries – besides those analyzed above – should be highlighted as well: Syria, Egypt, and Saudi Arabia (see Table 3). They are not only relevant because they have relatively advanced programs, but especially because of their ties to the Iranian or Israeli programs.

³² Uzi Rubin in "The global range of Iran's ballistic missile program", Jerusalem Issue Brief V. 5, N. 26, 20 June 2006, Jerusalem Center for Public Affairs.

Syria seems to be cooperating with North Korea and Iran for the development of its short-range Scud-B. According to Israel – but unconfirmed by independent sources³³ - Damascus carried out test flights in February of this year. Likewise, there are indications that Syria has had Iranian support in order to improve its short-range DF-11 and DF-15 missiles that were purchased from China. Other detected transfers include the Russian short-range FROG-7 and the Misagh-1, which is a Chinese copy of the US portable land-to-air FIM-92 Stinger missile. Syria also seems to be developing its own capacity with respect to Scud missiles and is attempting to acquire the Russian Iskander-E (SS-X-26)³⁴.

If the above is accurate, that would mean that Syria has the ability to strike any part within the region. This would advance its dual strategy: to dissuade Israel (or, hypothetically, the US) from an attack and to continue being a threat to Tel Aviv in order to enhance its regional status in the Near East.

It does not seem outrageous to link the Syrian missile program with Hezbollah and its struggle against Israel. In fact, Syria has made it clear that it has learned from the recent conflict between Israel and its Lebanese ally, and that consequently it is reforming its tactics in order to be able to resist such a militarily superior adversary. The conflict between Hezbollah and the IDF during the summer of 2006 made it abundantly clear that missiles can make a decisive contribution to rebalancing a situation in which one side has military inferiority. It is that experience that seems to have caused the Syrian interest in expanding its own missile capabilities. It is not helpful, however, to analyze the Syrian situation only in terms of Israel. It is important to understand that Damascus also has a natural concern for simple survival of its regime and has a desire to be an important player in the region.

The case of Egypt is obviously very different, but given its economic and technological resources it also has possibilities to be a significant actor when it comes to ballistic missiles. It has been exploring this option through cooperation with North Korea for decades. This was especially centered on developing its Scud-B and Scud-C programs by basing the designs on the North Korean Hwasong 5 and 6 missiles. Severe pressure from the US, however, seems to have caused a halt in this cooperation, even though Egypt continues to possess significant development capacity on its own.

³³ “Israeli media says Syria has tested Scud,” Agence France Presse, 2 February 2007.

³⁴ According to the *Nuclear Threat Initiative* (www.nti.org).

Although there are no indications that in the short term there will be any radical change in its strategy, it is clear that Egypt remains interested in being a relevant actor in the Mediterranean. It is aware that an adequate missile arsenal is a fundamental aspect of such an ambition, and it is therefore likely that Cairo is keeping open its options to improve its capabilities in this area. The probable path would be by cooperation with partners that are less problematic in the eyes of Washington.

In many ways, the situation that Saudi Arabia is in resembles the Egyptian case. Both need to balance their regional ambitions and self-defense with their delicate relationship with Washington. Rather than guaranteeing its security in a region as tense as the Middle East through its own military means, Riyadh has opted for decades to rely on the protection of the world's leading country. Nonetheless, because of its regional ambitions, Saudi Arabia has become one of the world's leading buyers of weaponry and it has increasingly become interested in developing its own capabilities. Its significant economic resources allow it to explore new ways to develop more and better ballistic and cruise missiles in combination with its notorious interest to enter the nuclear field. Besides the known arsenals (see Table 3) there are no specific data available with respect to such plans, but it is not difficult to imagine that the concerns about Iranian ambitions of regional leadership as well as the potential weakening of US support are causing a Saudi reaction.

This overview of the regional situation, and the behavior of some of the most relevant actors in this area, can only be concluded with a note of concern. Although there have not been substantial advances with respect to non-proliferation, there are numerous indications of a significant and general interest in rearmament. This threatens to unravel the regional situation and increases the probability of new outbreaks of violence. This autistic dynamic, in which every actor is only concerned about itself, usually leads to an expansion of military capabilities because of the belief that this is the only way to ensure one's own security. It is the wrong road to take, and one on which the region has been stuck for a long time already, seemingly without having learned to go down different paths.

