Criteria for Risk Assessment of Conventional Weapons and Delivery Systems in a Regional Security Regime that Eliminates Weapons of Mass Destruction in the Middle East

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The topic I have been asked to address is the “Criteria for Risk Assessment of Conventional Weapons and Delivery Systems in a Regional Security Regime that Eliminates Weapons of Mass Destruction in the Middle East.”

Let me begin with several caveats:

- Every form of risk assessment related to arms control must be based on assumptions about the political situation and the security the political situation provides.
  - No arms control agreement can ever be perfect, and no amount of deterrence, verification, inspection, and confidence building measures can prevent a state from going to war, finding ways to evade the terms of the agreement, or cheating at some level.
  - A good political climate, however, can secure even a bad agreement.
  - The best form of arms control is a good peace.
  - No form of arms control is a safe substitute for political stability or peace.
  - The problems in risk assessment become most serious when an uncertain political situation, and/or unstable peace, mix with demanding arms control agreements.
  - This is the case we are likely to encounter here.

- Nations are not equal in terms of risk assessment.
  - Every country must always view the risks in arms control primarily in national terms. At the same time, any agreement must consider major arms races, risks within subregions, and region-wide risks, and external risks.
  - Powers that were not threatened by weapons of mass destruction before a “Regional Security Regime that Eliminates Weapons of Mass Destruction” will probably be less threatened during the implementation phase and aftermath of such an agreement than the others.
  - Similarly, nations which have achieved a stable level of conventional deterrence, or which did not threaten each other conventionally before such a regional security agreement probably have less reason to be concerned with the implementation and aftermath phases of such an agreement.
  - There is no “Middle East” from the viewpoint of arms control. Three major subregions: North Africa, Arab-Israeli confrontation states, and the Gulf. Each has a different character.
• The exception is proliferating powers like Egypt, Israel, Iran, Iraq, Libya, and Syria and particularly Israel, Iran and Iraq. Long-range strike systems; weapons of mass destruction, and ideology create a kind of region-wide linkage.

• Each subregion has different peripheral threats.
  • The Gulf, for example, cannot ignore proliferation in India and Pakistan or the problems in the Red Sea. The other subregions can.
  • Aside from Egypt, the Arab-Israeli confrontation states and the Gulf can ignore peripheral threats in Sub-Saharan Africa.
  • North Africa is seen as involved in Mediterranean security issues, largely because of drugs and immigration.

No security region can eliminate the risks imposed by weapons of mass destruction.

• There will always be room to cheat at the margin:
  • The “Nth nuclear weapon” in Israel.
  • Residual biological weapons in Syria and Iraq.
  • Sanctuary programs in trusted nations like Egypt or external nations like the Sudan.
  • Non-verifiable residual weapons become progressively more important as other weapons and programs are removed. There is a natural military progression naturally towards the use of biological and nuclear weapons as “existential weapons” against population centers with limited warning.

• There will always be room to evade at the margin:
  • Iraq’s “150 kilometer” weapons with very high payloads that become long-range weapons with lower payloads, and which allow quick stretching.
  • Production of cluster weapons allowing easy conversion to chemical and biological weapons.
  • Complex conventional warhead designs allowing quick conversion to weapons of mass destruction.
  • Theater missile defenses whose missiles can be used for long-range delivery.
• Creation of “kits” in the form of nuclear weapons assemblies without fissile material, nuclear programs always on the edge of producing fissile material.
• Purchase of precursors and stocks of material usable to make precursors.
• Advances in cruise missile technology steadily increase the availability of commercial components for building long-range, very accurate cruise missiles.
• The technology for converting aircraft and cruise missiles designed for other roles is steadily improving.

• **Technology will pose major challenges to such forms of arms control:**
  • Reduced need for nuclear testing; improved missile and missile warhead simulation.
  • Widespread production of insecticides.
  • Biotechnology, Genetic engineering: Ebola, anthrax.
  • Food processing and pharmaceuticals.
  • No agreement can eliminate a substantial capability to rapidly create a strike capability. This “break out” capability is an inevitable aspect of civil technology and the steadily growing economic and education sophistication of the region will make things worse, as will advances in computer modeling and simulation capability.
  • Do not need massive numbers to deal with key civilian and strategic targets; irony is need far larger “break out” capabilities to deal with an opposing military force as saw during the Iran-Iraq War.

• **These pressures to cheat and evade are driven by the weakest link:**
  • The most threatening, extremist, and aggressive state.
  • The least regulated and inspected aspect of the problem – tends to push towards biological weapons and cruise missiles.
  • Peripheral powers will try to exploit perceived weaknesses in the region.

• **There will always be the risk of asymmetric warfare**
  • Terrorism and proxy warfare becomes more desirable in some ways after a “Regional Security Regime that Eliminates Weapons of Mass Destruction:” Anonymous, plausible deniability.
• Technology advances in areas like GPS, weather models, smart PCs as triggers affect covert delivery.

• Once again, tend to push the user towards anti-population and existential strikes that critical weaken or destroy the opponent’s ability to fight and govern.

• The key limiting factor is the unknown and intangible character of biological warfare and smart, cheap, “untested” nuclear weapons. Until actual use takes place to “prove” the concept, no nation may be willing to take the risk.

I realize in making these remarks that there is a danger of appearing to argue against regional arms control involving weapons of mass destruction.

• Do worry about the phrase “eliminate.” Not always clear that this is the best practical objective of arms control until the region and its surrounding have a very high degree of political security and stability.
  • Risk driving violators towards existential conflicts.
  • Very low-levels of nuclear or biological capability tend to limit the attacking power to population targets.
  • Political costs of threats using forbidden weapons are so high may reserve any use to last minute crisis-driven threats or actual use.
  • Political costs of using such weapons are so high that any use may seek to be decisive; do so much damage that opponent cannot recover or recover for years.
  • May be better to seek arms control based on a stable balance of residual deterrence.

