U.S./NATO-Russian Strategic Relationship and Missile Defense

Tytti Erasto, PhD, Roger R. Hale Fellow
Ploughshares Fund
terasto@ploughshares.org

FAS Workshop, Washington D.C. 17 May 2017
I BACKGROUND ASSUMPTIONS
1. BACKGROUND ASSUMPTIONS

A) Missile defense will play a key role in future U.S./NATO-Russian strategic relationship.

B) Russian concerns about *European Phased Adaptive Approach* (EPAA) are exaggerated but not baseless.

A) If the United States wants nuclear arms control, it must address Russian concerns about missile defense.
2. BACKGROUND ASSUMPTIONS

D) EPAA is currently not driven by stated security considerations: a nuclear/intermediate-range missile threat to Europe from the Middle East (rationale for Phase III in Poland) does not exist.

D) Suspending EPAA Phase III would be the easiest step towards addressing Russian concerns about missile defense.

D) As far as Russian motivations for developing the prohibited Ground-Launched Cruise Missile (GLCM) are dominated by concerns over missile defense, restraint on EPAA might also help to tackle the crisis over the Intermediate Nuclear Forces (INF) Treaty.
II CASE AGAINST EPAA PHASE III
3. EUROPEAN PHASED ADAPTIVE APPROACH, EPAA

• EPAA announced by President Obama in September 2009,
  • scaling down the Bush administration’s plans for 3rd Ground-Based Interceptor site (GBI) in Europe
  • adaptability to Iran’s actual, rather than hypothetical, capabilities

✓ “if the threat from Iran’s nuclear and ballistic missile program is eliminated, the driving force for missile defense in Europe will be eliminated.” Barack Obama 7 July 2009

• EPAA adopted by NATO at the Lisbon Summit, November 2010
4. EPAA PHASES

- **Phase I (Complete)**
  - X-band radar placed in Kurecik, Turkey;
  - Aegis-equipped ship with SM-3 Block IA interceptors deployed in the Mediterranean Sea in 2011;
  - four U.S. Aegis ships home-ported in Rota, Spain, in 2014-2015

- **Phase II (Complete)**
  - Aegis Ashore site, with Block IB interceptors and radar, built in Deveselu, Romania in 2013-2016;
  - upgraded interceptors also deployed on ships

- **Phase III (Underway)**
  - Aegis Ashore site to be built in Redzikowo, Poland, with Block IIA interceptors (upgraded capacity against inter-mediate range missiles) in 2016-2018;
  - new interceptors also deployed on ships and in Romania

- **Phase IV (Cancelled)**
  - Would have deployed Block IIB interceptors (against ICBMs) in Poland by 2020
5. RANGE OF IRAN’S MISSILES

Iran’s longest-range missiles are medium-range; they cannot reach Poland

- Sajjil-2: 2000 km (in development)
- Ghadr: 1600 km (operational)
6. NO IRANIAN IRBM THREAT IN NEAR FUTURE, EITHER

A) Developing longer-range missiles takes time and will not go unnoticed.

• “The need to flight test missiles before they are made operational provides advanced warning of new capabilities. Flight trials involve a dozen or more test launches, and historically require three to five years to complete, sometimes more.”

• many examples of countries using long-range ballistic missile programs as a basis for developing satellite launchers, but no country has ever done the reverse

B) Iran’s apparent lack of interest in IRBMs / ICBMs

• for the past decade “Iran has focused on improving the accuracy and reliability of its missiles, with little attention to increasing range.”

• “no evidence to suggest that Iran is actively developing an intermediate- or intercontinental-range ballistic missile”

SOURCE: Michael Elleman 2016
7. NO IRANIAN IRBM THREAT IN NEAR FUTURE, EITHER

C) Joint Comprehensive Plan of Action (JCPOA) 2015

- under JCPOA, Iran cannot develop nuclear weapons; in force at least until 2025
- “breakout” time of one year (to produce material for 1 nuclear bomb)
  - not including time for building nuclear warhead weighing no more than 750 kg

D) And why would Iran would attack a nuclear-armed Alliance?

- leadership in Tehran is not suicidal; never threatened Europe or United States
- Iranian-European relations not defined by enmity, but rather by mutual interest in trade
8. AMPLE WINDOW TO RESUME PHASE III LATER IF NEEDED

No reason to assume that Iran would develop IRBMs / attack Europe but...