IV. Updated information and new realities³⁵

IV.1. Country updates

In addition to the previous reports, the changes during the past year can be summarized by a general overview provided in Table 1.

Table 1: Selected News 2006/2007		
	2006	2007
Saudi Arabia	Rumors about the start of a possible nuclear weapons program. Declared interest in a civil nuclear program in December 2006.	Rumors about interests in accelerating its nuclear program.
Egypt	Signed agreement with the US to avoid nuclear trafficking through its waters.	Plan to construct a 1,000Mw nuclear reactor at Al-Dabah (within 10 years) and three more reactors of 600Mw (for 2020)
Iran	“The Iranian case” is handed over to the Security Council. Continues to reject the suspension of its uranium enrichment activities. Expands its missile capacity to 550 units.	95% of the Bushehr constructed, although the completion of the Project continues to be delayed because of alleged financial problems. 22 projects of nuclear technical assistance to Iran suspended as a consequence of the Security Council sanctions. Plans to reach 54,000 centrifuges, although so far only an estimated 3,000 have been installed.
Israel	Continues to focus its nuclear strategy in large part on the threat from Iran. Prime Minister Ehud Olmert, status in an interview that Israel is “a nuclear power”.	Improves SPYDER, approves Iron Dome, tests Arrow; all anti-missile defense systems Bombs Syrian facilities that allegedly form part of a secret nuclear program.
Libya	Signs agreements with the US, Russia, and France in relation to civil nuclear energy production.	Continues its policy of renouncing WMD.
Syria	Reiterates the call for Israel to sign the NPT. Looks for foreign assistance to replace its Scud-B missiles.	Washington freezes US assets of three Syrian governmental organizations for being supposed WMD proliferators.
Turkey		The Turkish nuclear agency announces that the first civil nuclear facility will be finished between 2012 and 2015, as well as plans to construct a further two.

³⁵ The authors wish to acknowledge the contribution of Júlia Viladomat in writing this section of the report.

While realizing that one year is not a lot of time to notice radical changes in an area like WMD, the following pages give an overview of the situation in the region from a national perspective.

Algeria

Algeria has a 15Mw nuclear reactor (Al Salam) which has probable been upgraded to 40Mw. It is a member of the Chemical Weapons Convention but remains without integrating itself into the Biological and Toxin Weapons Convention.

Saudi Arabia

Although during the past year there has not been specific news about possible developments in its WMD programs, there is an increasing amount of signals coming from Riyadh about the desirability of a nuclear program to enhance national security. It is clear that the government is aware of the structural weakness of its military, and that it is increasingly uncomfortable with its excessive dependency on Washington's protection. As far as it is known, the country does not have the capacity to produce its own weapons. It is likely, however, that through the financing of other countries' nuclear programs, it has obtained the necessary knowledge and technology as well as ways to import component or weapons if Saudi Arabia decides that it wants to go down that path.

At the end of 2006 several prominent figures issued statements on the kingdom's interest in starting a civil nuclear program. Although there is no visible link with the Iranian problem, it seemed obvious that - at the very least - these declarations were a reflection of the growing anxiety that their Shia neighbor was causing. The fact that Saudi Arabia sees itself as the principal Sunni actor in the region only adds to the tension.

In December 2006, the members of the Gulf Cooperation Council – which includes Saudi Arabia – held meetings with a team from the IAEA about possible plans to develop a joint civil nuclear program. It is also worth pointing out that the country

keeps open its communication channels for nuclear matters with Russia, Pakistan, and even North Korea³⁶.

Egypt

Egypt's ambition to restore its nuclear program is increasingly becoming reality. The Minister of Electricity and Energy, Hasan Younes, stated in March 2007 that the country is training staff, preparing basic infrastructure, and searching for locations suitable for this project. Its objective is to construct ten nuclear power generators throughout Egypt. At the same time he announced that there were plans to construct nuclear facility at Al-Darah with a capacity of 1,000Mw, and possibly three other with 600Mw capacity. It is estimated that the first one will be ready within a decade, and the other three before 2020. So far, Egypt has not shown interest in a uranium enrichment program.

