

**THE REFUSAL OF ACCESS TO HIGH RESOLUTION REMOTE SENSING  
DATA FOR REASONS OF NATIONAL SECURITY – A (NEW) RULE OF  
CUSTOMARY INTERNATIONAL LAW?**

by

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## SYNOPSIS

The freedom of space exploration, including the ability to conduct remote sensing activities, is widely accepted by states. The general principles set out in the Outer Space Treaty and the Moon Agreement were refined in various United Nations General Assembly Resolutions, including the Remote Sensing Principles (RSP) of 1986. Although the RSP support the basic tenets of the outer space treaties and refers to the provision of access to remote sensing data on non-discriminatory terms, the principles are drafted in general terms and fail to provide direction with regard to issues such as the refusal by states to provide access to remote sensing data.

Notwithstanding the fact that the RSP makes no provision for such an exception, various states have included provisions in their national legislation allowing for the refusal of access to high resolution remote sensing data for national security reasons. In order to evaluate whether there is an existing or new rule of customary international law allowing for the refusal of access to remote sensing data on this basis, the state practice and *opinio juris* of specially affected states were examined. It was found that the conduct of states in this regard constitutes voluntary repeated action for the sake of convenience and is not based on a belief that such conduct is required by a certain rule of law. Accordingly, this study did not find evidence of the requisite state practice and *opinio juris* to support an existing or new rule of customary international law allowing for the refusal of high resolution remote sensing data for national security reasons.

It is argued, however, that this study supports possible emerging state practice in this regard. The terrorist attacks of 9/11 was a 'Grotian moment' and resulted in a fundamental change in the concept of national security and what constitutes a threat to national security. The study shows that states predominantly refer to the threat of terrorism when discussing issues of national security. States are concerned that high resolution remote sensing data can be used for terrorist activities, as this imagery can reveal the precise location of roads, buildings and military structures and allow for more precise weapons delivery.

Accordingly, it is submitted that the above events have paved the way for the accelerated development of a new rule of customary international law, namely for states to reserve the right to refuse access to high resolution remote sensing data for national security reasons such as terrorist threats.

Customary international law must have the ability to evolve and respond to new developments. Increasing state conduct in this regard points to emerging state practice which may in future be supported by the requisite *opinio juris* to create a new rule of customary international law.

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## CHAPTER 1: INTRODUCTION

<sup>1</sup>Framers of the various space law treaties in the 1960s did not envisage a world where artificial satellites orbit constantly, providing mankind with services like remote sensing, weather prediction, direct television broadcasting, telecommunications, and global positioning systems. More significantly, framers of these treaties did not envisage the blurring of the line between civilian and military activities, and the exploitation of space technology.

Almost 15 years ago, Lee submitted that the legal framework was inadequate to deal with the commercialisation of outer space.<sup>2</sup> In 2003, the chairperson of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS), Sergio Marchisio, cautioned that the expanded uses of remote sensing necessitated a review of the international legal regime governing remote sensing to determine whether the Principles relating to Remote Sensing of the Earth from Outer Space<sup>3</sup> are still relevant.<sup>4</sup> These observations are particularly true in respect of the legal regime dealing with the provision of access to remote sensing data by sensing states.

In terms of article 1 of the Remote Sensing Principles (RSP), remote sensing is defined as the sensing of the earth for the purpose of improving the management of natural resources, land use, and the protection of the environment. The basis of remote sensing is that every object with a temperature above absolute zero radiates electromagnetic energy. Sensors are used to collect data obtained from the electromagnetic waves, and the analysis of the data provides information regarding the object sensed and its physical properties.<sup>5</sup>

Since the adoption of the RSP in 1986, the remote sensing industry has been increasingly commercialised, with remote sensing predominantly being conducted by non-state actors with government backing (including public-private partnerships).<sup>6</sup>

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<sup>1</sup> RJ Lee 'Reconciling International Space Law with the Commercial Realities of the Twenty-first Century' (2000) 4 *Singapore Journal of International and Comparative Law* 194.

<sup>2</sup> Lee (n 1 above) 195.

<sup>3</sup> UNGA Resolution 41/65.

<sup>4</sup> S Marchisio 'Remote Sensing Principles' (2003) 12<sup>th</sup> European Centre for Space Law Summer Course on Space Law and Policy Leuven, Belgium <http://www.ilwr.de/index.php?lang=eng> (accessed 10 February 2015).

<sup>5</sup> IHP Diederiks-Verschoor 'Current Issues in Remote Sensing' (1984) *Michigan Yearbook of International Legal Studies* 308.

<sup>6</sup> W von Kries 'The U.S. Commercial Remote Sensing Policy of April 28, 2003: Some Comments' (2003) 52 *German Journal of Air and Space Law* 556.

Whether private or government-owned, however, remote sensing satellites continue to generate data which are of great military use.<sup>7</sup> As technology improves, so do the capabilities of remote sensing satellites, and it is therefore understandable that states would monitor the possibilities of using remote sensing satellites for military purposes closely.

Although the RSP contemplates the use of remote sensing satellites for civil purposes, national security concerns in relation to the provision of remote sensing data initially arose from the potential use of remote sensing satellites for military purposes.<sup>8</sup> This is an important starting point in order to evaluate an increasing trend of states refusing access to high resolution remote sensing data for national security reasons.

## 1.1 The uses of remote sensing

As the commercial availability of detailed, unclassified imagery increased, so did the concern that commercially available imagery would be used for non-sanctioned military or terrorist activities. High-spatial resolution imagery can reveal the precise location of roads, railways, airport layouts, military installations, and other structures. It can be used to gather intelligence, assist in battlefield mapping, or, in some cases, used in conjunction with cruise missile technology for precise weapons delivery.<sup>9</sup>

This comment by Hanley illustrates the development in the capabilities of remote sensing satellites since the launch of Sputnik 1 in 1957.<sup>10</sup> The spatial resolution capabilities of satellites relates to the size of objects they can observe. The higher the spatial resolution of the particular satellite, the more detailed the images.<sup>11</sup> A resolution of one metre means that a satellite can take detailed images of objects of only one metre across. Due to the production of detailed imagery, high-resolution data are more

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<sup>7</sup> R Jakhu 'International Law Governing the Acquisition and Dissemination of Satellite Imagery' (2003) 29 *Journal of Space Law* 71.

