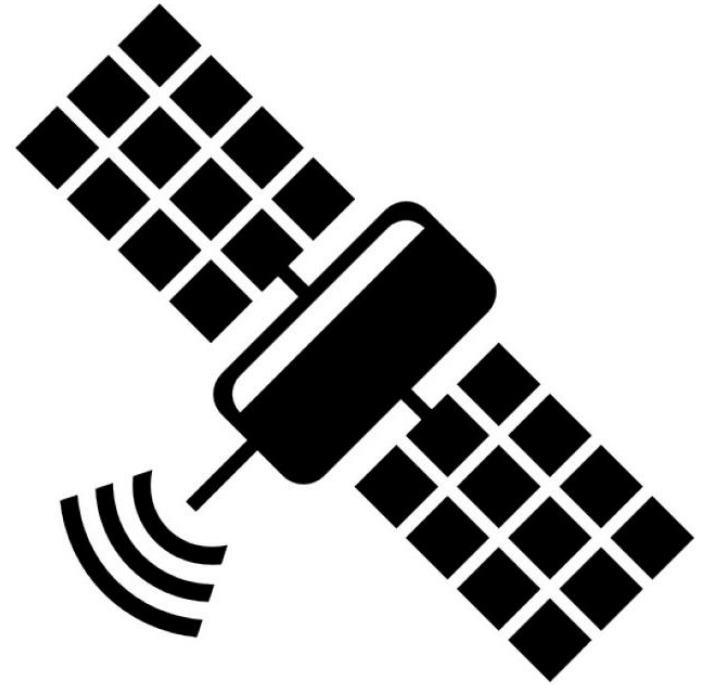


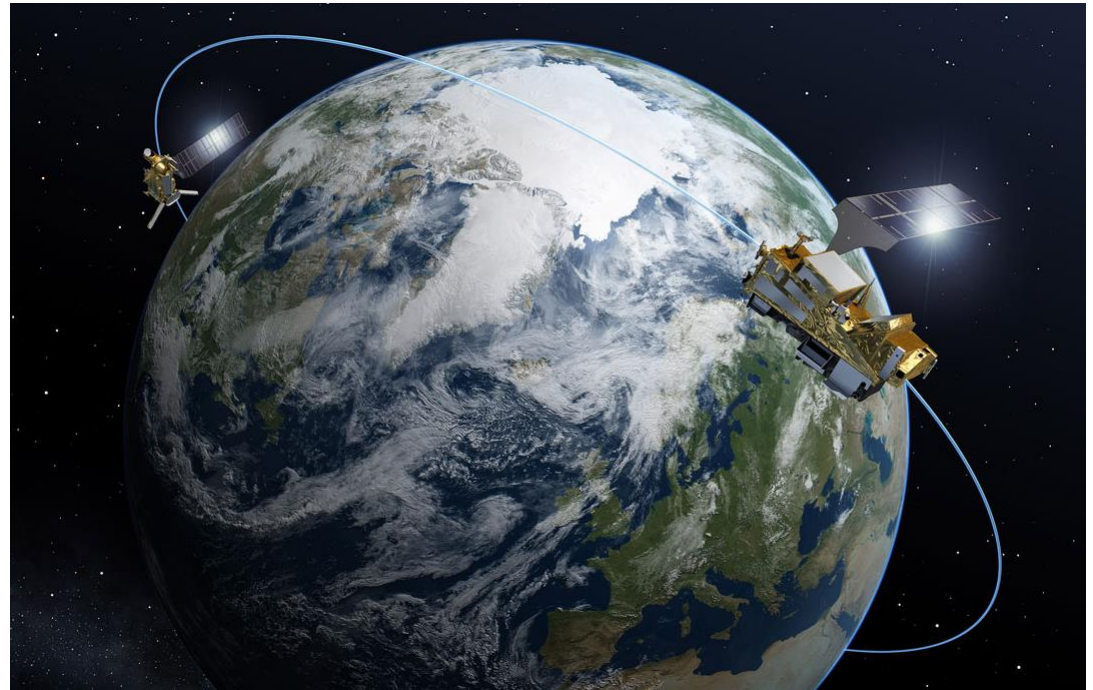
Designing space policies in emerging countries: main challenges

5th September 2016

1. Role of space for emerging countries
2. Main challenges in designing space policies
3. How to deal with the challenges
4. Next steps



1. Role of space for emerging countries



Agriculture, forestry, mineral resources, territorial planning,
energy, etc.