The international community has not been negative about the Egyptian decision to restart its nuclear program. The US, France and Israel do not consider it a threat to proliferation as long as there is no uranium enrichment. Russia, China and the US have shown interest in becoming involved in the project.

Younes emphasized this positive reaction from the international community with respect to the Egyptian plans, with eight billion Egyptian pounds (roughly a billion euros) invested in the energy sector during the 2007-2008 fiscal year. The World Bank declared in March of 2007 that it would be willing to finance any Egyptian nuclear program that is civil, and Russia and Egypt have reached a preliminary agreement to cooperate in this field. It should be noted, however, that the IAEA has stated that Egypt will need at least another ten years before it possesses nuclear capacity.

In the meantime, the Egyptian regime continues to update its antimissile capabilities through contract with Raytheon Co. In similar fashion, it is currently enhancing its SM-1, SHORAD and Skygard "Amoun" system through a contract with Boeing.

³⁶ The contacts with these last two countries seem to be the result of financial operations during the 1990s.

Iran

Besides its nuclear program on which all the world's attention seems to be focused, Iran successfully tested the sophisticated short range anti-air missile Tor-M1 of which it owns 29 units that were purchased from Russia. It also possesses the SSN4 (Raad) cruise missile which has a range of roughly 300km and can carry warheads of up to 500kg. Moreover, it can fly at low altitudes and thus avoid detection by radar or electronic means.

Iran has also confirmed that it is testing rocket launchers, emphasizing at every stage that its ultimate objective is not to launch missiles but rather commercial satellites into space³⁷. The Pentagon argues, however, that these launches are a step towards the Iranian development – to be finished in 2015 - of an Intercontinental Ballistic Missile (ICBM) with the ability to reach the US. It also seems³⁸ that Iran has successfully managed to convert one of its Shahab-3 missiles into a satellite launcher. This would mean that it has moved from single stage launch vehicles (such as the Shahab-3) to the technologically more complex two or three stages. If this is true – and there are many signs that it is – Teheran will have taken a highly significant step; the only difference between a satellite launcher and an ICBM is simply the load that it carries.

Israel

Israel's stance continues to be similar to the past years, albeit perhaps with a more proactive role. The declaration – or, possibly, slip of the tongue – by Prime Minister Ehud Olmert in December 2006 recognizing that Israel is a nuclear power has neither changed its traditional policy of calculated ambiguity nor the behavior of its neighbors.

In September 2007 documents circulated³⁹ which indicated that the country is attempting to gain an exemption status from the international non-proliferation regime while it continues to strengthen its ties with suppliers of nuclear technologies and materials.

³⁷ It is probable that the missile in question is a North Korean Taepodong-2 of which simply the exterior colors and flag has been changed. Even if this is the case, however, it still shows the level of cooperation with North Korea (and Pakistan) and Iran's willingness to move forward in this area.

³⁸ *Aviation Week&Space Technology*, 26 January 2007.

³⁹ George Jahn, *Israel Seeks Exemption From Atomic Rules*, Associated Press, 25 September 2007.

In the same month, Israel attacked facilities within Syrian territory. Unofficially it confirmed several weeks later that the strikes were aimed at halting a supposed nuclear program. This action, besides being a warning to its regional adversaries, can be interpreted as a new Israeli approach to strengthen its international image as an actor that is fighting proliferation. Notwithstanding the above, it seems unlikely that Syria is indeed developing such a wide-reaching nuclear program.

Overall, Israel combines its own capacity with support received from other countries. It continues to develop its nuclear arsenal in order to possess a radical element of dissuasion and hypothetical punishment. As such, it serves as an ultimate recourse when faced with possible scenarios of the state's destruction through regional conflicts and, especially, the threat it increasingly perceives from Iran. This explains, for example, that most of its research is centered on the development of systems against missiles and not on the development of missiles with greater ranges. As a consequence, Israel announced in November 2006 improvements of SPYDER – an anti-air protection system which can intercept medium range threats – and in February 2007 it approved Iron Dome - a short-range anti-missile defense system – which is expected to be operational within 24 months.

Also in February 2007, Israel successfully tested the anti-air defense system Arrow through simulations of the Iranian Shahab-3 ballistic missile. Arrow is capable of intercepting missiles at much higher altitudes than former systems, and thus permits a second attempt if the first one fails. Together, these three systems are developed to defend Israel against threats as varied as rudimentary Palestine Qassam rockets or the Iranian Zelzal. This requires an increase in the number of Arrow 2 systems and their deployment throughout the country⁴⁰.

