

Chapter 2

Space Policy: Understanding Space Activities, Motivations and Programs

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ABSTRACT

This chapter explores the concept of space policy and sheds light on its importance in understanding the nature and evolution of space activities and programs. More specifically, this chapter seeks to offer an introduction on how space policy can be defined and understood, followed by an overview of the main current trajectories of space policies of both national actors as well as international and intergovernmental institutions. Finally, this chapter formulates some conclusions regarding the future potential avenues of space policy and describes how these scenarios could impact the future of human activities and behaviour in space.

INTRODUCTION

Evolved in Africa over the course of millions of years, humans have ever since ventured into new territories, pushing boundaries wherever they would go. At some point in the distant past, humanity invented vessels to traverse rivers, seas and eventually oceans, allowing us to venture beyond the first environment – the land – into the vast open second environment which makes up over 70% of our planet's surface. Breakthroughs like this have paid off, because they expanded our options, thus increasing our chances of survival dramatically. In the beginning of the 20th century, we added a third environment to that list. With the invention of the airplane, we finally succeeded in realising the dream of flying, enabling us to venture into skies which for so long has been so close yet so far out of reach. Just a few decades after that, in the middle of the 20th century, an even bolder dream was realised, when we achieved the

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‘unachievable’: venturing beyond the confined surface of our planet. At that memorable moment of the first satellite launch, we entered a new era: the Space Age.

Today, more than 60 years since the start of the Space Age, the world is witnessing an ever-growing interests of states and private actors to become engaged in space activities. The club of spacefaring nations and its set of capabilities is constantly expanding. At the same time, strong innovation dynamics are drastically reshaping the way in which many space activities are conducted. All these developments are changing the playing field for space activities, programmes and capabilities, bringing space ever closer to the heart of a vastly inter-connected society. As a result, we are relying ever more on space assets, increasing their strategic importance for humanity. As space activities become increasingly strategically important, however, the risk and potential impact of disagreement is on the rise too. All these recent trends are expected to continue – if not intensify – in the foreseeable future.

This chapter explores the concept of space policy and sheds light on its importance in understanding the nature and evolution of space activities and programs. More specifically, this chapter seeks to offer an introduction on how space policy can be defined and understood, followed by an overview of the main current trajectories of space policies of both national actors as well as international and intergovernmental institutions. Finally, this chapter formulates some conclusions regarding the future potential avenues of space policy and describes how these scenarios could impact the future of human activities and behaviour in space.

Throughout this chapter, particular attention is given to the reasons why space policies have been and are evolving. In doing so, the diverse driving forces that give rise to these changes – which range from geopolitics, over economics to technological innovation – are illustrated and explained.

Considering that space activities are typically conducted in a highly specialised and segmented fashion, the authors hope that the interdisciplinary nature of space policy can help readers in getting a better overview and insight into the historic development, current trends and future directions in space.

DIMENSIONS OF SPACE POLICY

Before this chapter focusses on the specific contents and historic developments of space policies around the world, it is crucial to characterise and define the generic nature of space policy. Explaining the lenses through which space policies should be understood is crucial in order to grasp the true meaning and rationale behind them.

Since the term ‘policy’ is widely used in contemporary society, it is important to look at its generic substance before elaborating on the specificities of space policies. Generally speaking, ‘policy’ can be defined as *“a set of ideas or plans of what to do in particular situations which has been agreed upon officially by a group of people, a business organization, a government, or a political party”*¹. Policies formulated by the executive or legislative branch of government – as is typically the case for space and other policies at political level – are therefore a very important basis for making decisions. In fact, policies serve multiple purposes at once, thanks to their different ‘dimensions’.

Firstly, policies have a very important ‘communicative’ dimension: they are typically used to communicate and motivate a cohesive set of principles or vision adhered to by a government in devising and implementing its decisions and resources in a particular field. In this regard, space policies are only a very small field of national policies throughout countries, especially compared to other fields such policies on energy, poverty, mobility, etc. In fact, many countries in the world do not have dedicated space

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