


# (U) Responsibility 3B: Implications of Technology & Geopolitical Trends

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# (U) Executive Summary of Geopolitical Trends for 2011-2016

**(U) Background:**

(S//SI//REL) The SINIOs identified 34 geopolitical trends that are likely to take place and to have broad impact upon SIGINT efforts against a number of targets in 2011-2016. These trends will bring a set of new challenges and opportunities that could require changes in SIGINT posture and development of new approaches in order to address them successfully. The 34 geopolitical trends were assessed against traditional factors used by the Warning community—probability, impact to the U.S. and its allies, and relative importance in comparison with current importance—in order to prioritize the trends.

## (S//REL TO USA, FVEY) Key Judgments

•The global landscape over the years 2011-2016 will continue to be shaped by **strategic threats posed by international terrorism fed by the growing spread of extremism, weapons of mass destruction** (WMD) with focus on a growing number of nuclear aspirants, and regional instabilities, particularly in the Middle East, Africa and South America, where **shifts in traditional power and new balances are likely to emerge.**

•Challenges will play out somewhat differently than in the past. The world of 2011-2016 will be distinguished by **increasing challenges to U.S. economic and foreign policy goals,** as the impact of the current global economic crisis creates future ripples and growing energy security and climate change concerns, with closely related environmental challenges. Alternative energy sources, while developing substantially during this period, are unlikely to be commercially viable by 2016. Additionally, **seismic shifts in global governance** are likely to occur as newer economically influential organizations and alliances like the Association of Southeast Asian Nations (ASEAN), Gulf Cooperation Council (GCC), and Brazil, Russia, India and China (known as the BRICs) begin to challenge long-established existing structures, such as the International Monetary Fund (IMF), World Bank and World Trade Organization (WTO).

•**Demographic factors**, particularly the **continued growth of the disenfranchised youth bulge** in South Asia and the Near East and a **rising coalition of anti-U.S. actors in key regions** of the world, will challenge U.S. authorities. This time period is also likely to see the **further rise of non-state actors** taking on functions and roles previously reserved for nation states.

•**Net-centric threats to the U.S. will also increase** as more and more adversaries and developing states - especially Asian and Middle Eastern nations - gain greater access to the Internet and to cyber-attack tools. This access will be facilitated by the increased availability of low-cost computers and sophisticated cyber intrusion/hacking tools and techniques. Third World states, non-government entities, terrorists and other bad actors can readily download attack tools and the global reach of the Internet ensures that attacks can originate from anywhere in an instant. Traditional cyber actors such as China, Russia and Iran will also remain strong threats.

•**Strategic military challenges**, posed by China's continued modernization of its weapons and overall military capabilities, Russia's increasing power projection and military modernization efforts, and increased intelligence operations against the U.S. by a number of states, may begin to erode the U.S.'s current status as sole global superpower.

**(U//FOUO) Table: Prioritized List of Geopolitical Trends for 2011-2016**
**(This matrix is classified S//REL TO USA, FVEY in its entirety)**

| *Priority* | *Trend* |
|---|---|
| 1 | Global Energy Security |
| 2 | China Military Modernization |
| 3 | Computer Network Exploitation Programs Threaten U.S. Information Systems |
| 4 | Disenfranchised Youth Bulge Leading to Political Instability |
| 5 | Extremism in Pakistan/Afghanistan |
| 6 | Nuclear Weapons: More Aspirants, Less Risk |
| 7 | Coalition of Anti-U.S. Actors in the Middle East and Beyond |
| 8 | Global Economic Stability |
| 9 | Middle East Peace/Stability |
| 10 | Russian Military Power Projection/Modernization |
| 11 | Terrorist Threat to European Countries |
| 12 | Risk to U.S. Homeland From Extremist Networks in Canada and UK |
| 13 | Global Food Security |
| 14 | Ubiquitous Computing |
| 15 | Nuclear Power  Growth and Monitoring Challenges |
| 16 | Persistent African Islamic Extremism |
| 17 | Aging Autocratic Leaders in Middle-East |
| 18 | South China Sea: Energy and Potential Conflict |
| 19 | Growing Cyber Capabilities among Third World and Non-State Actors |
| 20 | Continued Decline in al-Qa'ida's Power and Influence |
| 21 | Influence of Countries of Strategic Concern in Latin America |
| 22 | Internal Challenges Threaten Indian Strategic Influence |
| 23 | Impact of Presidential Elections in Key Latin American Countries |
| 24 | Prospects for Arms Control |
| 25 | European Union Accession (Central and East European States) |
| 26 | Chemical and Biological Weapons Programs on the Decline |
| 27 | Decentralization of Terrorist Activity; Rise of Small, Independent Cells |
| 28 | Turkey as a Regional Power |
| 29 | Democratization of the African Continent: Gradual Decline of Autocracy |
| 30 | Future of the United Nations and International Political Order |
| 31 | Climate Change |
| 32 | Alternative Energy Sources |

