

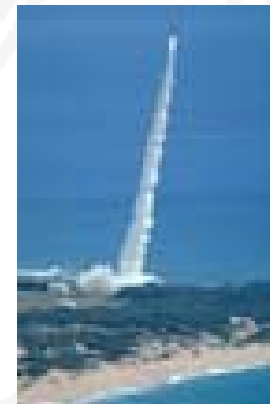
Europe's Role in Missile Defence

Götz Neuneck/ IFSH

(www.ArmsControl.de; www.Pugwash.de)

BASIC MD Conference, 18 March 2004 Panel II

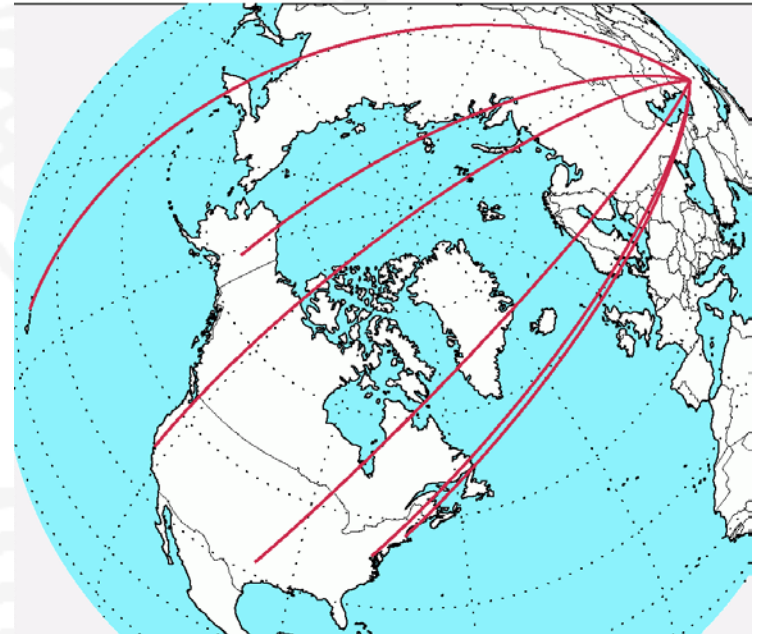
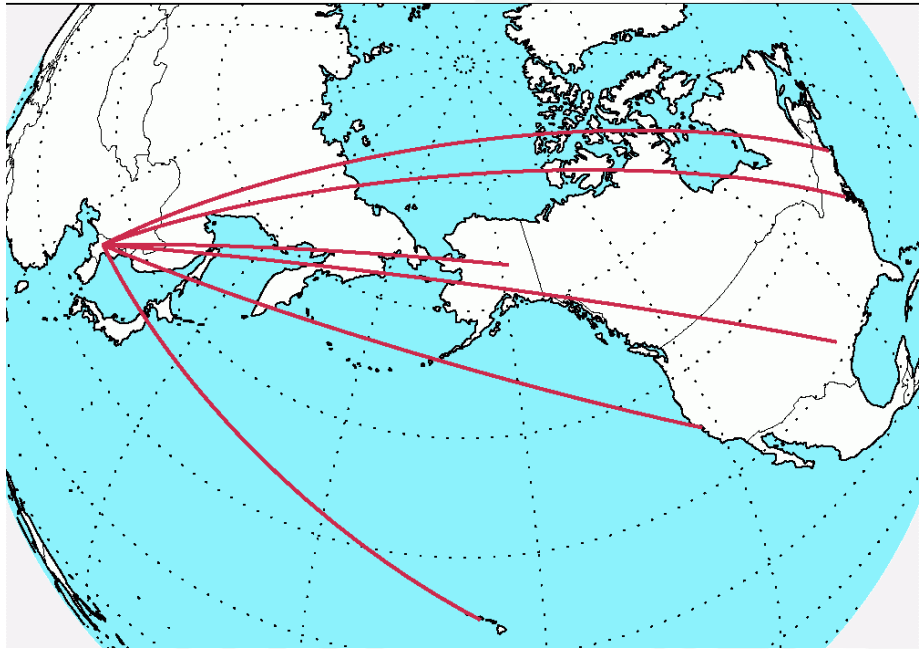
1. **Which Europe ? Players & Systems & Roles**
2. **Principal Problems of MD**
3. **European Efforts: NATO**
4. **Conclusions**