- If Iran would begin developing IRBM, 3-5 year window to respond
- If Iran embarks on crash nuclear weapons program, building one nuclear bomb and mating it into a missile likely to take much longer than one year

Phase III originally scheduled to take 2 years and 8 months
- only 1 year and 8 months left for completion now (May 2017)

➔ No need to build the Aegis Ashore site in Poland in advance; plenty of time to respond to Iranian IRBM threat later if needed—even if construction would begin from zero
### 9. COUNTRIES WITH BALLISTIC MISSILES

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>MISSILE RANGE*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SRBM</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>SRBM</td>
</tr>
<tr>
<td>Armenia</td>
<td>SRBM</td>
</tr>
<tr>
<td>Bahrain</td>
<td>SRBM</td>
</tr>
<tr>
<td>Belarus</td>
<td>SRBM</td>
</tr>
<tr>
<td>China</td>
<td>SRBM MRBM IRBM</td>
</tr>
<tr>
<td>Egypt</td>
<td>SRBM</td>
</tr>
<tr>
<td>France</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>SRBM</td>
</tr>
<tr>
<td>Greece</td>
<td>SRBM</td>
</tr>
<tr>
<td>India</td>
<td>SRBM MRBM IRBM</td>
</tr>
<tr>
<td>Iran</td>
<td>SRBM MRBM</td>
</tr>
<tr>
<td>Iraq</td>
<td>SRBM</td>
</tr>
<tr>
<td>Israel</td>
<td>SRBM MRBM IRBM</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>SRBM</td>
</tr>
<tr>
<td>Libya</td>
<td>SRBM</td>
</tr>
<tr>
<td>North Korea</td>
<td>SRBM MRBM IRBM</td>
</tr>
<tr>
<td>Pakistan</td>
<td>SRBM MRBM</td>
</tr>
<tr>
<td>Romania</td>
<td>SRBM</td>
</tr>
<tr>
<td>Russia</td>
<td>SRBM</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>SRBM MRBM IRBM</td>
</tr>
<tr>
<td>Slovakia</td>
<td>SRBM</td>
</tr>
<tr>
<td>South Korea</td>
<td>SRBM</td>
</tr>
<tr>
<td>Syria</td>
<td>SRBM</td>
</tr>
<tr>
<td>Taiwan</td>
<td>SRBM</td>
</tr>
<tr>
<td>Turkey</td>
<td>SRBM</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>SRBM</td>
</tr>
<tr>
<td>UAE</td>
<td>SRBM</td>
</tr>
<tr>
<td>UK</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>SRBM</td>
</tr>
<tr>
<td>Vietnam</td>
<td>SRBM</td>
</tr>
<tr>
<td>Yemen</td>
<td>SRBM</td>
</tr>
</tbody>
</table>
10. EUROPEAN MISSILE DEFENSE MOTIVATIONS

✓ “the NATO [ballistic missile defense] commitment is as much about politics, alliance cohesion and ultimately Russia, than it is about Iran.” Andrew Futter 2015

✓ while “some NATO states see the purpose of the project primarily in protection against threats from the south,” others view it as “a visible expression of America’s security guarantees for Europe – by which they mean above all protection against Russia.” Dickow & al 2016

✓ “NATO’s insistence on pushing ahead with a missile defence system does not necessarily imply agreement over its purpose and goal. The lack of a debate can be explained by Washington’s sustained willingness to fund the programme almost entirely itself. For many, the political costs of changing course also appears higher than those of continuing the programme.” Dickow & al 2016
III LINK BETWEEN MISSILE DEFENSE AND NUCLEAR ARMS CONTROL
9. RUSSIAN CONCERNS ABOUT EPAA

Russian concerns about EPAA are exaggerated

- SM-3s in Poland cannot reach Russian ICBMs heading to the United States
- Russian missiles outnumber the planned amount of interceptors in Europe
- SM-3 unlikely to work reliably in real-life circumstances (Postol & Lewis 2010)

But they are not baseless

- uncertainty about the future development U.S. ABM technology and policy
  • increase in the number / capability of interceptors that fit VLS launch tubes?

- Aegis ships are movable
  ✓ When “launching [SM-3 Block IIA] from the Baltic Sea near Stockholm [...] More trajectories heading toward the US east coast can now be potentially intercepted” (Wilkening 2012)
10. SM-3 BLOCK IIA DEPLOYMENTS WORLDWIDE

• Block IIA deployments to begin in 2018

• If located at sea near US coasts, Block IIA interceptors could provide the basis for continental missile defense (if they could intercept incoming missiles successfully).

• The current number (35) of BMD-capable ships could increase to 80-100 by late 2030s—each with ability to carry 90-122 Block IIA interceptors.

✓ “By the mid- to late-2030s [...] the number of US strategic-capable interceptors, including ground-based systems, could be roughly comparable to the number of survivable Russian ICBM/SLBM warheads... if the roles were reversed, this would be an absolutely unacceptable situation to the United States”

SOURCE: George N. Lewis 2016 & 2017
IV MISSILE DEFENSE DISPUTE AND INF CRISIS
11. ALLEGATIONS OF INTERMEDIATE NUCLEAR FORCES (INF) TREATY VIOLATIONS

In the 1987 INF Treaty, the United States and the Soviet Union agreed to eliminate all “shorter”- and “intermediate”-range [500-5500 km] land-based missiles and launchers of such missiles.