At a diplomatic level, this year Israel signed the International Convention for the Suppression of Acts of Nuclear Terrorism, and, at a purely military level, the US Department of Defense prolonged support for the aforementioned Arrow system for another five years.

Additionally, the Israeli Airforce (IAF) presented in March 2007 a new version of its unmanned aircraft, the Heron, with autonomous flight capability of up to 30 hours at a speed of 225km per hour and at an altitude of 10,000 meters. This gives it a range

⁴⁰ Currently there are two series deployed: one in the south and one in the north. A third series could be deployed around the Dimona nuclear facility.

of 6,700 kilometers and, as such, to cover all of Iranian territory and the rest of its Middle Eastern neighbors. The IAF has already received eight Heron, and India has signed an agreement to purchase another fifty.

Also, on March 20th, 2007, Israel carried out military exercises in how to react to a hypothetical simultaneous missile attack against different targets in the country. Police, security forces and rescue services – including soldiers, firemen, ambulances, government officials and healthcare personnel – were all involved. The operation had as its main objective to show the lessons that had been learned from the violent confrontation between Israeli forces and Hezbollah during the summer before.

Libya

Libya continues its policy of renouncing WMD. Following this line, and at the request of Libya, the Organization for the Prohibition of Chemical Weapons extended its deadline for the destruction of Schedule 1⁴¹ chemical weapons to the 31st of December 2010. Similarly, the OPCW has insisted that Libya should destroy its Schedule 2 chemical weapons⁴² as soon as possible and, in any case, no later than the 31st of December 2011. In contrast to this, however, was the refusal by Libya to adhere to the agreement in June 2007, regardless of the fact that it had reached a deal with the US to destroy its arsenal. It seems clear that Libya is not willing to break its promises, but that those delays have been caused by economic difficulties.

On the other hand, the Russian Minister of Foreign Affairs stated in April 2007 that the Russian Atomic Energy Agency will cooperate with Libya in the development of peaceful use of nuclear energy, especially for medical purposes.

Morocco

Morocco forms part of the NPT and its actions in this area have been limited to a recent request to construct a small nuclear research reactor. This was subsequently authorized by the US government, and construction began shortly afterwards.

⁴¹ Weapons based on “schedule 1” chemicals. They are labeled as “high risk”, and include sarin and VX.

⁴² Weapons based on “non-schedule 1” chemicals. They are labeled as “significant risk”, and include phosgene.

There is no indication that the country has chemical or biological weapons. It is a signatory of the BTWC and it has also signed, but not ratified, the CWC.

Syria

Syria continues to insist that it is not developing a nuclear program and that it has no intention to become a nuclear power. However, it emphasizes that it might be forced to go down that path in the future as the only available alternative to deal with its high national energy consumption (growing at 10% annually) and its dwindling oil reserves.

Besides the problems caused by the alleged existence of a nuclear program, Syria finds itself in an even more delicate situation because of its possession of chemical weapons. Even if this arsenal was initially created because of national security concerns, its mere existence has become a source of conflict as it makes its neighbors feel threatened. It seems clear that abandoning these programs would help the regime and the country to improve its security situation. On the other hand, it is difficult to imagine such a decision to be taken given the significant efforts over many years that have gone into them.

From an analytical perspective, it seems prudent for Damascus to reexamine its priorities and evaluate if maintaining its chemical arsenal compensates for the costs⁴³ and for the risks of more serious attacks than the one on the 6th of September 2007.

With respect to missile development, Israeli media announced in January 2007 that Syria had tested a Scud D, a short-range (700km) ballistic missile which could hit any part of Israel. Also, according to intelligence sources, Syria is developing new capabilities for the rest of its Scud arsenal, and is attempting to acquire the Russian Iskander-E (SS-X-26).

Turkey

This year, Turkey announced plans to construct three nuclear energy generating facilities. They would have a capacity of 5,000Mw at a cost of roughly 5.4 billion euros, and are supposed to be operational somewhere between 2012 and 2015.

⁴³ As happened on January 4th, 2007, when Washington decided to freeze US assets of three Syrian governmental organizations which had been accused of being proliferators of WMD.