<sup>8</sup> J Magdelénat 'The Major Issues in the 'Agreed' Principles on Remote Sensing' (1981) 9 *Journal of Space Law* 111.

<sup>9</sup> C Hanley 'Regulating Commercial Remote Sensing Satellites over Israel: A Black Hole in the Open Skies Doctrine?' (2000) 52 *Administrative Law Review* 423) 423, 427.

<sup>10</sup> Hobe, S 'The Impact of New Developments on International Space Law (New Actors, Commercialisation, Privatisation, Increase in the Number of 'Space-faring Nations')' (2010) 15 *Uniform Law Review* 869.

<sup>11</sup> Jakhu (n 7 above) 66.

useful, and thus more contentious, especially when it comes to national security concerns.

To put this into perspective, the first Landsat satellites launched by the United States (US) in the 1970s produced seventy-nine-meter resolution imagery.<sup>12</sup> In 1999, however, the US company Space Imaging launched the IKONOS satellite which can take black-and-white images of objects of one metre across and colour images of objects of four metres across. According to Space Imaging: 'You can count the cars in a parking lot, tell which are pickups and sedans, and tell what colour they are.'<sup>13</sup> Yedda confirms that IKONOS can distinguish individual vehicles and specific types of airplanes.<sup>14</sup>

These developments gave rise to security concerns should such detailed imagery be purchased by enemies of a particular state. Accordingly, a trend developed where access to high resolution data is refused for reasons of national security.

## 1.2 Refusal of access to remote sensing data

Due to the potential military use of data collected by remote sensing satellites, concerns arose as regards the disclosure of this data. The disclosure of access to remote sensing data is regulated in terms of Principle XII of the RSP. This principle states that a sensed state shall have access to remote sensing data on a non-discriminatory basis and on reasonable cost terms. The RSP makes no provision for any exceptions to this basic principle.

Prof Gabrynowicz confirms that, globally, states in general support a policy of open access to remote sensing data for scientific, social and economic purposes. She notes, however, that there is an increasing trend of states restricting access to data for reasons of national security, specifically with regards to high-resolution data.<sup>15</sup> Similarly, von Kries refers to the example of data being withheld for security reasons

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<sup>12</sup> JR Jensen & K Lulla 'Introductory digital image processing: a remote sensing perspective' (1987) 65.

<sup>13</sup> 'The satellite wars' <http://www.spacetoday.org/Satellites/YugoWarSats.html> (accessed 6 March 2015).

<sup>14</sup> JA Yedda 'U.S. National Security and Economic Interests in Remote Sensing: The Evolution of Civil and Commercial Policy' (2009) Prepared for National Geospatial-Intelligence Agency Sensor Assimilation Division Sunrise Valley Drive Reston 15.

<sup>15</sup> JI Gabrynowicz (ed.) 'The Land Remote Sensing Laws and Policies of National Governments: A Global Survey' (2007) National Centre for Remote Sensing, Air and Space Law, University of Mississippi School of Law.

during the Gulf War when the French satellite company Spot Image refused public access to satellite images of Iraq, Kuwait, and the Gulf region.<sup>16</sup>

This study will investigate the refusal of access to remote sensing data by states for national security reasons. It will argue that while there is insufficient evidence of state practice and *opinio juris* to support an existing or new rule of customary international law to this effect, the conduct of states support emerging state practice with regard to the refusal of access to high resolution remote sensing data for national security reasons.

### 1.3 Research Questions

The main research questions are as follows:

- 1.3.1 What is the current legal framework that regulates remote sensing activities?
- 1.3.2 How is customary international law created?
- 1.3.3 What is regarded as evidence of state practice and *opinio juris*?
- 1.3.4 Is there sufficient evidence of state practice and *opinio juris* to support a rule of customary international law stating that access to remote sensing data can be refused for reasons of national security?

### 1.4 Research Objectives

This study will investigate state practice and *opinio juris* in support of an existing, or new, rule of customary international law that access to remote sensing data may be refused by sensing states on the basis of national security.

It will show that although there is insufficient evidence of state practice and *opinio juris* to support an existing or new rule of customary international law in this regard, various states have included provisions authorising refusal of access to high resolution remote sensing data in their national legislation and policies. It will be argued that there is emerging state practice as regards such a refusal, which may

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<sup>16</sup> von Kries (n 6 above) 176.

eventually be supported by the requisite *opinio juris* in support of a new rule of customary international law.

## 1.5 Delimitation of Study Area

Due to practical constraints, this study will focus on the state practice and *opinio juris* of certain states which are specially affected by the development of a rule allowing for refusal of remote sensing data due to national security reasons. As a result, there are possible *lacunae* in respect of this study.

Matters relating to the liability of state and non-state actors in relation to remote sensing will not be considered. Similarly, issues concerning environmental protection, copyright of sensed data, and the possible impact of remote sensing on privacy laws are excluded from the ambit of this study.

## 1.6 Research Methodology

Academic desktop research will be conducted. The research will include a critical evaluation of relevant international law, including, as primary sources, relevant articles of the Outer Space Treaty and the RSP. The sources of customary international law will further be considered.

Secondary resources will include views expressed by authoritative writers on space law as set out in journal articles.

## 1.7 Chapter Breakdown

The research questions set out in paragraph 1.3 above will be addressed in the chapters below.

