



“Space and Internal Security in Europe” & “Responsive Space in Europe”

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Biography Nina-Louisa Remuß

- 2006: B.A. in European Studies (University of Maastricht)
- 2007: Master Degree in International Security
(University of St. Andrews)
- 2007: Permanent Mission of Germany to the United Nations
(New York City)
- Since 2008: Project Manager at ESPI



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Presentation Outline

1. Space and Internal Security in Europe
 - a) Background: Definitional Aspects
 - b) The Development of Space and Internal Security
 - c) Some Characteristics of the European Approach
 - d) Points of Departure for Cooperation
 - e) Issues and Perspectives for Transatlantic Cooperation
2. Responsive Space: A Concept for Europe
 - a) Background: The Development of Responsive Space in Europe
 - b) Some Characteristics of the European Approach
 - c) Points of Departure for Cooperation
 - d) Issues and Perspectives for Transatlantic Cooperation

Space and Internal Security in Europe - Transatlantic Issues and Perspectives

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1a. Space and Internal Security - Background: Definitional Aspects

- Homeland Security:
 - American concept
 - Systematic attempt to reduce society's vulnerabilities
 - U.S. National Strategy for Homeland Security:
 - a concerted national effort to prevent terrorist attacks,
 - reduce visibility to terrorism
 - minimise damage
 - recover from attacks occurring
- Societal security:
 - Nordic countries
 - All hazard approach, including entire spectrum of threats that society might be confronted with (environmental to natural disaster)
 - Diverging threat perception as explanation for different concepts
- Internal security:
 - Homeland security resonates most strongly at country level (↔ intra EU security)

1b. Space and Internal Security - The Development of Space and Internal Security (1)

- While the notion that space can play a key role in security policy is finally taking ground, its role in counter-terrorism is often neglected
- Terrorism is one out of five key threats mentioned in the European Security Strategy
- June 2004: SPASEC was given the mandate to inter alia review the role of space in meeting the objectives in the fight against terrorism
- March 2005: The SPASEC-Report did a first step in considering the support of space-based applications in counter-terrorism operations
- Three year long “Preparatory Action” (2004-2007) addressing five main areas inter alia “protection against terrorism”
- September 2006: European Security Research Advisory Board (ESRAB) Report
- December 2006: FP7 – European Security Research Programme (ESRP)
- Since September 2007: European Security Research & Innovation Forum (ESRIF) WG 11: Situation Awareness and the Role of Space

1b. Space and Internal Security - The Development of Space and Internal Security (2)

Existing Documents and Strategies

- Plan of Action on Combating Terrorism, Declaration on Combating Terrorism, The Hague Programme
- European Union Counter Terrorism Strategy:
 - Four pillars: prevention, protection, pursuit, response
 - Combat terrorism globally while respecting human rights and make Europe safer, allowing its citizens to live in an area of freedom, security and justice
- Issue Area specific policies and strategies: the European Neighbourhood Policy (ENP), The Maritime Strategy, Strategies related to organised crime and illegal immigration, Critical Infrastructure Protection Policy etc.

prevent

protect

pursuit

respond

1c. Space and Internal Security – Some Characteristics of the European Approach (1)

- Europeans feel less threatened by terrorism than Americans
 - 71 % of Americans think it is likely that they will be personally affected by international terrorism (vs. 53 % of Europeans)
 - Europeans feel more likely to be affected by global warming (73 % Europeans vs. 64 % Americans)
- Five key threats (ESS): (1) terrorism, (2) proliferation of weapons of mass destruction, (3) regional conflict, (4) State failure, (5) organised crime
- For a long time counter-terrorism was considered part of judicial and domestic policy within the EU and only came to be understood as a cross-policy task in the aftermath of 9/11

1c. Space and Internal Security – Some Characteristics of the European Approach (2)