Although the increasing fear caused by the Iranian nuclear program has renewed the national debate on the necessity to react to the perceived threat, there is no proof that Ankara has decided to initiate any type of military nuclear program.

IV.2 Updated Tables

Table 2: Overview: WMD in Mediterranean countries				
Country	Biological	Chemical	Nuclear	Ballistic Missiles
Saudi Arabia	<i>None</i>	<i>None?</i>	<i>Research?</i>	<i>Yes</i>
Algeria	<i>Research</i>	<i>Research?</i>	<i>Research</i>	<i>No</i>
Egypt	<i>Development?</i>	<i>Reserves</i>	<i>Research</i>	<i>Yes</i>
Iran	<i>Development</i>	<i>Deployed</i>	<i>Development</i>	<i>Yes</i>
Israel	<i>Production capability</i>	<i>Production capability</i>	<i>Deployed</i>	<i>Yes</i>
Jordan	<i>None</i>	<i>None</i>	<i>None</i>	<i>No</i>
Lebanon	<i>None</i>	<i>None</i>	<i>None</i>	<i>No</i>
Libya	<i>Finished</i>	<i>Finished</i>	<i>Finished</i>	<i>Yes</i>
Morocco	<i>None</i>	<i>None</i>	<i>None</i>	<i>No</i>
Mauritania	<i>None</i>	<i>None</i>	<i>None</i>	<i>No</i>
Syria	<i>Research?</i>	<i>Deployed</i>	<i>Research</i>	<i>Yes</i>
Tunisia	<i>None</i>	<i>None</i>	<i>None</i>	<i>No</i>
Turkey	<i>None</i>	<i>None</i>	<i>None</i>	<i>Yes</i>
Yemen	<i>None</i>	<i>None?</i>	<i>None</i>	<i>Yes</i>
Legend: - Production capability: Capable to produce WMD, without having produced significant quantities. - Deployed: Nuclear, chemical o biological weapons integrated into the armed forces and operational. - Development: Involved in activities to develop production capabilities. - Research: Involved in dual-use activities (civil, although with potential to be used as military means). - Finished: Production in the past. Has dismantled the program and its ammunition.				
<i>Sources: CNS, JCSS</i>				

Table 3: Programs of selected missiles				
Country	Missile	Quantity	Range (Km)	Pay Load (Kg)
Iran	Shahab-1 (Shehab-1, Hwasong-5, Scud-B)	200-300	320	1.000
	Shahab-2 (Shehab2, Hwasong-6, Scud-C)	100-150	500	1.000
	Shahab-3 (Shehab-3, Nodong)	25-100	1.000	1.000
	Shahab-4	1-2 prototype	2.000	1.000
	Shahab-5 (ICBM)		10.000	1.000
	Tor-M1	29	short range	-
	SSN4 (Raad)	1	300	500
Israel	Lance (SRBM)		130	450
	Jericho I (SRBM)	~50	500-650	450-500
	Jericho II (MRBM)	~50	1.500	1.000
	Jericho III (IRBM) under development		4.800	unknown
	Popeye (SLCM)		200-350	200
	Harpoon (SLCM)		120	200-220
Syria	SS-21 (Scarab)	200	70	160
	Scud-B (SS-1C, R-17 Elbrus)	200	300	1.000
	Scud-C (Hwasong-6)	60-120	500-600	1.000
	Scud-D? (Nodong 1)		700	1.000
Saudi Arabia	DF3-A/CSS-2	50-120	2.200	2.000
<i>Sources: GlobalSecurity.org, fas.org, SIPRI</i>				