### 1.7.1 Chapter 2 International conventions and principles regulating remote sensing activities.

This chapter considers the various treaties and resolutions regulating international space law. It provides an overview of the RSP as well as the status of the RSP as a possible source of customary international law. It further illustrates that although the

RSP stipulates that access to remote sensing data must be granted by sensed states on a non-discriminatory basis, states are reserving the right to refuse such access for reasons of national security.

As the RSP do not provide for any such exception to the granting of access to remote sensing data, it is submitted that the RSP cannot be evaluated as a source of *opinio juris* with regard to the existence or establishment of a customary international law rule in this regard. Accordingly, other sources of customary international law must be considered.

### **1.6.2 Chapter 3 An overview of the test for the creation of a rule of customary international law.**

The traditional view that customary international law consist of two elements, namely state practice and *opinio juris*, is discussed. Although alternative views that either state practice or *opinio juris* is sufficient to constitute customary international law are considered, it is argued that the traditional view is widely accepted and persists in both theory and practice.

Accordingly, state practice and *opinio juris* will be evaluated in order to determine whether there is an existing or new rule of customary international law to support the refusal of remote sensing data for national security reasons.

### **1.6.3 Chapter 4 What is regarded as evidence of state practice and *opinio juris*?**

This chapter will provide an overview of the various forms of conduct which can serve as evidence of state practice and *opinio juris*. It will be shown that both state practice and *opinio juris* can take a wide range of forms, and that the same conduct can be proof of both state practice and *opinio juris*. The requirements for conduct to qualify as state practice and / or *opinio juris* will be discussed.

### **1.6.5 Chapter 5 State practice and *opinio juris* with regards to the refusal of access to remote sensing data for reasons of national security**

The meaning of the term 'national security' will be evaluated, and it will be argued that this term is vague and affords states a wide discretion to refuse access to remote sensing data on the basis of national security.

Furthermore, the practice of specially affected states will be considered, and it will be argued that various states followed the example of the US in including provisions in their policies and legislation to allow for the refusal of access to remote sensing data for national security reasons. It will be submitted, however, that the conduct of states of refusing access to remote sensing data for national security reasons does not meet the requirements of state practice and furthermore that states do not act on the basis of *opinio juris* in this regard.

### **1.6.5 Chapter 6 Conclusion**

This chapter argues that although there is state conduct in support of the refusal of access to remote sensing data for national security reasons, such conduct is not sufficiently widespread or consistent to constitute state practice. Furthermore, the requisite *opinio juris* is lacking, as it seems that states simply follow the example of previous states in the inclusion of provisions to this effect in their national legislation and policies.

In the modern era of increasing terrorist threats and in light of the global impact of international terrorism, it is submitted that the conduct of states amount to emergent state practice which may in future constitute a new rule of customary international law. It is argued that the refusal of such access may eventually be supported by the requisite *opinio juris*.

## CHAPTER 2: INTERNATIONAL CONVENTIONS AND PRINCIPLES REGULATING REMOTE SENSING ACTIVITIES

### 2.1 Synopsis

In order to understand the reasoning behind the current legal framework regulating access to remote sensing data, it is necessary to understand the events which contributed to the development of international space law. This chapter examines the genesis of the rules of international space law, including the various treaties and resolutions adopted by the United Nations General Assembly (UNGA) to govern the conduct of states in outer space.

It further discusses the history of the RSP in terms of which access to remote sensing data must be granted on a non-discriminatory basis. It illustrates that there are growing exceptions to the granting of such access, in particular for reasons of national security.

In light of the fact that the RSP do not provide for any exceptions to the granting of non-discriminatory access to remote sensing data, it is submitted that the RSP cannot be evaluated as a source of *opinio juris* as regards the existence or establishment of a customary international law rule allowing for the refusal of access to remote sensing data for reasons of national security. Consequently, other sources of customary international law must be evaluated in this regard.

### 2.2 Introduction

Initially, the space race was dominated by two major superpowers – the US and Russia. These states competed vociferously for the position of being the dominant space power. The launch of the Sputnik satellite by Russia in 1957 and the first manned spaceflight with Yuri Gagarin<sup>17</sup> in 1961 were swiftly followed by the US' Neil Armstrong and Edwin 'Buzz' Aldrin walking on the moon with 'one giant leap for mankind.'

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<sup>17</sup> Sekhula, P 'The Law Governing the Acquisition and Use of Earth Observation Data in South Africa: A Need for Legal Harmonisation' (2013) 2 *South African Journal of Geomatics* 142.

These events necessitated rules regulating the conduct of states in outer space. It fell to the UNGA to address this issue. In December 1959, the UNGA established UNCOPUOS. UNCOPUOS consisted of two subcommittees, namely a Scientific and Technical Subcommittee and a Legal Subcommittee. It was the Legal Subcommittee which faced the difficult challenge of attempting to regulate human conduct in outer space.

The initial drafting work by UNCOPUOS was commendable, and it led to the adoption of various resolutions and treaties dealing with issues relating to the conduct of states in outer space, as set out below.

### 2.3 Outer space resolutions and treaties

Two years after the establishment of UNCOPUOS, the UNGA adopted a resolution entitled International Co-operation in the Peaceful Uses of Outer Space.<sup>18</sup> This was followed by the adoption of the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space in 1962.<sup>19</sup> These resolutions laid the legal foundation for the Outer Space Treaty which was adopted by the UNGA in 1967.<sup>20</sup>

The Outer Space Treaty is widely regarded as the *magna carta* of international space law<sup>21</sup> and has been ratified by 103 states. It encapsulates the general principles which are now widely accepted in international space law, such as the freedom of use and scientific investigation of outer space. In terms of the Outer Space Treaty, the exploration and use of outer space is the province of all mankind, and will be for the benefit and common interests of all countries.<sup>22</sup> States, furthermore, must respect the rights and interests of other states and share the products of advances in outer space with other states on the basis of equality.<sup>23</sup>

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<sup>18</sup> UNGA resolution 1721 (XVI).