Importance of space policy for emerging countries

- Structure and bring together all measures required for the development of space activities in the country
- Guarantee the use of outer space also in benefit of the country
- Take advantage of the characteristics of the country for space activities (if applicable – e.g., geostrategic position)
- Define and allocate responsibilities
- Increase awareness on the importance of space activities and call all relevant stakeholders to participate in the space effort of the country
- Position the country at the international level as a country that recognises the importance of space
- Guarantee that the country is committed to the development of space activities

Impact of the investment in space activities by emerging states

- New actors that can be new clients for the industry
- New partners for space agencies (know-how transfer and sharing, joint projects)
- Possible new suppliers

This “second space race” is able to materialize the long held principle that:

The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development

Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality

2. Main challenges in designing space policies



Awareness

Of:

Full impacts and benefits of space activities

At the public level

There is a somewhat unstructured view of the benefits of outer space for the development of the country – some ideas and thoughts, some initial projects, but no full breadth awareness

There is no view that relates space activities with the overall and sectorial goals of the country

At the population /
civil society level

No understanding of the role of outer space in day to day life

No effective use of space products and applications especially in remote rural areas

Awareness (cont.)

Of:

Space activities, institutions and organisations at the international level

At the international level

There is not a clear vision of the main international bodies dealing with space affairs, from the UN to other intergovernmental relevant organisations

There is no awareness of the principles and legal impacts of space activities (from registry to liability, including responsibility, sustainability and even the “peaceful uses of outer space”)

Awareness (cont.)

Of:

Space activities, institutions and organisations at the international level (cont.)

At the continental
and regional level

In certain situations, there is no awareness of the work being done in space related matters at the continental level

In other cases, there is no view relating the use of space technologies and services with the goals of the regions or other areas that the country is a part of

Approach

To:

Space activities in general

There is a clear view that space activities and technologies need to be used for the development of the country, but not on what the approach to achieve this overall goal should be

There is also, sometimes, a disconnection between what the country can achieve in the short medium term and the objectives or projects we are sometimes told that the country would like to achieve

There is no structured vision on how to use outer space to respond to the country's general and sectorial goals

Approach (cont.)

To:

Space priorities and projects

There are usually some projects and programs that the countries have already decided they would like to implement even before deciding on drafting a policy (e.g., launch a satellite, conclude agreements for using space technology for traffic management, develop university and training programs on space matters, etc.)

However, in most cases, there is no clear Vision of what the priorities should be with relation to the projects and programs to launch in the short medium term

Coordination

Between:

National competent entities

Many countries lack an effective cooperation / dialogue among the different public stakeholders with a role in space activities or that benefit from space activities

This leads to difficulties in achieving a space policy and goals that are acceptable to all and fit for all

Coordination (cont.)

Between:

Different goals and objectives

Lack of coordination between competent entities may also lead to duplication of efforts in achieving certain goals

In fact, one single investment/project in space may have benefits that extend to all areas of a State's activity

Capacity

Of:

Public stakeholders

One of the main challenges in emerging countries relate to capacity

There is usually not enough trained and qualified human resources to:

- Implement the space strategy, its projects and programs
- Effectively use space services and products
- Be a part of international, continental or regional initiatives and projects

Capacity

Of:

Users / suppliers of space services and products

Another angle of capacity relates with the use of space services and products by the final users – a space policy is only effective if space technology can be effectively used by the people whose problems space activities aim to solve

Capacity is also relevant for the development of private activity in a country

Financing

Financing space activities

Many of these countries deal with challenges relating with obtaining financing for their activities

Obtaining financing for space activities is an additional challenge

3. How to deal with the challenges



Initial workshop with all relevant stakeholders

This will help all stakeholders with a role in space activities to be aware of the scope of space activities, its main international actors and main benefits

