

# Contents

<b>1 Introduction</b> .....	1
References .....	5
<b>2 The Principle of Peaceful Use of Outer Space: Reviewing the Scope of “Peaceful” in the Changed Context</b> .....	7
2.1 The Enigma of Peaceful Use of Space .....	7
2.2 Exploring Evolution of the Concept of Peaceful Use of Outer Space .....	9
2.2.1 Peaceful Use of Space in the Pre-Sputnik Era .....	9
2.2.2 Crystallization of the Concept of Peaceful Use of Outer Space .....	11
2.3 Convolution of the Concept of Peaceful Use of Outer Space .....	13
2.3.1 The Genesis of Selective Interpretation of Peaceful Use of Space .....	13
2.3.2 Geo-Politics and Regime Formation in Space .....	16
2.4 Adapting Peaceful Use to Contemporary Issues .....	18
2.4.1 Intentional Ambiguity and Its Incorporation in Space Treaties .....	18
2.4.2 Contextual Assessment of the Concept of Peaceful Use of Space .....	19
2.4.3 Reviewing Legislative Underpinnings of the Concept of Peaceful Use of Space .....	21
2.4.4 UNCOPUOS: Evolving to ‘Peaceful Use’ in the Broader Context .....	22
2.5 Conclusion .....	23
References .....	25

<b>3</b>	<b>Converging Interests and International Cooperation: Solutions in International Law</b> . . . . .	27
3.1	Role of International Law in Shaping the Contours of Space Cooperation . . . . .	27
3.1.1	Evolution of International Cooperation in Space . . . . .	29
3.1.2	Cold War Space Treaties; Détente to International Cooperation . . . . .	30
3.1.3	Evolving Contours; Peaceful Use to Commercial Use . . . . .	32
3.1.4	The International Space Station: From State to Commercial Cooperation . . . . .	33
3.2	The Legal Framework of Space Cooperation . . . . .	36
3.2.1	The UN Charter and Its Scope of Application to Space Cooperation . . . . .	37
3.2.2	International Cooperation and the Space Treaties . . . . .	39
3.2.3	The 1996 Declaration on Space Cooperation . . . . .	42
3.3	Examining Effects of Legal Mechanisms on International Space Cooperation . . . . .	43
3.3.1	Resilience of Legal Mechanisms Enabling Adaptation . . . . .	43
3.3.2	Adapting to Change: Commercial Cooperation . . . . .	44
3.3.3	Commercial Cooperation: Examining the Case of India and the EU . . . . .	47
3.4	Conclusion . . . . .	51
	References . . . . .	52
<b>4</b>	<b>Legal Options to Address the Challenges and Opportunities in Small Satellites</b> . . . . .	55
4.1	The Small Satellite Surge . . . . .	55
4.1.1	Mega-Constellations of Small Satellites . . . . .	55
4.1.2	Small Satellite Classification and Functions . . . . .	57
4.2	The Impact of Lack of Specific Small Sat Regulation . . . . .	59
4.2.1	Rise in Frequency Allocation and Allotment Complexities . . . . .	59
4.2.2	Space Debris and Related Issues . . . . .	60
4.2.3	National Security Issues . . . . .	63
4.3	The Regulations Enveloping Small Satellites . . . . .	64
4.3.1	Definitional Issues with Regards to Satellites . . . . .	64
4.3.2	Small Satellite Issues in the Outer Space Treaty . . . . .	65
4.4	Small Satellites, Space Debris and Sustainable Development . . . . .	67
4.4.1	Small Satellites and International Environmental Law . . . . .	68
4.4.2	Small Satellites and Debris Mitigation Guidelines . . . . .	70
4.5	Recommendations <i>De Lega Ferenda</i> . . . . .	71
4.5.1	Addressing Definitional Issues . . . . .	71
4.5.2	Declaring LEO as Limited Natural Resource . . . . .	72

4.5.3 Non-functional Space Objects and Environmental Law . . . .	73
4.5.4 Elevating UNCOPUOS Guidelines to Standards . . . . .	75
4.6 Conclusion . . . . .	77
References . . . . .	77
<b>5 Conclusion and Summary . . . . .</b>	<b>81</b>