U.S. concerns

• Russian development (since 2008) & deployment (since Dec 2016) of prohibited Ground-Launched Cruise Missile (GLCM)
• SSC-8 – ground-based version of Kalibr Sea-Launched Cruise Missile?

Russian concerns

• multi-purpose MK-41 Vertical Launching System (VLS) at Aegis Ashore sites in Romania and Poland could be used to launch prohibited Tomahawk GLCM, alongside SM-3 interceptors
12. BACKGROUND ASSUMPTIONS REGARDING INF CRISIS

A) If unresolved, the INF crisis will prevent further progress in arms control and might lead to dangerous escalation in Europe.

A) As far as Russian motivations for developing prohibited GLCM are dominated by concerns over missile defense (both in the sense of “missile-defense-counter-force” capability and bargaining tool), there is room for diplomacy when negotiation involves EPAA.

A) As far as Russian motivations are dominated by US/NATO advanced conventional weapons, there is room for diplomacy when negotiation involves such weapons.

A) As far as Russian motivations are dominated by Chinese, Indian, Pakistani and Iranian INF, there is room for negotiation when that negotiation involves such countries.
V THREE SCENARIOS
13. SCENARIO I: DOWNWARD SPIRAL

EPAA Phase III completed as planned, by end of 2018

→ Russian response
  • Iskanders will stay in Kaliningrad indefinitely
  • threats against Poland an other European ABM system hosts will increase
  • INF-range GLCMs continue to be deployed
  • Iskanders to Crimea? Russian withdrawal from New START?

→ US/NATO response
  • additional measures to protect Redzikowo site (more PAC-3s)?
  • increasing calls for directing missile defenses against Russia, as well as the integration of air, ballistic & cruise missile defense?
  • deployment of US INF in Europe?

→ Russian response
  • missile defense threat seen as increasingly imminent
  • maximizing ability to penetrate/outnumber U.S. interceptors and prevent counter-force strike
  • increasing the number of INF-range GLCMs?
14. MEDVEDEV’S NOVEMBER 2011 “ULTIMATUM”

- Russia to take steps 1-4 immediately
- If missile defense dispute remained unresolved, also step 5 and, potentially, 6-7

1. Early warning radar station in Kaliningrad on combat alert

2. Added protection for strategic nuclear weapons though air & space defense

3. Develop advanced penetration systems & warheads for strategic nukes

4. Plans for disabling missile defense system data & guidance systems

5. Deploy modern offensive weapons systems to ensure ability to take out any part of the US missile defence system in Europe
   - Only Iskanders mentioned by Medvedev, but INF-range GLCMs could serve this purpose as well.

6. Other measures deemed necessary

7. Withdrawal from the New START
15. TALK ABOUT REPURPOSING EPAA

• Internal NATO debate on this issue apparently ongoing to some extent—thus far those (East Europeans) calling for EPAA to be directed against Russia constitute a minority

• Some analysts also promote this view:

  ✓ Additional steps are needed to update and expand European air defenses into an Integrated Air and Missile Defense (IAMD) network tailored to deter and defeat low-tier Russian threats while enhancing strategic stability. [... Missile defense] architecture tailored to Iran [...] does not deter Russia. Both the southern and the eastern problems require respective, albeit related, solutions. The [Warsaw] summit affirmed that NATO will have “the full range of capabilities necessary to deter and defend against potential adversaries and the full spectrum of threats [...]. Applying this to air and missile defense will mean going beyond current European Phased Adaptive Approach (EPAA) plans, while remaining consistent with the EPAA’s guiding principle of adaptability. (Karako 2016)
16. SCENARIO II: “UPWARD” SPIRAL

EPAA Phase III is halted by end of 2018.

→ **Russian response**
  - threats against Poland and others decrease
  - Iskanders withdrawn from Kaliningrad?
  - perceived need for INF-range GLCMs decreases?

→ **US/NATO response**
  - limited nature of EPAA reflected both in rhetoric & actions
  - openness to transparency measures in Romanian Aegis Ashore site?

→ **Russian response**
  - perceived threat from missile defense less imminent
  - openness to nuclear arms control
  - openness to INF transparency / verification measures

→ **US response**
  - openness to comprehensive strategic arms control talks, including global missile defense
17. SCENARIO III: MIXED DEVELOPMENTS

a) Despite completion of the Redzikowo site, EPAA’s limited nature is signaled by other means (e.g. a decision not to deploy Block IIA interceptors in Europe), paving the way for comprehensive arms control.

a) Despite suspending Phase III, Russia focuses on the absence of legal limits to EPAA, and continues prohibited INF deployments. The US/NATO respond in kind, considering any further restraint regarding missile defense as appeasement.

a) Despite initial positive steps, no progress is ultimately made towards arms control due to...

A) US refusal to show restraint regarding its broader missile defense policy;
B) Russian refusal to reduce nuclear weapons, despite US restraint on missile defense;
C) lack of interest in nuclear arms control in either/both the US and Russia.