Analysis of the country

Analysis of the main policies and strategies of the country that may have an impact on, or benefit from, space activities

Identification of the main goals at the international level with impact on the country

Identification of the role of outer space in achieving international, continental and regional goals with impact on the country

Drafting the space policy and strategy

Identify the Vision of the country in space related matters

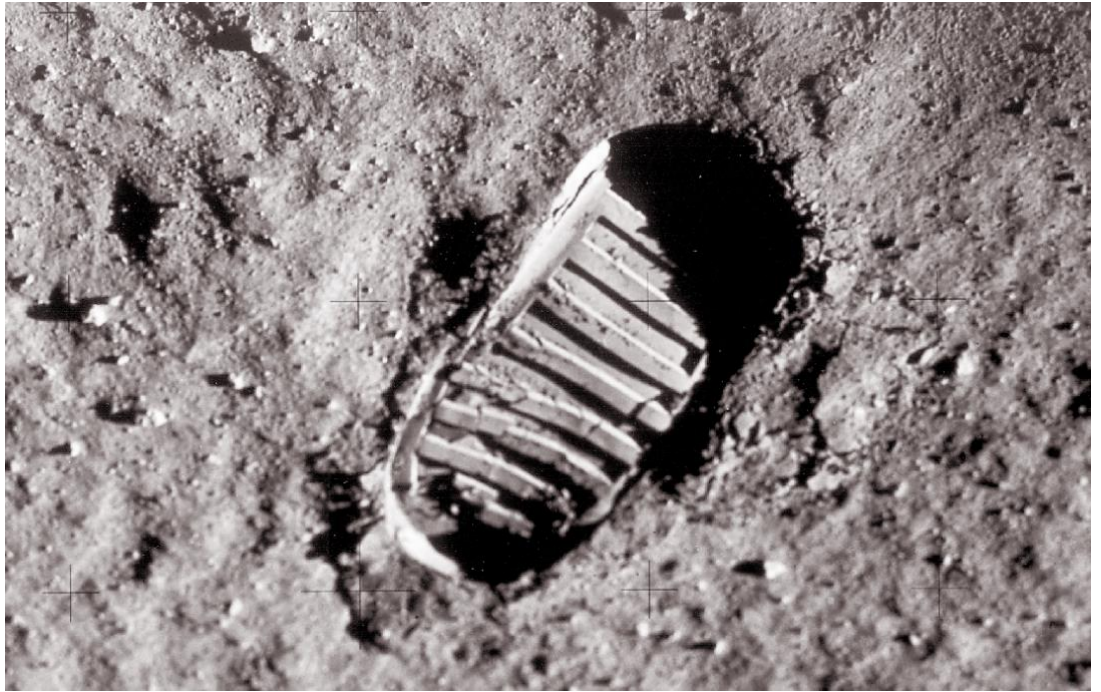
Define the approach

Identify the priorities for space activity

Indicate the timeline

Identify the management, monitoring and report responsibilities

4. Next steps



Guarantee that the organisational structure is fully implemented and running

Assist in the execution of the legal and regulatory goals of the space strategy (e.g., becoming a part of COPUOS and the Space Treaties, drafting the laws, concluding partnerships, etc.)

Assist in the execution of the projects and programs with regulatory / legal impacts (e.g., licensing conditions for satellite data, public consultation for the use of orbital slots, capacity building, supply and service contracts for space technology, services and products, etc.)

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The background of the slide is a composite image. The top and bottom sections show a deep space scene with several galaxies, including a prominent spiral galaxy in the center. The middle section features a view of Earth from space, showing the curvature of the planet, the blue atmosphere, and white clouds. A bright sun is visible on the right side, creating a lens flare effect. The text 'Thank you' is centered in the middle section.

Thank you

Magda Cocco (Partner)
Helena Correia Mendonça (Consultant)

Aerospace
Telecommunications & Media
Information and Emerging Technologies
Privacy, Data Protection & Cybersecurity
Intellectual Property
Defence

mpc@vda.pt