<sup>19</sup> UNGA resolution 1962 (XVIII).

<sup>20</sup> UNGA resolution 2222 (XXI).

<sup>21</sup> MN Andem 'Meeting international responsibilities and addressing domestic needs' (2005) United Nations and Nigeria Workshop on Space Law. 21-24 November 2005, Abuja, Nigeria <http://www.unoosa.org/pdf/sap/2005/nigeria/presentations/01-05.pdf> (accessed on 13 March 2015).

<sup>22</sup> Article 1 of the Outer Space Treaty.

<sup>23</sup> Andem (n 21 above) 3.

After the Outer Space Treaty, the UNGA adopted several conventions which refined the broad principles set out in the treaty. These conventions relate to issues such as astronauts, the registration of space objects, and international responsibility for damage caused by space objects.<sup>24</sup>

The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (the Moon Agreement),<sup>25</sup> adopted by the UNGA more than a decade after the Outer Space Treaty, supports many of the broad principles contained in the Outer Space Treaty. The Moon Agreement declares that the exploration and use of the moon is the province of all mankind, and it stipulates that all exploration should be carried out for the benefit of all countries, irrespective of their degree of economic or scientific development.<sup>26</sup>

Although various issues related to outer space thus received further attention by states by way of conventions after conclusion of the Outer Space Treaty, none of the space law conventions contains any reference to remote sensing. This is despite the fact that remote sensing was already widely practised at the time of the UNCOPUOS deliberations.<sup>27</sup> Indeed, when attempts were made to formulate principles relating to remote sensing, the reaching of consensus proved challenging. The history of the RSP will be discussed below.

## **2.4 The Remote Sensing Principles**

### **2.4.1 Introduction**

As has been mentioned earlier, the Legal Subcommittee was tasked to deal with issues surrounding remote sensing. This warranted the establishment of an additional working group in 1971 to assist in the task.<sup>28</sup> Ultimately, the finalisation of the RSP took almost 15 years.

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<sup>24</sup> The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched in Outer Space of 1968; the Convention on International Liability for Damage Caused by Space Objects of 1972; the Convention on the Registration of Objects Launched into Outer Space of 1976 & the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies of 1979.

<sup>25</sup> UNGA resolution 34/68 of 1979.

<sup>26</sup> Article 4 of the Moon Agreement.

<sup>27</sup> IHP Diederiks-Verschoor (n 5 above) 308.

<sup>28</sup> IHP Diederiks-Verschoor (n 5 above) 307.

Several factors contributed to the delay in finalising the RSP. These included differences in approach by developing and developed states in relation to remote sensing activities. Developing states favoured a more restrictive approach (including prior consultation and consent before remote sensing is conducted) while developed states favoured the unrestricted collection and dissemination of remote sensing data.<sup>29</sup>

The historical context is of further importance. As discussions regarding remote sensing took place in the midst of the Cold War,<sup>30</sup> the inability of the major space-faring nations (Russia and the US) to agree on precise and detailed rules governing conduct in space is not surprising. Moreover, remote sensing was used primarily in the military sphere,<sup>31</sup> and the major space powers would arguably have been hesitant to agree to any restrictions of their activities in this area.

In spite of these difficulties, the UNGA finally adopted the RSP in 1986.<sup>32</sup> The status of the RSP as an UNGA resolution will be evaluated below.

#### 2.4.2 The status of the RSP

Article 38(1)(b) of the ICJ Statute sets out the two elements which form customary international law.<sup>33</sup> These elements are *usus*, or state practice ('a general practice'), and *opinio juris sive necessitates (opinio juris)*, a belief that the practice is obligatory on the basis of a rule of law or 'accepted as law.'<sup>34</sup>

There are different views as regards whether UNGA resolutions such as the RSP constitute *opinio juris*.

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<sup>29</sup>M Benkö & G Gruber 'UN Committee on the Peaceful Uses of Outer Space: Adoption of Principles on Remote Sensing of the Earth from Outer Space and Other Recent Developments' (1987) 36 *German Journal for Air and Space Law* 18-19.

<sup>30</sup>Lee (n 1 above) 195.

<sup>31</sup>J Magdelénat (note 8 above) 111.

<sup>32</sup>UNGA Resolution 41/65.

<sup>33</sup>Jl Slama 'Opinio Juris in Customary International Law' (1990) 15 *Oklahoma City University Law Review* 647.

<sup>34</sup>Slama (n 33 above) 605-606, 641; *North Sea Continental Shelf cases (Federal Republic of Germany v Denmark, Federal Republic of Germany v Netherlands)* ICJ (20 February 1969) (1969) ICJ Reports 44; *The Case of the S.S. Lotus (France v. Turkey)* PCIJ (7 September 1927) (1927) PCIJ (ser. A) 28; *Asylum Case (Colombia v Peru)* ICJ (20 November 1950) (1950) ICJ Reports 276.

Jenks comments as follows on the value of the *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space* being adopted as an UNGA resolution:

The cautious will, of course, continue to warn us not to read into the approval of the Declaration by the General Assembly more than is really there, but how much is there depends primarily on how much we wish to be there. When governments make it clear in the deliberations of the General Assembly that they regard a declaration about to be adopted as a statement of international law as it is accepted by the members of the United Nations, it is altogether unseemly for responsible scholars to dismiss it as a statement of intention which has not created any new obligations incumbent on Members of the United Nations.<sup>35</sup>

Manfred Lachs, former President of the ICJ, echoes the above sentiment and states:

Thus, by expressing their will to be bound by the provisions of the document in question, they consented to be bound, and there is no reason why they should not be held to it. For their intention seems to have been clear, the question of form, therefore, ceases to be of essence.<sup>36</sup>

Similarly, the ICJ places great significance on the consent of states to the text of a resolution. Charlesworth is of the view that in the *Nicaragua* case the ICJ suggests that voting for a resolution in an international forum is sufficient to provide both state practice and *opinio juris* for the formation of customary rules.<sup>37</sup>

Bin Cheng argues that UNGA resolutions automatically form part of customary law through evidence of exceptionally strong *opinio juris* alone. In Bin Cheng's opinion, the various UNGA resolutions relating to outer space which were adopted unanimously constitute instant customary law and require no further proof of state practice. Cantegreil agrees that, in certain cases, unanimous resolutions can be evidence of *opinio juris*.<sup>38</sup>

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<sup>35</sup> CW Jenks *A New World of Law? A Study of the Creative Imagination in International Law* (1969) 210.

