

**Briefing Memo**  
**The Pre-emption against Nuclear Facilities Revisited**

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**Introduction**

In 1981, eight F-16 of the Israeli air forces bombed Osiraq nuclear reactor in the Al Tuwaitha Nuclear Research Center in Iraq. A few days later, then Prime Minister Begin officially confirmed that the country had conducted the operation as a pre-emptive strike for self-defence. The prime minister stated in a press conference, “Unless the bombing is done right now, Saddam Hussein will obtain nuclear weapons, which will make the situation impossible for us to cope with. Israel should never encounter another holocaust.” He also declared that Israel should take a similar measure if the country would be threatened with weapons of mass destruction (WMD) in the future.

This stance, called “the Begin doctrine”, was also maintained in 2007, when the Israel bombed what was considered to be a graphite-moderate nuclear reactor covertly being built by Syria in Al Kibar with assistance from North Korea. Because of the Iran's reluctance to fully cooperate in the International Atomic Energy Agency (IAEA) safeguards, the possible pre-emption is discussed in public domain. After attacking the Osiraq reactor, Tel Aviv justified the act as the exercise of the right of self-defence as defined by Chapter 7, Article 51 of the Charter of the United Nations. However, it has been pointed out that both “necessity” and “proportionality” are required for this sort of military pre-emption to be justified in the international community.

This article overviews the claims and discussions made by related countries on military attacks against Iranian nuclear facilities and examines whether the above two conditions can be met in case the attacks are conducted on the nuclear sites.

**Discussions on military pre-emption**

Discussions on military attacks against Iranian nuclear facilities focus on the following three issues. Firstly, the assessment of Iranian nuclear programme Secondly, the understanding of the timing of the military strikes; where the red line lies to implement the attacks. Finally, one must study whether pre-emption substantially reverse nuclear programme.

Tehran consistently claims that the country has been enhancing its nuclear development, which is limited to peaceful purposes and that it is an inalienable right granted by the nuclear non-proliferation treaty (NPT). However, an unprecedented report published by the Director General of the IAEA in November 2011 pointed out 12 areas suggesting the possible nuclear weapon development by Tehran, reporting some activities could have been conducted until quite recently. In response to this issue, Israel seems to consider that Iranian leaders have not decided to produce nuclear weapons, while they try to develop capabilities to produce them at any time they want, and the United States basically supports this idea (source: United States Senate Select Committee on Intelligence).

On the second issue, Iran has traditionally had uranium enrichment facilities in Natanz and is suspected of constructing the second uranium enrichment plant in the suburbs of Qom, which are located below the bedrock dozens of meters under the ground.

Conducting nuclear programme in solidly-protected facilities will enable Iran to continue uranium enrichment and other nuclear activities while the country suffers from military attacks. Israeli Defense Minister Barak cautions against this invulnerability of the Iranian nuclear facilities against military strikes and calls it “an immunity zone” (Source: Foreign Affairs). This viewpoint could be an important criterion for considering the red line defined by Tel Aviv. On the other hand, the United States defines the red line as a situation whereby Iran enhances the uranium enrichment from the current 20% to a weapons-grade (90% or more) and shows its clear intention to develop nuclear weapons. This might indicate that the two countries have certain differences in determining the timing of an attack, suggesting that Israel may start a military pre-emption against Iran before the country starts the production of weapons-grade uranium (Source: The Jerusalem Post).

In relation to the third issue, military experts in the United States particularly claim that military strikes may delay nuclear programme by Iran by a few years but cannot stop the regime from doing it at the end of the day. It is also considered that Washington has gone through a simulation to show a high probability of the United States being involved in conflicts in the Middle East in the aftermath of the military pre-emption, and is retaliated by, Iran. It is also reported that Israel doubts the rise of confusion and terrorism in the Middle East triggered by the air raid as suspected by the United States, meaning that Israel is more concerned about the diminishing opportunity to prevent Iran from developing nuclear weapons (Source: The New York Times).

### **Necessity of military attacks**

As previously noted, the article will first discuss the “necessity” of military pre-emptive strikes and of the two conditions required for the attacks. Scholars explain that taking military actions require those countries who engage in them to prove that they face an “imminent” threat. Then, is it possible to prove that nuclear programme by Iran is an imminent threat?

If the past historical cases, Iraq’s Osiraq and Syria’s Al-Kibar, are closely traced, one must recognise the difficulty in understanding comprehensive status of nuclear programme and their precise intention. Iraq had initially inquired the French government to purchase a nuclear reactor which was easily capable of producing weapon-grade plutonium, but the reactor France agreed to sell was a reactor of more proliferation-resistant. Moreover, later research suggests that Israel could not obtain enough intelligence of the Osiraq nuclear power plant although the reactor was placed under the IAEA safeguards. In terms of the nuclear facilities in Al-Kibar, a background briefing with Senior U.S. intelligence officials on Syria a few months after the airstrikes confirmed that it did not have sufficient intelligence on other facilities required to produce nuclear weapons, such as reprocessing facility. David Kay, a member in the United Nations Special Commission (UNSCOM) commented to an American newspaper and said that the organisation had not succeeded in collecting enough intelligence on what decisions were made on nuclear (weapon) programme by Iranian and North Korean leaders. Then Secretary of Defense Gates also mentioned the difficulty in determining the accurate timing of those countries to produce nuclear weapons, while Tehran maintains nuclear threshold status.