Table 4: Summary of BTWC and CWC framework

<i>Convention</i>	<i>Year</i>	<i>Results</i>
<i>BTWC</i>	1972	Currently, 158 countries (with 16 pending ratification) have signed the agreement prohibiting the development, production and storage of biological and toxin weapons.
1 st RC	1980	Agreement reaffirmed by the members.
2 nd RC	1986	Beginning of the verification system and ways to create trust.
3 rd RC	1991	Expansion of the ways to create trust.
4 th RC	1996	New protocols of verification.
5 th RC	2001	Without a final declaration due to a veto by US. Agreement about annual meetings to strengthen the convention in terms of its mechanisms of action in the area of security, international response against its possible illegal use or related illnesses, institutional support for detection and reaction, and a code of conduct for the scientific community.
6 th RC	2006	Recuperation of the “positive dynamic”, lost following the failure of the 5 th CR. Agreement about next the steps to discuss – but not negotiate – the different aspects of the Convention.
<i>CWC</i>	1993	182 members dedicated to the prohibition of development, production and storage of chemical weapons, and to the cooperation with mechanisms for their verification and control.
1 st RC	2003	Evaluation of the existing mechanism and reaffirmation of political willingness through two final documents: The Political Declaration and The Revision Document
2 nd RC	2008	-
<p>Legend: BTWC: Biological and Toxin Weapons Convention. RC: Revision Conference. CWC: Chemical Weapons Convention.</p>		
<p>Sources: www.opbw.org; www.opcw.org</p>		

Table 5: Participation of the Mediterranean countries in the BTWC and CWC

	1972	1973	1974	1975	1979	1982	1984	1993	1995	1996	1997	1998	2000	2001	2002	2004	2007
Saudi Arabia	SIG RAT							SIG		DEP							
Algeria*								SIG	DEP					SIG RAT			
Egypt*	SIG																NFP
Iran*	SIG	RAT						SIG			DEP						
Israel*								SIG									NFP
Jordan	SIG			RAT							DEP **						
Lebanon	SIG			RAT													NFP
Libya						APR		SIG								DEP	
Morocco*	SIG							SIG	DEP						RAT		
Mauritania*								SIG				DEP					NFP
Syria*	SIG																NFP
Tunisia*	SIG	RAT						SIG			DEP						
Turkey*	SIG		RAT					SIG			DEP						
Yemen	SIG				RAT			SIG					DEP				
Other Mediterranean Actors																	
United States*	SIG			RAT				SIG			DEP						
France*						APR		SIG	DEP								
United Kingdom*	SIG			RAT				SIG		DEP							
* = Member of the UN Conference on Disarmament. ** = Accession instrument deposited.																	
SIG – Signed; RAT – Ratified; APR – Approved; DEP – Deposited; NFP – No Formal Participation. BTWC: Biological and Toxin Weapons Convention CWC: Chemical Weapons Convention.																	
Fuentes: www.opbw.org ; www.opcw.org																	

Table 6: Basic Information about MTCR

<i>Members</i>	Germany, Argentina, Australia, Austria, Belgium, Bulgaria, Brazil, Canada, Denmark, Spain, United States, Russian Federation, Finland, France, Greece, Hungary, Ireland, Israel, Italy, Japan, Luxemburg, Norway, New Zealand, Netherlands, Poland, Portugal, United Kingdom, Czech Republic, Republic of Korea, South Africa, Sweden, Switzerland, Turkey y Ukraine.
<i>Objectives</i>	<p>To limit the diffusion of technology and systems – missiles with a minimum of 500kg pay load and 300km range and unmanned aerial vehicles (UAV) – used as missiles to launch nuclear weapons.</p> <p>Cooperation and transparency in related commerce.</p>

V. Appendices

V.1. List of acronyms

ABM – Anti-Ballistic Missile Treaty.

WMD – Weapons of Mass Destruction.

BTWC - Biological and Toxins Weapons Convention.

CTBT – Comprehensive Test Ban Treaty.

CWC - Chemical Weapons Convention.

US – United States of America.

ICBM – Intercontinental Ballistic Missile.

IDF – Israeli Defense Forces.

IRBM –Intermediate-Range Ballistic Missile.

LACM – Land Attack Cruise Missiles.

MIRV – Multiple Independently Targetable Re-entry Vehicle.

MLRS –Multiple Launch Rocket System.

MRBM –Medium-Range Ballistic Missile.

MTCR - Missile Technology Control Regime.

IAEA – International Atomic Energy Agency.

UN – United Nations.

OPCW – Organization for the Prohibition of Chemical Weapons.

NATO – North Atlantic Treaty Organization.

ENP – European Neighborhood Policy

SLBM – Submarine-Launched Ballistic Missile.

SLCM – Submarine-Launched Cruise Missile.

SRBM – Short-Range Ballistic Missile.