<sup>36</sup> M Lachs *The Law of Outer Space* (1972) 138.

<sup>37</sup> HCM Charlesworth 'Customary International Law and the Nicaragua Case' (1984 – 1987) 11 1 *Australian Yearbook of International Law* 24.

<sup>38</sup> B Cheng 'United Nations Resolutions on Outer Space: 'Instant' International Customary Law?' (1965) 5 *Indian Journal of International Law* 35-40; J Cantegreil 'The Audacity of the Texaco / Calasiatic Award: René-Jean Dupuy and the Internationalization of Foreign Investment Law' (2011) 22 2 *European Journal of International Law* 449.

In the *Western Sahara* case, the ICJ states:

The cumulative impact of many resolutions when similar in content voted for by overwhelming majorities and frequently repeated over a period of time may give rise to a general *opinio juris* and thus constitute a norm of customary international law.<sup>39</sup>

The difficulty with the view that UNGA resolutions constitute ‘instant custom’ is that the UN Charter does not afford any legislative or formal prescriptive authority to the UNGA.<sup>40</sup> According to D’Amato, UNGA resolutions are not formally binding and can at best be evidence of *opinio juris*, but only in instances when there is ‘a sufficient body of State practice for the usage element of the alleged custom to be established without reference to the resolution.’<sup>41</sup>

### 2.4.3 The Remote Sensing Principles as an UNGA resolution

Sneifer argues that the practice of nations regarding remote sensing activities reflects a widespread acceptance of the principles regarding the freedom of space exploration, including remote sensing activities. This practice is evidenced by national legislation as well as the rise of commercial remote sensing ventures.<sup>42</sup> Marchisio is of the view that although certain of the RSP (such as the freedom to observe earth from outer space) have a firm basis in international customary law, the same cannot be said of all the principles.<sup>43</sup> Williams agrees that despite the fact that the RSP can predominantly be seen as declarative of customary international law, gaps remain, for example as regards the dissemination of data.<sup>44</sup>

Arguably, the RSP therefore constitute state practice and *opinio juris* in respect of certain of the general principles such as freedom of use of outer space by all states on a basis of equality as set out in the Outer Space Treaty and the Moon Agreement.

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<sup>39</sup> *Western Sahara (Advisory Opinion)* ICJ (16 October 1975) (1975) ICJ Reports 121.

<sup>40</sup> SA Bleicher ‘The Legal Significance of Re-citation of General Assembly Resolutions’ (1969) 63 *American Journal of International Law* 446; *South West Africa cases (Ethiopia v South Africa) (Liberia v South Africa)* ICJ (18 July 1966) (1966) ICJ Reports 51; MP Scharf ‘Accelerated Formation of Customary International Law’ (2014) 20 2 *International Law Students’ Association Journal of International & Comparative Law* 324.

<sup>41</sup> HWA Thirlway *International Customary Law and Codification* (1972) 67.

<sup>42</sup> Y Sneifer ‘The Implications of National Security Safeguards on the Commercialization of Remote Sensing Imagery’ (1996) 19 *Seattle University Law Review* 552.

<sup>43</sup> Marchisio (n 4 above) 412.

<sup>44</sup> S Williams ‘Reflections and Suggestions on Remote Sensing and International Law’ (2001) 50 *German Journal of Air and Space Law* 417.

Gaps remain, however, as regards aspects relating to access to remote sensing data, as will be illustrated below.

#### 2.4.4 Access to remote sensing data

The RSP represent a compromise by states on various issues, and as such the principles are mostly couched in general terms. Lee argues that the fact that decisions in UNCOPUOS are made by consensus results in the fact that principles are formulated in 'vague and abstract terms' in order to ensure that they gain wide acceptance.<sup>45</sup> This seems to be especially true in respect of the RSP and the principle dealing with access to remote sensing data.

Principle XII, dealing with the access to and distribution of remote sensing data, is an example of a compromise where the lack of specificity may lead to uncertainty. Hopkins notes that this principle reflects an accommodation between the sovereign rights of both sensing and sensed states. It allows remote sensing to be carried out by any state, with the sensed state having access to any data relating to its territory 'on a non-discriminatory basis and on reasonable cost terms.'<sup>46</sup> Professor Christol refers to the need to define the terms 'non-discriminatory basis and 'reasonable costs' in the 2004 report by the International Law Commission (ILC) on Remote Sensing and National Space Legislation.<sup>47</sup>

Furthermore, the RSP fail to address instances where, despite the provisions of article XII, access to remote sensing data is refused by states. Professor Gabrynowicz points to a growing exception to the general principle that states make data available on an open and non-discriminatory basis:<sup>48</sup>

The trend is moving away from applying general principles, like the non-discriminatory access policy, to analysing the specifics of each request. The analysis of each request itself has also trended away from considering what kind of data is being requested to who is requesting it, and why. In one potential and important case, the analysis is moving completely away from the data and requester to analysing the sensitivity of the entire context of the transaction. The cumulative effect of these trends emphasizes national security interests over commercial interests and

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<sup>45</sup> Lee (n 1 above) 206.

<sup>46</sup> Principle XII of the RSP; Hopkins, GL 'Legal Implications of Remote Sensing of Earth Resources by Satellite' (1978) 80 *Military Law Review* 66.