- Growing awareness of contribution of space applications to internal security in Europe
- Two levels of internal security activities in Europe:
 - European level
 - Nation-State level
- The EU seems to have started to look into the provision of internal security only recently with research programmes relating to this matter being included in FP 5 to FP 7
- The EU does not follow a centralised approach through a Department for Homeland Security or a related Directorate General (DG)
- Fragmentation among different policies (horizontal), different bodies and actors in the three pillars (institutional) as well as between the EU and its Member States (vertical)

1d. Space and Internal Security – Points of Departure for Cooperation

Europe

- decentralised approach: no Internal Security Department
- EU Counter-Terrorism (CT) Coordinator
- internal security goes beyond counter-terrorism
- Criminal-Justice-Model: involves the investigation of terrorist crimes in order to bring individuals involved to justice
- emphasis on freedom

U.S.

- Department for Homeland Security
- shattered agency involvement
- homeland security emphasises counter-terrorism
- Military Solution/War-Model: involves the military in fighting terrorism
- emphasis on security

- Coordination and Cooperation does not mean to adopt the other's approach
- It is rather about rapprochement, confidence building and understanding of each other's policies, values and practical approaches
- While Europe and the U.S. will each follow their own distinct approach, both need to find a common ground as to create a win-win situation for both

1e. Space and Internal Security – Issues and Perspectives for Transatlantic Cooperation (1)

- Globalisation has given the effective provision of internal/homeland security an international dimension
- Greater U.S.-European cooperation in the field of internal/homeland security is necessary in order to better guarantee security on both sides of the Atlantic
- Without systematic pan European and transatlantic coordination, each side of the Atlantic is at greater risk of attack
- A dialogue should take place both at the EU and the transatlantic level
- Neither the U.S. nor Europe is yet well organised enough to advance the provision of internal/homeland security
- The different mechanisms set in place in Europe and the U.S. have each complicated transatlantic cooperation.
- Scattered efforts must now be incorporated into a systematic, high profile effort to “transform” homeland security in all of its many dimensions

1e. Space and Internal Security – Issues and Perspectives for Transatlantic Cooperation (2)

- With Barack Obama as new U.S. President differences between the U.S. and European conceptions have narrowed
- Complete transatlantic agreement is utopian, but the EU and the U.S. should aim at presenting a unified message about their commitment and the fundamental values they espouse
- Requires both to internally assess their core principles in this provision
- The U.S. and Europe need to establish points of contact to ensure opinions are conveyed correctly to their counterparts
- The Spanish EU Presidency could provide a good ground for advancing cooperation in this field
 - with the objective of drafting a public declaration on fundamental principles for confronting terrorism, organised crime and illegal migration
- Such a declaration should provide for a guiding strategy on cooperation, thereby underlining the principles and values both share in the fight against terrorism

Responsive Space: A Concept for Europe - Transatlantic Issues and Perspectives

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2a. Responsive Space - Background: The Development of Responsive Space in Europe (1)

The Setting

- Increasing use of space for internal and external security threats
- Europe is facing a need for operational and responsive solutions to perform security missions
- Calls for sharing and pooling of resources of civil and military nature
- Security missions have the objective of covering a wide range of actions in all three pillars: incl. disaster management, humanitarian assistance, peacekeeping operations, international treaties monitoring, border security, critical infrastructure protection and transport security
- EU still lacks a comprehensive space-based architecture for security
- ESA has thus started to reflect on an initiative supporting the development of a European space-based architecture for security in coordination with the other relevant European stakeholders and its Member States which became known as GIANUS (Global Integrated Architecture for iNovative Utilisation of space for Security)

2a. Responsive Space - Background: The Development of Responsive Space in Europe (2)

GIANUS/A European Space-Based Architecture for Security

- Objectives
 - affordable space capabilities
 - guaranteed and timely access to services
- Scope
 - bring the right information or services to the right people when they need it
 - support the full spectrum of internal and external security missions, covering the whole crisis management cycle
 - holistic approach incl. EO, SatCom, SatNav and launchers in one concept
 - responsive space is only one element of this security architecture
- Timeframe
 - Preparatory Phase (2009-2011): preparation of the programme proposal (incl. User requirements and capability gaps) to be submitted to the ESA Council at Ministerial Level in 2011
 - Technology Readiness Phase (2011-2014): technology research
 - Development Phase (2014-)

