

EUROPE AND SPACE SECURITY: A CHANGING SPACE SECURITY ENVIRONMENT

An assessment of the preliminary findings of a
EUISS study on space security

FOR DISCUSSION

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Sinaia, 18 April 2016

Who We Are

- EU's agency in charge of the analysis of foreign, security and defence policy issues

Mission

- To provide analyses and fora for discussion of relevance to the formulation of EU policy

Objectives

- To foster a common security culture for the EU
- To support the elaboration and projection of its foreign policy
- To enrich Europe's strategic debate

What We Do

TOWARDS AN EU GLOBAL STRATEGY
Background, process, references
Edited by Antonio Missiroli
Preface by MASSIMO PELLEGRINO

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A changing global environment

GROUP OF PERSONALITIES
EUROPEAN DEFENCE RESEARCH
The case for an EU-funded defence R&T programme

ALERT
The threat of state-sponsored industrial espionage
by Massimo Pellegrino

Against the new background, Russia and especially China are using industrial espionage to tip the competitive balance in their favour.

There are significant advantages to studying espionage from within Europe's borders. Not only can this be classified as a national security issue, but it is also a matter of public interest. The threat of industrial espionage is a major threat to the economy and the primary industrial property and trade secrets in a matter of national security. While national security intelligence agencies have focused on high-tech espionage, the gap between national and economic security has become indistinct.

States and players
The global industrial espionage market is still embryonic and has not reached its mature phase. First, it has not been a result of a strategic decision. The difference in information technology (IT) networks, the ease of access to computers and the difficulties in attributing access to computers and the difficulties in attributing access to computers have made industrial espionage a second-order change in the global security environment of state actors in engaging new technology.

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Background

- Changing Space Security Environment
 - Contested, Congested, Competitive
 - Growing dependence on space
 - Growing number of actors
 - Growing market competitiveness
- Space systems must be protected
- The sustainability of space be ensured
- Security in space → Security from space

Task Force

- Launched in September 2015
- To support the EUISS with analysis on short and long term issues concerning space security
- To contribute to framing policy options

Objectives

Research Institute

Identify and analyse priorities, challenges, and options for Europe to move forward

Forum for Discussion

Build bridges among different actors with a view to pooling expertise and knowledge

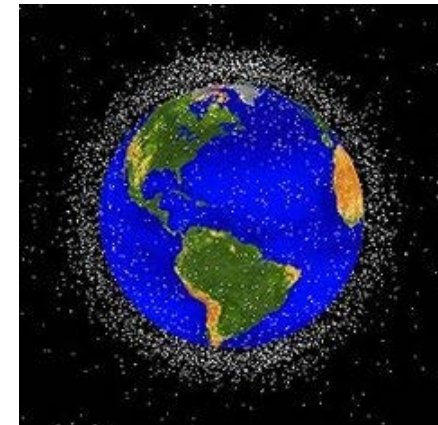
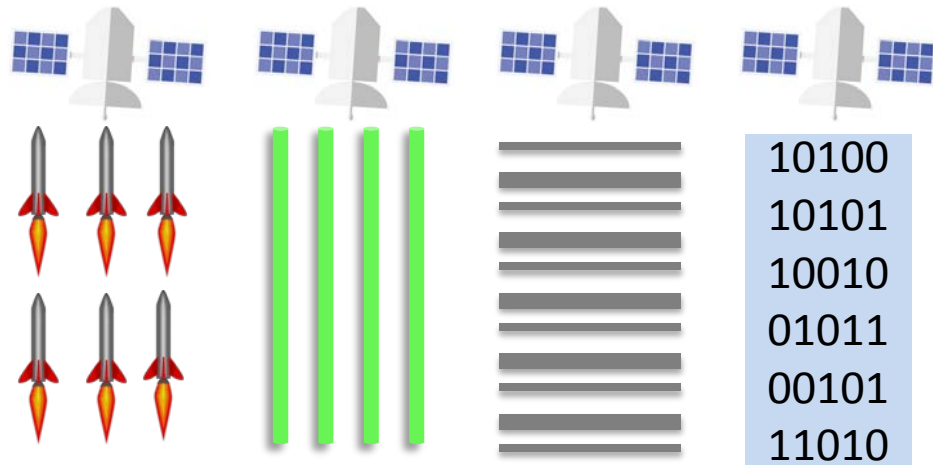


1. **Space and Security in Europe** – Provides the full spectrum of relations between space and security, as well as an overview of the Report.
2. **Space systems as critical infrastructure** – Analyses the critical nature of space infrastructure, evaluates the threats to this infrastructure and responses to them.
3. **EU Space Programs** – Reviews the strategic development and security considerations related to the European Union's space programs.
4. **International Cooperation in Space Security** – Analyzes the role of diplomacy in securing outer space.
5. **Strategy and Policy for Europe** – Analyzes strategies and policies in Europe as regards space and space security.
6. **Options for moving forwards** – Investigates options to ensure that space will continue to be accessible and used for peaceful purposes and societal benefit.
7. **Conclusions**