<sup>47</sup> ILC Report 'Report On the Legal Aspects of the Privatisation and Commercialisation of Space Activities: Remote Sensing And National Space Legislation' (2004) Berlin Conference. [www.ila-hq.org](http://www.ila-hq.org) (accessed 5 April 2015).

<sup>48</sup> Gabrynowicz (n 15 above) 11.

brings control of high-resolution satellites, data, and data products increasingly within the authority of national defence and licensing agencies via various legislative and policy mechanisms.<sup>49</sup>

## 2.4 Conclusion

The RSP do not make provision for any exceptions to the granting of access to sensed data. Consequently, the RSP cannot serve as a source of *opinio juris* as regards the existence or establishment of a customary international law rule allowing for the refusal of access to remote sensing data for reasons of national security. Other sources supporting state practice and *opinio juris* will need to be evaluated in order to determine whether there is an existing, or new, rule of customary international law supporting such refusal, alternatively emerging state practice.

In order to evaluate the above, the next chapter will commence with a discussion of the requirements for the creation of a rule of customary international law.

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<sup>49</sup> Gabrynowicz (n 15 above) 2.

## CHAPTER 3: AN OVERVIEW OF THE TEST FOR THE CREATION OF A RULE OF CUSTOMARY INTERNATIONAL LAW

### 3.1 Synopsis

This chapter discusses the test for the creation of a rule of customary international law. It provides an overview of the traditional view that customary international law consist of two elements, namely state practice and *opinio juris*. It argues that although there are dissenting views in literature that either state practice or *opinio juris* is sufficient to constitute customary international law, the traditional view is widely accepted.

### 3.2 Introduction

One cannot readily divorce the material element from the psychological element, for in the specific cases where custom has been alleged both of these elements operate interdependently to qualify each other.<sup>50</sup>

The traditional view that both state practice and *opinio juris* are necessary components for the formation of a rule of customary international law is supported by various judgments of the ICJ.<sup>51</sup> In the *Lotus* case, decided in 1927, the Permanent Court of International Justice states that mere state conduct is not sufficient to prove the creation of customary international law. It is necessary that states perform or abstain from conduct because of a belief that they are obliged to do so before international custom is created.<sup>52</sup>

In the *North Sea Continental Shelf* cases (*Federal Republic of Germany v Denmark, Federal Republic of Germany v Netherlands*) decided in 1969, the ICJ

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<sup>50</sup> AA D'Amato *The Concept of Custom in International Law* (1971) 111-114.

<sup>51</sup> *Constitution of the Maritime Safety Committee of the Inter-Governmental Maritime Consultative Organization (Advisory Opinion)* ICJ (8 June 1960) (1960) ICJ Reports 150; *South West Africa Cases* (n 40 above) 6; *Case Concerning Military & Paramilitary Activities in & Against Nicaragua (Nicaragua v United States)* ICJ (27 June 1986) (1986) ICJ Reports 14; *Case Concerning the Continental Shelf (Libyan Arab Jamahiriya v Malta)* ICJ (3 June 1985) (1985) ICJ Reports 13; *Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada v United States)* ICJ (12 October 1984) (1984) ICJ Reports 246; *Western Sahara Case* (n 39 above) 12; *Fisheries Jurisdiction Case (Great Britain and Northern Ireland v Iceland)* ICJ (25 July 1974) (1974) ICJ Reports 3; *Case Concerning Barcelona Traction (Belgium v Spain)* ICJ (5 February 1970) (1970) ICJ Reports 3.

<sup>52</sup> *Lotus* case (n 34 above).

states that the frequency or habitual character of acts is not in itself enough to constitute state practice. By way of illustration, the ICJ refers to many international acts such as those in the field of ceremony and protocol which are motivated only by considerations of convenience, courtesy or tradition and not by of any sense of legal duty.<sup>53</sup>

The dual nature of the components of customary international law is further confirmed in the 2014 Annual Report of the ILC. Michael Wood, the Special Rapporteur, notes that the traditional view of customary international law is widely supported by the practice of states and the decisions of international courts and tribunals.<sup>54</sup> The definition of customary international law in the 2014 ILC report mirrors the wording of article 38 of the ICJ statute where customary international law is defined as ‘those rules of international law that derive from and reflect a general practice accepted as law.’<sup>55</sup>

### 3.3 Criticisms of the traditional view

Notwithstanding what is stated above, there are certain criticisms of the traditional view. Slama points out the circularity of the view that customary international law consists of both state practice and *opinio juris*. He notes that, on the one hand, it is argued that a rule of law evolves from practice, but on the other hand this practice must be accompanied by a belief that the practice itself is required by some (existing) rule of law.<sup>56</sup>

D’Amato echoes Slama’s sentiment and queries how custom can create law if its psychological component (*opinio juris*) requires action in accordance with law which pre-exists the relevant action. D’Amato is of the view that, although the traditional view can possibly still explain customary rules already in existence and in respect of which *opinio juris* exists, it is inadequate as an explanation of the formation of new customary international law.<sup>57</sup>

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<sup>53</sup> *North Sea Continental Shelf cases* (n 34 above).

<sup>54</sup> Report of the ILC (2014) Sixty-sixth session (5 May - 6 June 2014 and 7 July - 8 August 2014) supplement no 10 (A/69/10) 241.

<sup>55</sup> 2014 ILC Report (n 47 above) draft conclusion 2(a) p 239.

<sup>56</sup> Slama (n 33 above).

<sup>57</sup> As above.