Despite the above issues, both Israel and the United States seem to consider that they can detect when Iran has decided to develop nuclear weapons. For example, there are such multiple sources as the expulsion of IAEA inspectors, the discovery of undeclared nuclear facilities and activities, and intelligence provided by Iranian scientists. It seems that Israel is more concerned than the United States about the risk of not being able to

detect these symptoms. As suggested by past examples, it is difficult to detect nuclear programme in the first place and impossible to accurately understand the intention of those countries engaging in it. Waiting for an imminent threat to appear will definitely make it impossible to stop nuclear weapons programme. Within Israel, some figures including Chief of the General Staff Gantz and former Director of the Mossad Dagan are against attacking Iran. Nevertheless, nuclear programme poses “an existential threat to Israel” (Prime Minister Netanyahu) and its strong awareness of threat perception appears to support military pre-emption.

### **Proportionality of military attacks**

Even the criterion of the necessity is met, scholars claim that the pre-emption should not exceed the reasons of a threat and requests us to consider the following two issues. The first issue could be related to physically limiting the airstrikes; preventing contamination resulting from the release of the radioactive materials. The literature explains that the Protocol Additional to the Geneva Conventions of 12 August 1949 (adopted in 1977) specially eliminates nuclear electrical generating stations as a target of a military attack “If such attack may cause the release of dangerous forces and consequent severe losses among the civilian population.” Some experts argue that other nuclear facilities including fuel fabrication and reprocessing facilities are not included in the Protocol and the judgment could be highly dependent on pre-emptor.

Nonetheless, the past military pre-emptions against nuclear facilities seemed to be carefully prepared and carried out. It might be fair to say that Israel prevented collateral damages including the contamination of the area by the release of radioactive materials. The attack against Osiraq was conducted before fuel rods were installed. Similarly, Al-Kibar was also destroyed before it was in operation. On the other hand, Iranian nuclear sites in Natanz and other locations have already started uranium enrichment activities and estimated to emanate large volumes of radioactive substances in case they are susceptible to military attacks. These circumstances may suggest that Israel has already lost the opportunity to attack nuclear facilities in comparison with its past opportunities of military strikes.

It should be noted that while there are differences as well as similarities between past cases and possible Iranian scenario. For instance, Israel is said to have sabotaged nuclear reactor parts prior to its shipment from France to Iraq and have assassinated Iraqi scientists. Likewise, it is also reported that at least five Iranian nuclear scientists so far have been assassinated. Furthermore, a computer virus named Stuxnet disabled centrifuges in Natanz uranium enrichment plant, suggesting the involvement of Israel and the United States behind these acts. Considering these similarities with the past events, it may be difficult to imagine that Israel is reluctant to implement traditional military pre-emptive strikes.

Second, is to verify whether military strikes on nuclear facilities can stop nuclear programme. The Osiraq and Al-Kibar facilities had only one nuclear reactor attacked, but Iran’s nuclear facilities are scattered across the country, with some facilities constructed deep underground. This is likely to minimize the damage caused by military strikes, prompting Iran to further protect and conceal the facilities and making the efficiency of military strikes doubtful. When Iraq’s Osiraq nuclear reactor was attacked, the country speeded up its nuclear programme in a more systemic manner. It is estimated that the number of engineers involved in the programme significantly increased from about 400 to 7,000, with related costs surged from about 400 million dollars to 10 billion dollars. Although Iraq initially had planned to extract plutonium, the country started several pathways to highly-enriched uranium (HEU), which could be easily concealed, after

Osiraq reactor was bombed. Iraq also made efforts to decrease the procurement activities of related technologies from abroad. Scholars maintain that Iraqi nuclear programme was reversed by the economic sanctions after the Gulf War and the subsequent invasion by the United States in 2003. Thus, nuclear reversal would require military strikes followed by political interventions enabling regime change; the military pre-emption against nuclear facilities is not enough to achieve the goal.

### Conclusion

Perhaps, it is daunting task to meet the criteria of “necessity” and “proportionality”, when it comes to military pre-emption against nuclear facilities and to define general criteria for them. In addition, the historical cases show that attacks on nuclear facilities could be carried out according to the threat perception of related countries as well as the existence of military capabilities required to make effective attacks. It is believed that Iran and North Korea had learnt the lesson from the Osiraq air raid and spread nuclear facilities and enhance their protection. There were arguments in *Foreign Affairs* over military action against Iran and even opponents to “Strike” showed understanding of their validity if all other options did not work. As Iraq, North Korea, Syria, and Iran have been implementing undeclared nuclear activities, the discourse on military pre-emption against nuclear facilities will surely continue as a means to ensure the nuclear non-proliferation regime. (This article was completed on June 11, 2012.)

### Resources:

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