Changing Space Environment

Threats

Hazards



Kinetic Weapons (ASAT)

Energy Weapons

Jamming/Spoofing

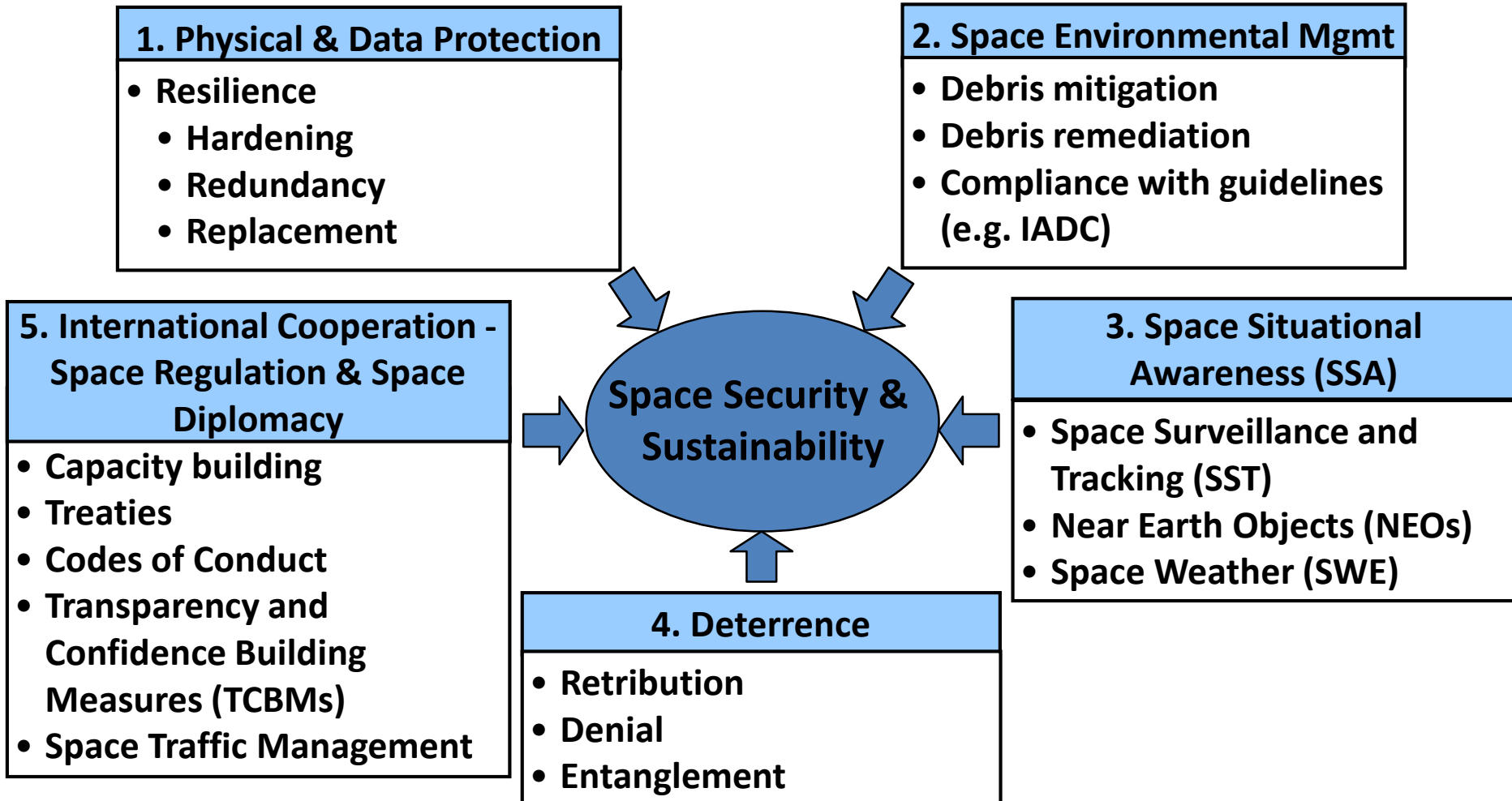
Cyber Attack

Space Weather

Space Debris



The more Europe relies on space capabilities, the more it needs to counter threats to space systems and to the services they provide.