Likewise, Koskenniemi refers to the circularity of the traditional view. He points to the interplay between the two elements of international customary law and the possible arbitrariness involved in the determination of custom:

Because both elements [State practice and *opinio juris*] seek to delimit each other's distorting impact, the theory of custom needs to hold them independent from each other. But this it cannot do. Attempting to identify the presence of the psychological element, it draws inferences (presumptions) on the basis of material practice. To ascertain which acts of material practice are relevant for custom-formation, it makes reference to the psychological element (i.e. those acts count which express the *opinio juris*). The psychological element is defined by the material and *vice versa*. This circularity prevents doctrine from developing a determinate method of custom-ascertainment. It has led to determining custom in terms of an equity which it can itself only regard as arbitrary.<sup>58</sup>

There are, furthermore, dissenting views with regard to the elements necessary for the creation of customary international law. These views focus either on state practice or on *opinio juris* being sufficient as a constitutive element of customary international law. For example, Bin Cheng argues that *opinio juris* is sufficient to establish a rule of customary international law 'instantly.' He is of the view that, once *opinio juris* is established, there is no need for any state practice.<sup>59</sup>

Cheng's view is criticised on a practical level. As D'Amato points out, it is very difficult to prove the majority of international rules apart from on the basis of usage.<sup>60</sup> D'Amato argues that the only decisive way to determine the collective views of decision makers on the content of international rules is through state practice, as 'a state can act in only one way at one time, and its unique actions, recorded in history, speak eloquently and decisively.'<sup>61</sup> Likewise, Petersen is of the view that it is difficult to imagine customary law without state practice or custom.<sup>62</sup>

An alternate view is that state practice alone is sufficient to constitute customary international law. This argument is partly premised on the concern that *opinio juris* is

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<sup>58</sup> M Koskenniemi *From Apology to Utopia: the Structure of International Legal Argument* (1989) 363 quoted in M Byers *Custom, Power and the Power of Rules* (1999) 138.

<sup>59</sup> Cheng (n 38 above) 23, 38.

<sup>60</sup> D'Amato (n 50 above) 50.

<sup>61</sup> D'Amato (n 50 above) 51.

<sup>62</sup> N Petersen 'Customary Law without Custom? Rules, Principles, and the Role of State Practice in International Norm Creation' (2007-2008) 23 *American University International Law Review* 284.

extremely difficult to prove.<sup>63</sup> Slama criticises this view on the basis that article 38 of the ICJ Statute gives formal sanction to *opinio juris* as a necessary component of the formation of customary international law.<sup>64</sup> Lepard argues that state practice is, in fact, evidence of *opinio juris*. This is based on his opinion that, where the majority of states have collectively decided that a certain norm ought to be law, this decision may be evidenced by state practice.<sup>65</sup>

Prof Dennis Arrow proposes a four-part test. This test is based on ICJ jurisprudence and describes the elements of customary international law as follows: state practice or the quantitative component; *opinio juris* or the psychological component; adherence to the norm by a majority of 'specially affected' states, the 'qualitative' element; and the continuation of this practice over some period of time, the 'temporal' element.<sup>66</sup>

### 3.4 Conclusion

Slama argues that, despite dissenting views, the traditional view that customary international law consists of some combination of state practice and *opinio juris* persists in theory and practice.<sup>67</sup> In the light of what is stated above, as well as statements by the ILC confirming the wide-spread acceptance of the two element view of customary international law, Slama's argument is supported.

The question as to which conduct is regarded as evidence of state practice and *opinio juris* is addressed in the next chapter.

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<sup>63</sup> H Kelsen *Principles of International Law* (1966) 450-51.

<sup>64</sup> Slama (n 33 above) 616.

<sup>65</sup> B Lepard 'The Necessity of *Opinio Juris* in the Formation of International Law' Conference on the Role of *Opinio Juris* in Customary International Law Duke-Geneva Institute in Transnational Law, University of Geneva (July 12-13, 2013) [http://law.duke.edu/cicl/pdf/opiniojuris/panel\\_2-lepard-necessity\\_of\\_opinio\\_juris\\_in\\_the\\_formation\\_of\\_customary\\_international\\_law.pdf](http://law.duke.edu/cicl/pdf/opiniojuris/panel_2-lepard-necessity_of_opinio_juris_in_the_formation_of_customary_international_law.pdf) (accessed 3 April 2015).

<sup>66</sup> D Arrow The Proposed Regime for the Unilateral Exploitation of Deep Seabed Mineral Resources by the United States (1980) 21 *Harvard International Law Journal* 337, 370-72.

<sup>67</sup> Slama (n 33 above) 616.

## CHAPTER 4: WHAT IS REGARDED AS EVIDENCE OF STATE PRACTICE AND *OPINIO JURIS*?

### 4.1 Synopsis

Various forms of conduct can serve as evidence of state practice and *opinio juris*. This chapter will consider this as well as requirements for conducts to constitute state practice and / or *opinio juris*. It will further be shown that the aforementioned two elements of customary international law interact to an extent, as the same conduct can be proof of both state practice and *opinio juris*.

### 4.2 Introduction

As discussed earlier, the two components of customary international law are interrelated and evidence of the one often proves to be evidence of the other. This is illustrated by the various debates between members of the ILC in its 2014 Annual Report regarding state practice and *opinio juris*.<sup>68</sup>

In its 2014 report, the ILC confirms that the same act or omission by a state can be evidence of both state practice and *opinio juris*.<sup>69</sup> Notwithstanding this, *opinio juris* is still a discrete requirement which must be separately identified in each matter.<sup>70</sup> Although there is no prescribed hierarchy or temporal order between state practice and *opinio juris*, the ILC notes that, where states 'do not speak with one voice', less weight should be afforded to their practice.<sup>71</sup>

### 4.3 Actions which serve as evidence of state practice and / or *opinio juris*

In terms of draft conclusion 7 of the 2014 ILC report, state practice includes physical and verbal actions and 'may take a wide range of forms.' Examples of manifestations of state practice include:

...the conduct of States 'on the ground', diplomatic acts and correspondence, legislative acts, judgments of national courts, official publications in the field of international law, statements on behalf of States concerning codification efforts, practice in connection with treaties and acts in connection with resolutions of organs of international organizations and conferences.

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<sup>68</sup> 2014 ILC report (n 47 above) 243-248.