2b. Responsive Space - Some Characteristics of the European Approach (1)

- While most space-faring countries space policies are driven mainly by security concerns it took Europe long to consider this
- Europe's Space Policy (ESP) also follows civilian objectives
- The strategic mission of the ESP is based on the peaceful exploitation of Outer Space and seeks to meet Europe's security and defence needs
- A European Responsive Space (RS) will consider both civil and military requirements
- The European approach to crisis management emphasises the synergy between civilian and military actors
- The EU consists of 27 nations, the only workable political direction for 27 nations consists in dealing with a broad and generic security concept rather than a more classical military one
- Given that Europe does not have the same structure as the U.S., it cannot simply take over the architecture, e.g. the ORS Office structure as established by the U.S.

2b. Responsive Space - Some Characteristics of the European Approach (2)

Figure: The ORS Office Working Structure

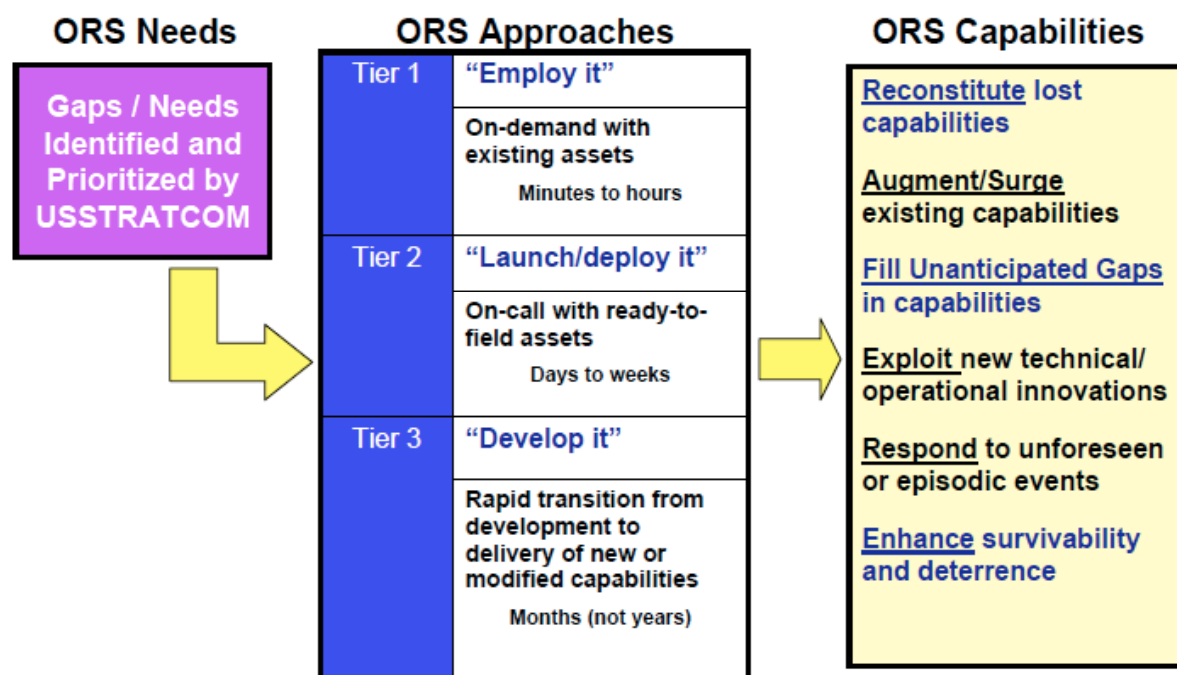


Image Credit: McLaughlin, Kevin. Presentation Jul 2007. 28 Aug 2009
<<http://www.respondivespace.com/ors/reference/McLaughlin.pdf>>.