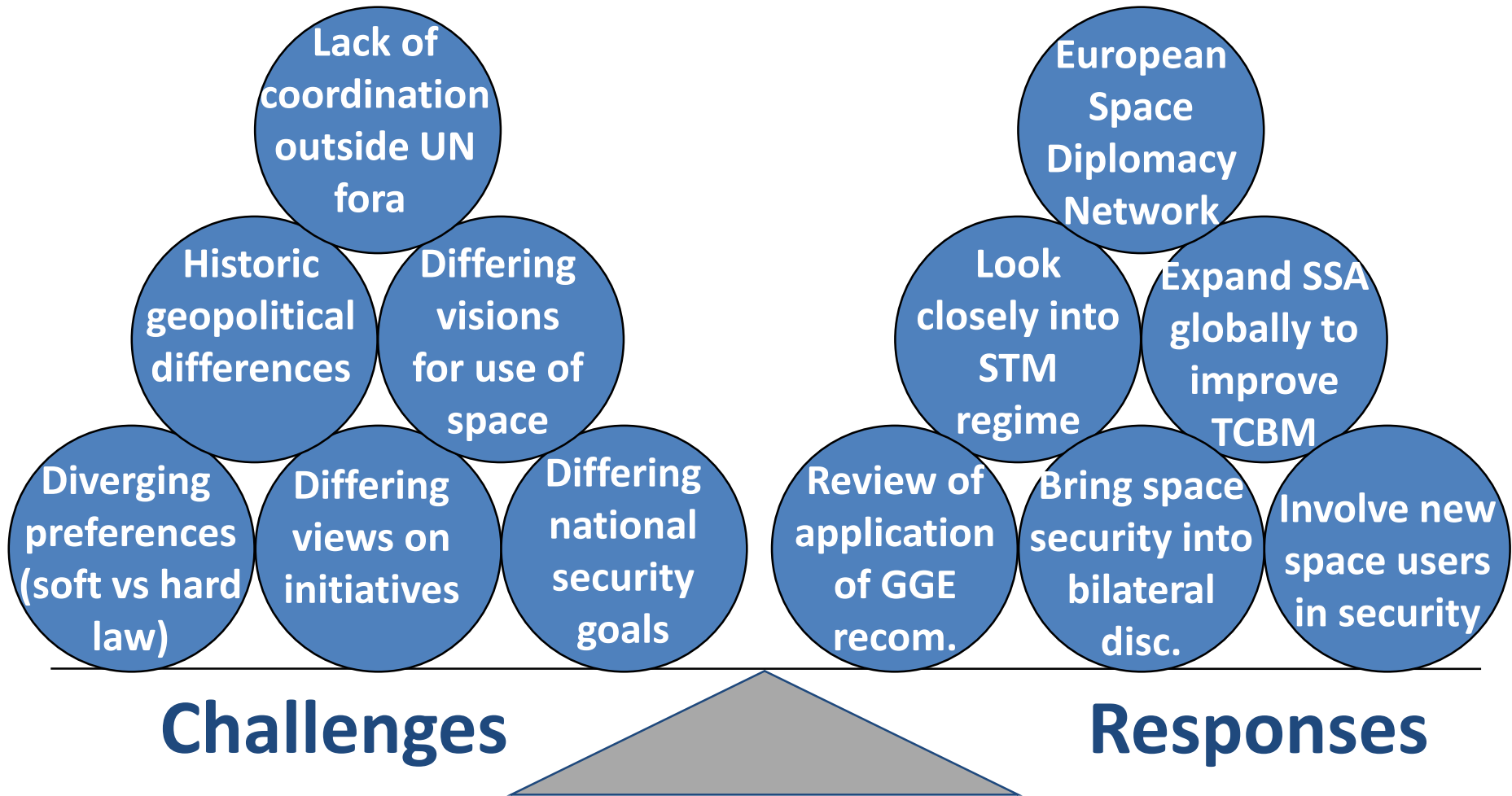
Space Security Discourse

Arms control

Responsible behaviour

	PPWT	ICoC	GGE Report on TCBM	LTSG
Proponent	Russia & China	EU	UNGA	UN COPUOS
Legal status	Legally-binding	Voluntary	Voluntary	Voluntary
Conduct guidelines	No weapons in space; No threat against space objects;	Don't damage space objects; Minimize debris and risk of collision; Implement IADC/ITU	Implement other guidelines	Conduct only activities of a peaceful nature; No deliberate alterations of space environment; Respect ITU regulations;
TCBMs	Information sharing;	Information sharing (policy, strategy, R&D, SSA); Notification (I-m-r); Site visits;	Information sharing (registrations, orbital parameters, CAPEX); Notification (I-m-r); Site visits;	Information sharing (space activities, debris); Enhance registration; Notification of launches encouraged;
Outreach & Support	-	Supported towards developing countries	Recommended within UN system	Raise awareness; Support capacity building
Grievances	Yes	Yes	-	-
Verification	-	-	-	-

Challenges to International Coop.



