Recent incidents in Germany involving the attempted smuggling of fissile material from the former Soviet Union have heightened concerns that the proliferation of nuclear weapons in the Middle East could occur much sooner than previously expected. The emergence of potential new sources for fissile material and weapons -- in the former Soviet Union, North Korea, and elsewhere -- will greatly complicate counter-proliferation efforts and the estimation of timeframes and outcomes for nuclear weapons development efforts in the Middle East.

The Nature of the Problem

The emergence of new sources of fissile material and weapons increases the likelihood that nuclear aspirants such as Iraq and Iran could get the bomb in coming years unless far-reaching steps are taken to counter this development.

The United States faces an immediate proliferation challenge in the former Soviet Union. Effective material controls and accounting at nuclear facilities throughout the former Soviet Union are practically nonexistent. As a result, the diversion of fissile material could go undetected. And while safeguards on nuclear weapons are considered adequate, making theft difficult, this could change if the domestic political situation there were to deteriorate.

The United States faces a mid-term proliferation challenge in the Korean Peninsula. Despite ongoing negotiations with the United States, North Korea remains a potential nuclear power and, if permitted to retain its nuclear infrastructure, it could eventually produce nuclear weapons for export in order to earn hard currency.

The United States faces a long-term proliferation challenge in the form of plans by Japan, Russia, and France to build a new generation of breeder reactors for power production. These reactors are expected to dramatically increase the world's stockpile of plutonium, straining the existing safeguard systems and posing increased risks of diversion.

Finally, the disbanding of the Coordinating Committee on Multilateral Export Controls (COCOM) -- a Cold War era organization that controlled the export of sensitive technologies to the Communist Bloc -- without the creation of a successor regime to deal with the challenges of the post-Cold War era, has created new opportunities for technology acquisition by potential proliferators.

Nuclear Terror at the Doorstep?

The recent smuggling of nuclear materials has fueled concerns that terrorists groups might acquire fissile material or a weapon. Although possible, this does not appear very likely. First, terrorists lack the necessary funds; the asking price for nuclear contraband recently seized in Germany ranged between $100-$250 million for quantities below those required for a weapon. These are sums beyond the means of most terrorist groups. Second, even if terrorists could acquire fissile material, weaponization requires resources -- hundreds of skilled personnel and modern R&D facilities -- that only states possess. Third, even if terrorists could acquire nuclear weapons, most have anti-tamper devices that could prevent or greatly complicate their use or exploitation. For these reasons, terrorist groups are unlikely to get into this business on their own; rather, they are more likely to act on behalf of or in conjunction with a state sponsor.

New Proliferation Paths for Rogue States?

In the Middle East, Iraq, Iran, and Libya pose the greatest proliferation concern. All three have nuclear ambitions, and all have seen these ambitions thwarted by a lack of qualified personnel, financial constraints, the denial of technology by suppliers, or military action. For all three, acquiring fissile material or nuclear weapons from abroad may be the only way to achieve nuclear status in the near term. And because each of these states are politically isolated and subject to economic sanctions of one kind or another, they may all see the bomb as a way to end their isolation, overturn an unfavorable status quo, and quickly acquire regional power status.

In recent months, there have been several attempts to smuggle fissile material from Russia through Germany. It is still unclear how extensive this smuggling might be, or how much fissile material -- if any -- has gotten into the hands of potential buyers. Iraq was implicated in one of these episodes, and there is little doubt that it will exploit
its contacts in the former Soviet Union (especially in the military) in its efforts to acquire fissile material or nuclear weapons. For Iraq, acquiring the bomb would be the most direct and dramatic way to overturn its Gulf War defeat.

Although Iraq's known nuclear infrastructure has been dismantled by UN inspectors, it retains critical assets, including skilled and experienced personnel and a viable weapon design. Further, the possibility that it could mount a weaponization effort with resources on hand cannot be ruled out. And if weapons development and testing were to be restricted to small and inconspicuous facilities, such an effort might even escape detection by UN weapons inspectors based in Iraq.

North Korea is another potential source of fissile material or nuclear weapons for the Middle East. However, it is not likely to export either in the immediate future. Weak and isolated, it will probably focus on building its own nuclear arsenal before it produces for export, although this assessment could change if current negotiations between the United States and North Korea were to break down, and sanctions were to be imposed on North Korea increasing its need for hard currency.

The most likely customers for a North Korean bomb are Iran and Libya. Iran is North Korea's largest customer in the region; it has bought everything from small arms and ammunition to SCUD-C missiles, and it reportedly helped fund North Korea's NoDong-1 missile. Libya also has bought arms from North Korea, and is likewise reportedly interested in the NoDong-1. However, the future of North Korea's nuclear program will depend on the outcome of its ongoing negotiations with the United States.

Finally, if Japan, Russia, and France go forward with plans to build breeder reactors in order to provide for their future electrical power needs, the world stockpile of plutonium could grow dramatically in the coming years. The rapid growth of the world's plutonium stockpile could overwhelm safeguards and create new possibilities for diversion to Middle Eastern proliferators by corrupt officials.

**Implications of a Nuclear Break-Out in the Middle East: The Perils of Sudden Acquisition**

The sudden acquisition by Iraq, Iran, or Libya of a nuclear capability would undermine key U.S. interests in the Middle East. Because all three countries are beleaguered and isolated, and their leaders have sometimes shown a tendency to overplay their hand, the sudden acquisition of a nuclear capability might encourage rash or reckless behavior. It could also prompt these countries to follow the North Korean example and attempt to use their nuclear capabilities to wrest political concessions from the international community or to lift damaging economic sanctions.

The acquisition of a nuclear capability by Iraq, Iran, and Libya would produce -- almost overnight -- a major shift in the balance of power in the region, breathe new life into the forces of rejection in the area, and endow the country with a capability which the United States would find difficult to counter. In this regard, it is worth noting that rapid transitions in regional power balances in the past have often led to crisis or war: in 1955, a major Czech arms deal with Egypt helped bring about the Suez Crisis of 1956; the Iranian Revolution in 1979 and the subsequent collapse of Iran's military led to the Iraqi invasion of 1980, and; Iraq's growing sense of strength following its victory over Iran in 1988 led to the invasion of Kuwait in 1990.

Moreover, the sudden acquisition of a nuclear capability by Iraq, Iran, and Libya -- prior to the development of an appropriate doctrine for the use of these nuclear weapons, a clear understanding of their political and military utility and limitations, and the creation of adequate command and control arrangements -- is likely to have a destabilizing impact on the region.

Finally, the sudden acquisition of a nuclear capability by Iraq, Iran, or Libya, might spur countries which have thus far eschewed the bomb -- such as Egypt, Turkey, Saudi Arabia, and Syria -- to seek a protective U.S. nuclear umbrella or to pursue their own nuclear options, prompting a nuclear arms race in the region. The progressive spread of nuclear capabilities in the Middle East is likely to complicate the problem of deterrence, and pose new challenges to regional stability.

**Conclusions**

Nuclear proliferation is perhaps the most urgent long-term national security problem facing the United States. Managing this increasingly difficult problem will require the sustained involvement of the President, the elevation of this issue to the top of his foreign policy agenda, and in some cases his personal intervention with foreign leaders. Only in this way can the United States hope to deal effectively with the potential diversion problem in the former Soviet Union, to achieve a favorable outcome to negotiations with North Korea, to work with Japan, Russia, and France to find alternatives to the breeder reactor or solutions to the problems it will create, and to create a successor to COCOM to deal with the proliferation challenges of the post-Cold war era.

Michael Eisenstadt is military affairs fellow at The Washington Institute.