1. What is Europe?

- NATO- Europe or European Union ?
- What role for MD ?
- Main unsolved Problems:
 - **Technical:** Architecture & Countermeasure Problem
 - **Transatlantic** tensions and different policy views
 - **Financial:** low military budgets and military restructuring
 - Different **threat** assesment and geography
 - **Arms Control:** How to deal with Russia ?
 - **Nuclear** Disarmament: France and UK ?
 - Best answer to **Non-Proliferation?**

Scenario North Korea and Iran



MD Systems

Name	Status	Deploy.	Details
Patriot	PAC-2/PAC-3	now	Mobile, allies
GBMD	Alaska	2004	is NMD expandable ?
Sea-based MD Defense	Aegis/SM-3 20 interceptors, 20 ships	(2005)	Worldwide, esp. Taiwan, Japan or Mediterranean
THAAD	Ground-based, tests	2007/8	Worldwide, esp. Taiwan, Japan or Mediterranean
Airborne Laser	First flight tests	2005/6	Iran, North-Korea?
Space-based Interceptor/La.	Planning phase	2010-2015-2020	Global?
MEADS	Extended Air Defense (F/GE/IT), 360 ° coverage	< 1000 km miss, but also CM	2006 or 2028 ??
SAMP(T)	Air Defense (FR/IT)	< 600 km, Feas.	Aster Bl I
PAAMS	Area Air Defense (F/UK/IT)	Open architecture	Sea-based

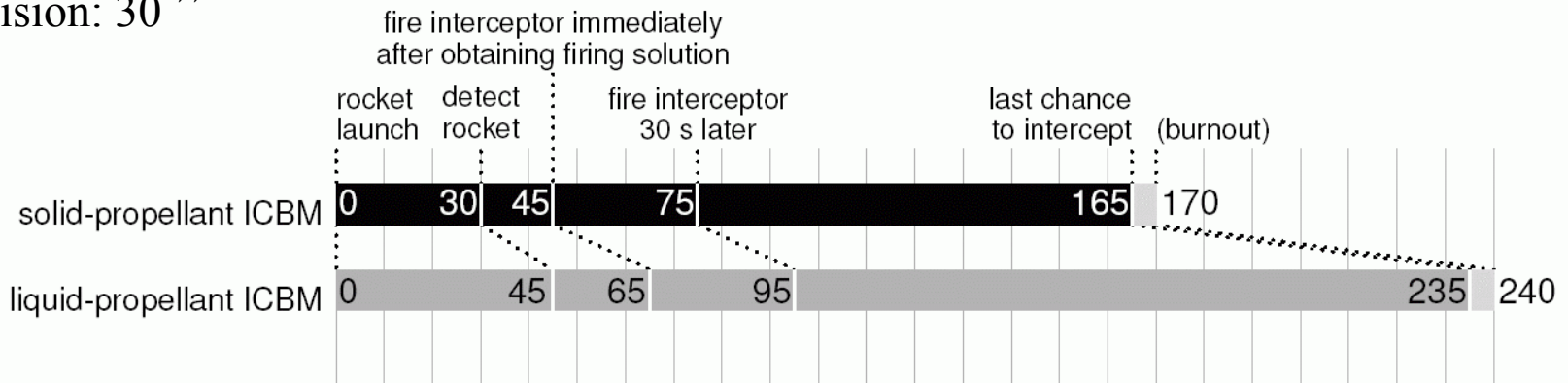
Boost-Phase - Critical: time

Detection today 45-65 ''

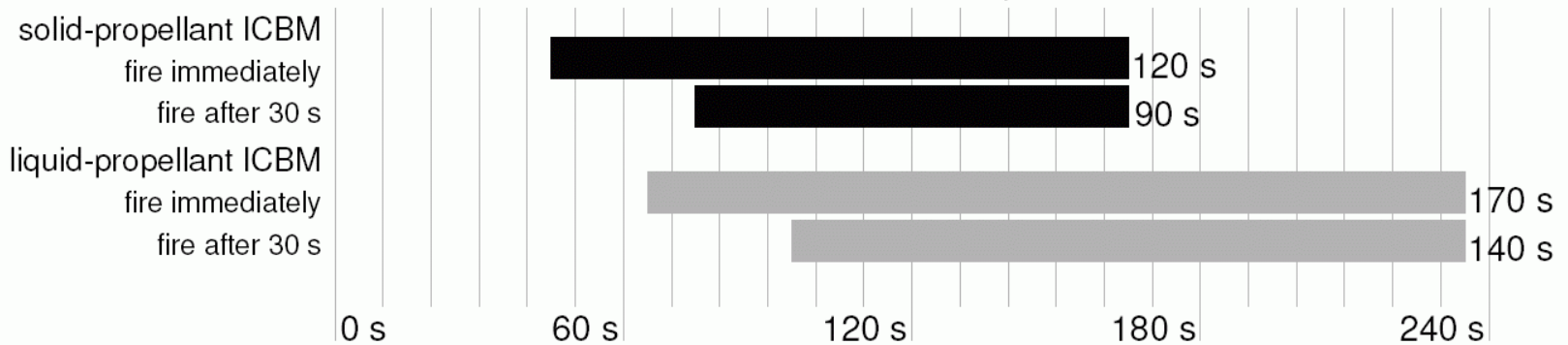
Calculation: 15''