2b. Responsive Space - Some Characteristics of the European Approach (3)

Figure: The Possible European RS Office Working Structure

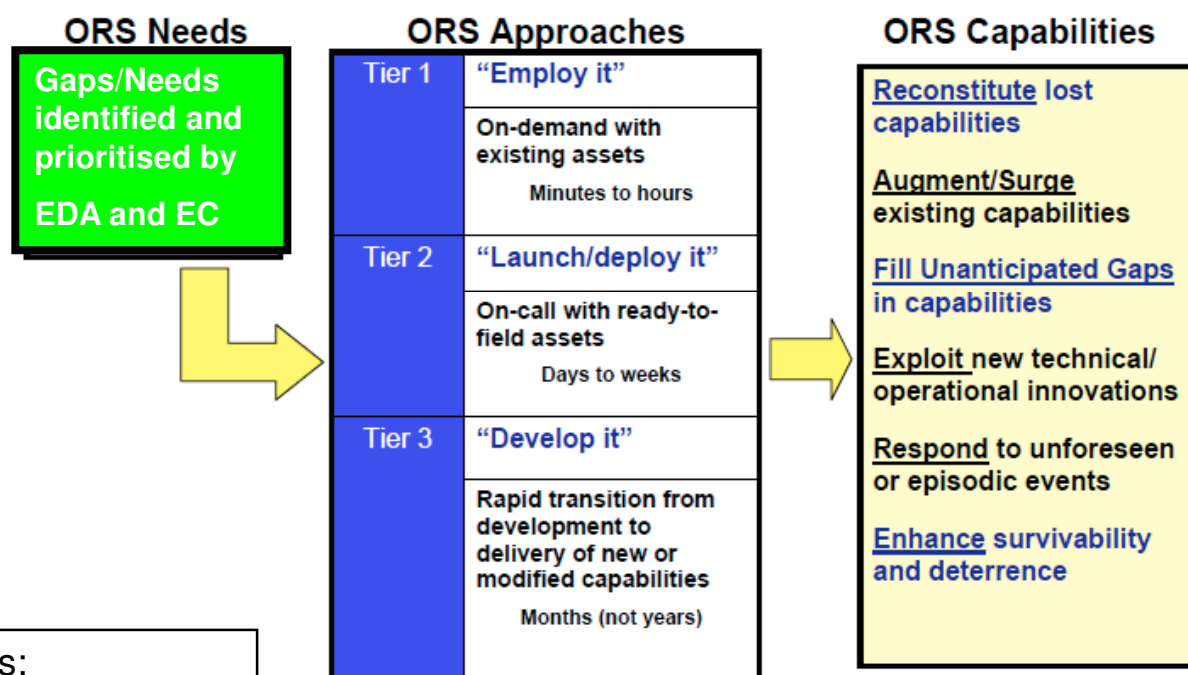


Image Credit: McLaughlin, Kevin. Presentation Jul 2007. 28 Aug 2009
<<http://www.respondivespace.com/ors/reference/McLaughlin.pdf>>.

Open Questions:

- funding
- MS involvement
- etc.

2c. Responsive Space - Points of Departure for Cooperation (1)

- The U.S. and Europe agree on the importance of developing responsive space to manage the new security challenges but differ in terms of the types of space assets they would like to develop

Europe

- concept is based on broad definition of security and the development of dual-use programmes and applications, i.e. space = security enabler
- users are broadly defined as the security community ranging from emergency forces to the military
- just starting to consider space applications as Critical Infrastructures
- ESA is defined as a civilian agency; funding is coming from civilian sources

U.S.