• In practice, however, the alternatives of an arms race involving weapons of mass destruction are much worse.
  • The creation of stable balances of terror and deterrents is largely a game-theoretic possibility.
  • The erosion of Israel’s nuclear monopoly and the increase in biological weapons efforts is a warning.
  • More and more declared and undeclared systems are being linked to unstable conventional arms races, risks of proxy wars, unstable escalation ladders in the hands of half-informed leaderships with unstable mixes of allies and enemies.
• The Iran-Iraq War and Gulf War have already conditioned regional powers to plan to use such weapons.

• Inevitable imbalances in capability mean launch on warning/under attack, covert use, and escalatory threats.

At the same time, these real-world risks create complex demands for the risk assessment of conventional weapons and delivery systems.

• There must be stability in terms of conventional war fighting and deterrence.
  • Cannot shape national forces for the worst case alone.
  • Golan, Kuwait, threat to Straits of Hormuz are examples of reason why.

• Must be careful about the risks of conversion.
  • Almost impossible to create an inspection and verification regime for bombs and warheads designed for dual use: Cluster munitions, smart guidance systems like GPS, etc.
  • Any long-range strike system can be used quickly and with little warning.
  • Removing the ballistic missile threat reduces the risk of using aircraft, drones (fly-by-wire), and cruise missiles against an opponent that cannot retaliate.
  • Removing the nuclear threat reduces the risk of using biological weapons against an opponent that cannot retaliate. Makes the “break out” potential of dry food processing, crop spraying, and pharmaceutical plants higher.
  • Whether or not the agreement regulates such capabilities, strategic intelligence becomes steadily more critical.
  • Any international or UN body may fail here to provide warning and intelligence; may need a third party or group of third parties: France, Russia, US to aid.
  • New forms of inspection may be needed of civil, academic, and industrial technology and industrial processes.

• Must be careful about the risks that hostile states will create strategic conventional bombing and missile capabilities.
  • There is also the danger that removing weapons of mass destruction will lead to a different kind of strategic arms race involving conventional weapons.
• Weapons of mass destruction are messy and politically undesirable killing mechanisms.

• The advances taking place in precision guided weapons, targeting, target planning and analysis will make it steadily easier to strike at the critical nodes in the economy and political character of the state.

• Serbia is a model of how not to do it, but three to four months may devastate Serbia’s economy and leave a legacy of political instability and isolation for years.

• Advances in GPS and electro-optics are moving accuracies to one-meter levels, and advances in electro-optical recognition systems are making it possible to precisely strike the most critical, vulnerable, expensive, and long-lead component in a complex industrial, infrastructure, and national command and control facility.

• Some advances in smart submunitions and long-range strike systems like ATACMs with ranges of 190-400 kilometers will give rockets a somewhat similar capability.

• Range is not always critical: Syria to Israel and vice versa; distance between Baghdad and Tehran is shrinking steadily in technological terms.

• Middle Eastern economies are growing steadily more sophisticated and vulnerable in critical areas like power and water

• Oil and gas provide a separate set of vulnerabilities. The IEA and EIA project a doubling of oil exports out of the Gulf area by 2020. Mines, anti-ship missiles, “soft strikes” against offshore oil and extremely expensive gas facilities, major distribution facilities, petrochemical plants, refineries, and ports will become steadily more serious issues.

• High technology powers with advanced conventional technology for tactical purposes – such as Israel -- will inevitably acquire such capabilities whether they intend to or not.

• **Conventional forces may have to provide additional war fighting and deterrent capability to guard against the failure of regional arms control involving weapons of mass destruction.**

• The other side of the coin is that a strong conventional “soft strike” capability can deter against violation of agreements seeking to eliminate weapons of mass destruction.
• Having a strong deterrent to attack the opposing nation, and not the body count, is the issue.

• May not work if a conflict is based on ideology or hate.

• **Must be careful about the risks of eliminating defense and protection capabilities to deal with a covert threat or break out.**

  • The creation of a “Regional Security Regime that Eliminates Weapons of Mass Destruction in the Middle East” does not necessarily remove the need for theater missile defenses, civil defense, or other defensive measures.

  • The “break out” problem will remain regardless of whether an agreement is reached and appears to be fully implemented.

  • Equally important to consider the risk of terrorism, proxy warfare, covert delivery.

Let me conclude with several key points:

• The nations of the region have little in common in the details of dealing with these issues because each faces a different mix of risks. Purely national solutions must be found to force planning.

• A “Regional Security Regime that Eliminates Weapons of Mass Destruction in the Middle East” can offer the region considerable hope of eliminating both a frightening arms race and horrible kinds of wars, but it is to some extent a technological oxymoron.

• Nations who are at risk must plan to guard against violations and break outs until they are truly at peace.

• A fixed level of Weapons of Mass Destruction designed for stability and deterrence may be a better practical solution.

• Regardless of what happens, conventional forces must be chosen and sized to deal with the risk of breakouts and violations until political confidence reaches a level where this is no longer possible.

• There is a natural contradiction between creating a conventional strategic deterrent to treaty violations and the “break out” use of weapons of mass destruction, and the risk such “soft strike” capabilities will be used aggressively.

• Put differently, a “Regional Security Regime that Eliminates Weapons of Mass Destruction in the Middle East” cannot eliminate a substantial risk of
conventional strategic attacks which will grow steadily more serious with time because of advances in technology.

None of these points are arguments against arms control per se. They are, however, a warning that arms control can never be a substitute for peace, political security, and well-designed military forces.

- Put differently, arms control cannot be shaped to deal with men as they should be, is must be shaped to defend against men as they are.