To realise the investments in space, outer space needs to be adequately managed

Dedicated European space security strategy

Pros:

- Raise awareness and political will to cooperate
- Improve compliance with principles of soft and hard law
- Enhance protection mindset
- Frame existing, yet scattered initiatives in the field
- Increase trust of partners (e.g. US) towards the EU
- Strengthen its credibility

Integrate space into EU security strategy

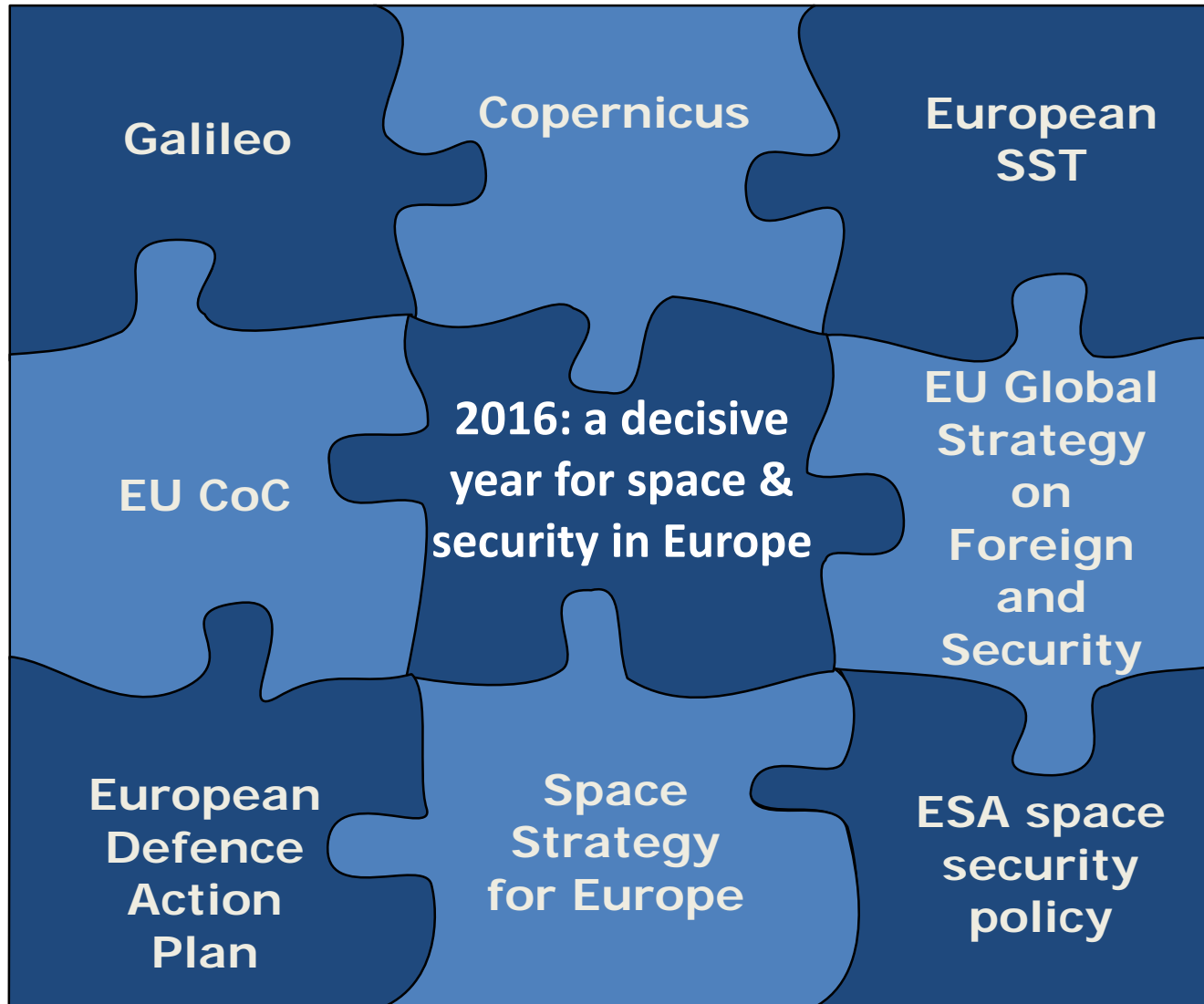
Pros:

- Give a meaning to the ICoC
- Space being part of the EU foreign policy toolkit
- Recognize space as a dimension of EU security
- Formalise a link between space and the CSFP/CSDP
- Increase protection and resilience mindset

Integrate security into EU space strategy/policy

Pros:

- Enhance security dimensions of EU space programs
- Empower flagship programs
- Quicker approach, as a “space strategy for Europe” is currently being developed





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