SSBN –Ballistic Missile Submarine.

NPT – Non Proliferation Treaty (of Nuclear Arms).

EU – European Union.

AMU – Arab Maghreb Union.

UAV – Unmanned Aerial Vehicle.

NWFZ – Nuclear Weapon Free Zone

V.2 Chronology of the Iranian nuclear program (October 2006 – October 2007)

28/10/2006. Iran confirms that a second set of centrifuges for uranium enrichment has been made operative.

23/11/2006. Mohamed El Baradei states that there are still issues pending before it can be affirmed that “undeclared” nuclear activities do not exist in Iran.

23/12/2006. Resolution 1737 is unanimously approved by the UN Security Council. It imposes sanctions against Iran for not having stopped its uranium enrichment process as it had instructed to do by Resolution 1696.

06/02/2007. Iran proceeds with the installation of 3,000 centrifuges in Natanz, against the ultimatum given by the UN Security Council. The final goal is the installation of 54,000 centrifuges.

10/02/2007. The IAEA suspends half of its technical assistance projects in Iran. It is a reaction against the lack of cooperation by Teheran, and/which depends on the approval of the organization’s committee.

22/02/2007. The IAEA publishes a report for the UN Security Council about Iran’s nuclear activities. It maintains that Teheran has accelerated its uranium enrichment program instead of adhering to the ultimatum set by the Council. It also includes information about the ongoing construction of nuclear installations, the activities in the Natanz installations and the growing quantities of centrifuges.

06/03/2007. The head of the Iranian atomic agency, Gholam Reza Aghazadeh, declares that Iran has begun the construction of a new nuclear installation in Darkhovin. It will have a capability of 360Mw.

09/03/2007. The IAEA committee approves the suspension of 22 projects dealing with Iran’s nuclear assistance, as part of the sanctions imposed by the UN Security Council.

21/03/2007. The construction of a nuclear reactor in Bushehr appears to have stopped following Russia's removal of its technicians and engineers. Russia alleges that there is a delay in payments by Teheran.

24/03/2007. Resolution 1747 is unanimously adopted by the UN Security Council. It imposes new sanctions against Iran, including the selling of arms as well as financial measures.

09/03/2007. The president, Mahmoud Ahmadinejad, announces that Iran has the capability to produce nuclear combustible at an industrial level.

23/04/2007. Russian officials declare that the Bushehr reactor will not be operational before the summer of 2008 – due to Iran's inability to make the necessary payments.

15/05/2007. Iran rejects the “Swiss plan” that proposes detain the uranium enrichment process in return for the suspension of UN sanctions.

25/07/2007. Iran warns that it would consider “illegal actions” – even threatening to withdraw from TNP – if UN sanctions in reaction to its nuclear program continue.

27/08/2007. The IAEA publishes a document drawn up by Iran, dealing with the cooperation between Teheran and the organization.

02/09/2007. Mahmoud Ahmadinejad announces that Iran has met important goals in its nuclear program and has 3,000 operative centrifuges for the enrichment of uranium.

11/10/2007. Iran asserts that it has provided information about its centrifuges during a meeting with the IAEA. Furthermore, it expresses its hopes for the viability of the Swiss plan in order to facilitate the dialogue between Iran and the international community.

V.3. Sources for tables and websites

Abbreviation	Name	Website
ACA	Arms Control Organization	www.armscontrol.org
OPBW	Biological and Toxin Weapons Convention	www.opbw.org
CNS	Center for Nonproliferation Studies	cns.miss.edu
CDI	Center for Defense Information	www.cdi.org
CTBTO	Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization	www.ctbto.org
FAS	Federation of American Scientists	www.fas.org
GlobalSecurity.org	Global Security.org	www.globalsecurity.org
IAEA	Internacional Atomic Energy Agency	www.iaea.org
IMF	International Monetary Fund	www.imf.org
ISIS	Institute for Science and International Security	www.isis-online.org
NTI	Nuclear Threat Initiative	www.nti.org
OPCW	Organisation for the Prohibition of Chemical Weapons	www.opcw.org
SIPRI	Stockholm International Peace Research Institute	www.sipri.org
The Bulletin	Bulletin of the Atomic Scientists	www.thebulletin.org
UNTD	United Nations Treaty Database	untreaty.un.org