- concept is driven by U.S. strategists' concept of "battlefield awareness", i.e. space = strategic enabler
- user is mainly the JFC and user requirements are based on "warfighter's needs"
- ORS is part of larger Critical Infrastructure Protection Policy
- U.S. Space Policy funding is largely coming from military sources (DoD budget is larger than NASA's budget)

2c. Responsive Space - Points of Departure for Cooperation (2)

Figure: Tiered Approach to Enhance Responsiveness of Space Capabilities

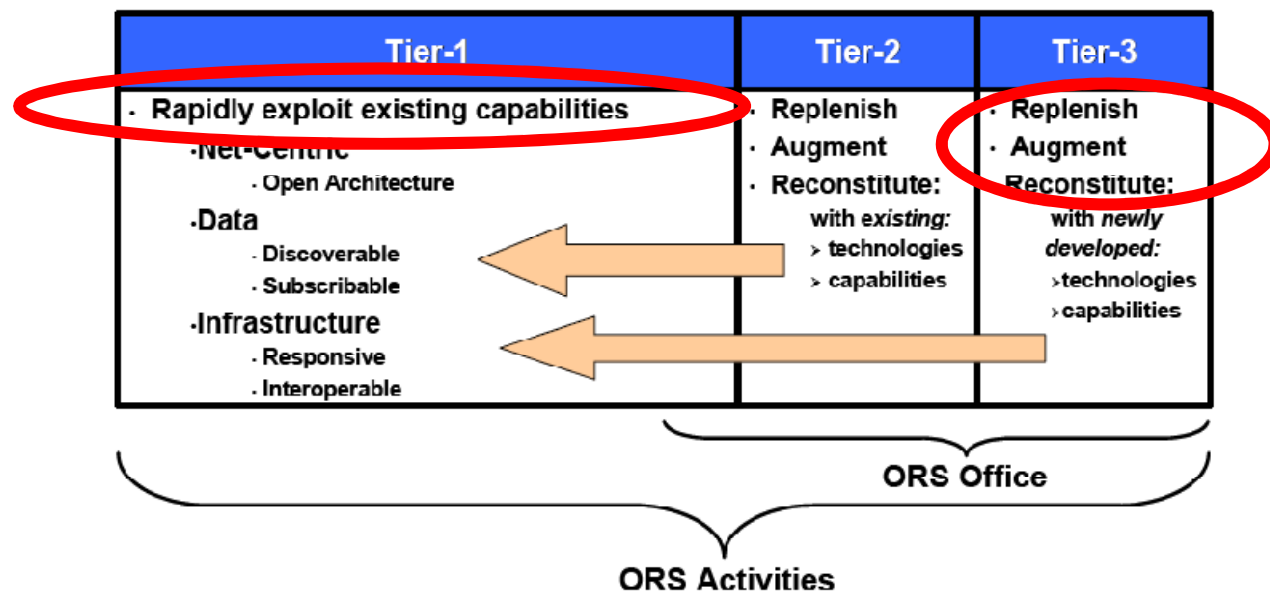


Image Credit: DoD Plan for ORS

2c. Responsive Space - Points of Departure for Cooperation (3)

Tier 1

- is about rapidly exploiting existing capabilities
- cooperation among Europe and the U.S. would increase the range of existing capabilities

Tier 2 and Tier 3

- both include rapid launches
- for launches to become more responsive one needs to consider
 - The ground infrastructure available
 - The launch vehicles
 - Functional design choices of the satellite
- Thus, modular or standardisation of satellite designs and launchers in both Europe and the U.S. would allow for faster launches
- Coordination in the technical development would allow for both to gain

2d. Responsive Space - Issues and Perspectives for Transatlantic Cooperation

- Coordination and Cooperation does not mean to adopt the other's approach
- It is rather about rapprochement, confidence building and understanding of each other's policies, values and practical approaches
- While Europe and the U.S. will each follow their own distinct approach, both need to find a common ground as to create a win-win situation for both
- Both can learn from the experiences particularly in the context of legal, organisational and managerial challenges
- Coordination particularly in the area of technical development should be fostered as to establish design standardisations
- Workshops like the ones for cooperation in the context of SSA should be envisaged to agree right from the start on the most effective ways of cooperation