Decision: 30 ''

Timelines for intercepting ICBMs launched from Iran against east coast cities of the United States



Maximum time available to achieve intercept



2. Open Questions: Boost-Phase Defense

- BP MD would require a **decade** or more to complete
- Even if a multilayered defense is established there are **many countermeasures** available
- The maximum time available to achieve an intercept is between 90 to 170 s and hence US troops would have little or **no time to consult allies** and friends,
- “**shortfall problem**”. Currently envisioned BPI systems would destroy only the missile body and could leave the payload untouched. A surviving warhead could fall on populated areas short of the target in the United States or allied countries, but in almost no case it would fall back on the attacking country.

APS Study 2003, p. xxxvi

MEADS and Patriot

PATRIOT PAC-3/ERINT missile

- Mixed results in tests and '03 Iraq war
- Procurement program prod. Work share GE (28%), It. (17%)
- EADS wants to keep the price < \$2 m, but now \$7 m.

MEADS

- Trinational joint venture '95, highly mobile & air transportability
- Against BM with a range of up to 1000 km, CM, aircraft
- Erosion of support from GE, US wants to use PAC-3, 23 tests
- FY 2004 \$ 276.3m development costs
- GE costs classified, wants to have „genuine transfer to „cutting edge“-technology“
- These systems only have the capability to protect small areas (f.e. 50 km footprint) given „cueing“ or „distributed launchers“

NATO and Missile Defense

- `98** NATO began its work for Active Layered TMD (ALTMD)
- 1/2000:** "NATO Layered TMD Feasibility Study"
(13.5.Million USD) 18 month, 1.7.2001, 2 teams, SAIC Consortium vs. JANUS-Team: Results: "***Capabilities for MD architecture technologically feasible***"
- November 2002** NATO Prague Summit initiates a NATO MD Feasibility Study (16 Million €, 18 month)
- 9/2003:** SAIC consortium is chosen: "*best value of NATO*"
= SAIC, Boeing, Raytheon (all US), EADS ST, Thales (all FR) , Diehl, IABG (all GE), TNO (NL), Alenia Spazio (IT)
- 2004 NATO Staff Requirement** which should serve as the basis for NATO's acquisition of a Layered TMD cap.

NATO Feasibility Study

PRAGUE Summit: Examine options for protecting Alliance **territory, forces, and population centres** against the **full range of missile threats**

- Define NATO **consultation, C2-architecture, systems**
- Determine the best “mix of systems and capabilities to meet the “Military Operational Requirement” considering **performance, cost, and risk.**
- Recommend options and **configurations for system elements**
- **Threat Extension to ICBMs**
- TMD identified as a **potential opportunity for cooperation between NATO and Russia (28. May 2002 NATO Russia Council was established)**

Arguments of the Industry

Governments:

- Should develop collective European Defense Industry
- Should decide to avoid European industry left behind
- Secure equitable role in any collaboration with US

Industry:

- All technologies are in principle available, but
- No system is developed and operational
- Must keep pace with US technology advances

Conclusions: More open questions than answers

- *Protection of Europe not possible with Patriot, MEADS, SAMP/T*
- *MD still needs years to be developed to work on an operational basis*
- *NATO is still considering TMD/EADS*
- *There is the temptation to expand point defense to area defense but highly dependent on radar, location,*
- *Open f.e. use of SB infrastructure (SBIRS) for TMD*
- *Trade offensive vs. Defense is still open. Costs !!!*
- *Proliferation (NK, Iran etc.) problem is not solved. Diplomacy, arms control and disarmament are more efficient and robust than an inefficient MD.*