## (S//REL TO USA, FVEY) Key Drivers/Consolidated Geopolitical Trends for 2011-2016
**(alphabetical order)**

**Access to Energy and Resources.** Continued supply problems, and shortfalls in access to conventional energy sources (oil, gas) will have a significant impact on many developed states (U.S., China, India, Europe) resulting in fluctuating energy prices that will impact the global economy. Global food shortages could lead to possible rioting and political instability in countries of concern to the U.S. Expanding focus on nuclear power will prove insufficient and could bring accompanying proliferation monitoring concerns. Alternative energy sources based upon two lines of development—commercializing existing alternative power technologies (e.g. wind and solar) and investigating new alternative technologies (e.g. fusion power will grow as limits on petroleum production become more severe.

**Global Governance and Economic/Political Order**. Demographic factors, particularly the continued growth of the disenfranchised youth bulge in South Asia and the Near East and a rising coalition of anti-U.S. actors in key regions of the world will challenge U.S. authorities. Continued shifts in international financial markets towards newer economic organizations and alliances (ASEAN, Gulf Cooperation Council, BRICs) will challenge existing structures—IMF, World Bank and WTO. The changing nature of multinational organizations, including the United Nations and the European Union, and the increased role of non-state actors in global affairs, as individuals and organizations take on functions and roles previously reserved for nation states, will transform traditional balances of power.

**Net-Centric Threats.** Cyber threats to the U.S. will increase as more and more adversaries and developing states --especially Asian and Middle Eastern nations – gain access to the Internet and master increasingly sophisticated cyber intrusion/hacking tools and techniques. Increased availability of more capable computers at extremely low cost, making computer technology increasingly available to third world and non-state actors, could serve as a potential game changer in the divide between “haves” and “have nots.” Increasing access to virtual environments (gaming/video) offers increased opportunities for use by adversaries for operational applications. This trend will challenge U.S. ability to protect critical systems and infrastructures.

**Radical Extremism/Terrorist Threat.** The U.S. homeland will face an increased terrorist threat due to the spread of Islamic extremism, which will be exacerbated by a demographic youth bulge in Middle Eastern and South Asian countries, as well as an increasing danger from growing Muslim immigrant populations in Europe and Canada. It is likely that al-Qa’ida’s power and influence will continue to decline in this time frame with a growing trend towards decentralization of terrorist activity and an increase in the number of small, independent terrorist cells.

**Regional Stability and Influence.** The replacement of aging autocratic leaders in the Middle East, a gradual move away from autocracy towards democratization in Africa, the rise of authoritarian leaders in Latin America, Middle East peace or lack thereof, and changing composition of the European Union will present both new challenges and opportunities for U.S. foreign policy. India and Turkey both face internal challenges to their regional influence. As traditional balances of power shift, the emerging global landscape will take new and more complex forms, with some new centers of power increasingly opposed to the U.S.

**Strategic Military Challenges.** China’s continued modernization of its weapons and overall military capabilities, Russia’s continued flexing of its military muscles, and increased intelligence operations against the U.S. by both states, may begin to challenge the U.S.’s current status as sole global superpower. More nations will attempt to develop nuclear weapons in order to gain global status and attention and to deter potential adversaries, as state chemical and biological weapons programs decline in numbers. Future arms control agreements will be critical in this period as many existing treaties come to the end of their terms. The threat of non-state actors gaining access to nuclear weapons must be considered.