<sup>69</sup> 2014 ILC report (n 47 above) 241.

<sup>70</sup> 2014 ILC report (n 47 above) 241-242.

<sup>71</sup> 2014 ILC report (n 47 above) 239, draft conclusion 8.

In addition to the above, failure to act may also serve as practice.<sup>72</sup>

In terms of draft resolution 9 of the 2014 ILC Report, practice must be general (not necessarily universal) and consistent. If a practice is general and consistent, no prescribed duration is required. This is supported in the *North Sea Continental Shelf* cases, where the ICJ found that a very widespread and representative practice may be evidence of the establishment of a customary international rule, even without the passage of a considerable period of time.<sup>73</sup> The ICJ confirmed the requirement for a virtually, or substantially, uniform state in the *Anglo-Norwegian Fisheries* case.<sup>74</sup>

Examples of evidence of *opinio juris* are listed in draft conclusion 11 as including the following:

... statements by States which indicate what are or are not rules of customary international law, diplomatic correspondence, the jurisprudence of national courts, the opinions of Government legal advisers, official publications in fields of international law, treaty practice and action in connection with resolutions of organs of international organizations and of international conferences. Inaction may also serve as evidence of acceptance as law.<sup>75</sup>

The continuing challenge of the application of *opinio juris* is to objectify its subjective nature.<sup>76</sup> According to Slama, the subjectivity of *opinio juris* must be ascertained by reference to such objective factors as actions, protests, expressions of state policy, consent, or acquiescence. In the *Lotus* and *North Sea Continental Shelf* cases, the Court seems to have accorded the status of *opinio juris* to statements made by the ILC and decisions of the International Court itself.<sup>77</sup> Similarly, in the *Nicaragua* case, the ILC regards its own decisions, commentaries by the ILC to articles in the Vienna Convention on the Law of Treaties of 1969 and references by state representatives to certain principles as ‘fundamental’ rules of customary international law<sup>78</sup> as sources of *opinio juris*.

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<sup>72</sup> 2014 ILC Report (n 47 above) 240.

<sup>73</sup> *North Sea Continental Shelf* cases (note 34 above) 42.

<sup>74</sup> *Anglo-Norwegian Fisheries* case (*United Kingdom v Norway*) ICJ (18 December 1951) (1951) ICJ Reports paragraph 138; *Continental Shelf* cases (note 47 above).

<sup>75</sup> 2014 ILC Report (n 47 above).

<sup>76</sup> Slama (n 33 above) 636, 653.

<sup>77</sup> Charlesworth (n 37 above) 10.

<sup>78</sup> *Nicaragua* case (n 51 above) 100-101.

### 4.3 Conclusion

There is an overlap between conduct which serves as state practice and conduct which serves as *opinio juris*. By way of illustration, diplomatic and legislative acts, judgments of national courts, official publications in international law, statements on behalf of states, practice in connection with treaties, and acts in connection with resolutions of organs of international organisations can serve as evidence of both state practice and *opinio juris*.<sup>79</sup> Despite this, the two elements of customary international law remain distinct and there must be evidence supporting the existence of both elements before an international customary law rule is created.

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<sup>79</sup> UNGA resolution 1962 (XVIII).

## CHAPTER 5: STATE PRACTICE AND *OPINIO JURIS* WITH REGARDS TO THE REFUSAL OF ACCESS TO REMOTE SENSING DATA FOR REASONS OF NATIONAL SECURITY

### 5.1 Synopsis

In this chapter, certain states are considered as ‘specially affected’ for purposes of evaluating state practice. It will be argued that states rely on precedent set by previous states in drafting policies or legislation dealing with refusal of access to remote sensing data for reasons of national security. It will be illustrated that the term ‘national security’ is vague and that states have a wide discretion to refuse access to remote sensing data on this basis.

It will further be submitted that states are not refusing access to remote sensing data due to national security concerns because of a belief that they are legally obliged to do so. Accordingly, it will be argued that the conduct of states currently only support ‘normal’ custom in the sense of voluntary repeated usage for convenience. It will be submitted that this custom supports emerging state practice of a refusal to provide access to remote sensing data for national security reasons, which may in future crystallise into a rule of international customary law if supported by the requisite *opinio juris*.

### 5.2 The concept of specially affected states

In terms of draft conclusion 9 of the 2014 ILC Report, in assessing state practice for purposes of establishing a possible rule of customary international law, due regard must be given to states whose interests are specially affected.<sup>80</sup>

According to the ICJ, the practice of ‘specially affected states’ should be analysed in the context of each particular case. Furthermore, the practice of powerful states should not be accorded more weight or be regarded as a substitute for a practice being sufficiently widespread.<sup>81</sup>

Byers is of the opinion that in reality, the process of establishing state practice often only takes into account the practice of ‘major powers and the most affected

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<sup>80</sup> 2014 ILC Report (n 47 above) 240.

<sup>81</sup> 2014 ILC Report (as above).

states.<sup>82</sup> This is because powerful states have greater military, economic, political and diplomatic strength, and it is therefore easier for these states to conduct practices (including garnering support for certain legal views) which will influence the development or amendment of rules of customary international law.<sup>83</sup> The use of power by these states in terms of state practice is then converted into obligations or rules of international customary law. Interestingly, these rules then act as a constraint on the use of power.<sup>84</sup>

Henckaerts argues that the concept of 'affected states' will vary according to the relevant circumstances. By way of illustration, as regards the evaluation of a rule to use laser weapons, specially affected states will include the states developing such weapons. Henckaerts is of the view that in certain areas such as international humanitarian law, all states have a legal interest, whether they are developing methods of warfare or suffering from such methods. Petersen cautions that it is practically impossible to establish the practice of hundreds of state in the international community.<sup>85</sup>

In the evaluation of state practice regarding refusal of remote sensing data based on national security concerns, it is argued that practically, wealthy and powerful states have the resources to launch remote sensing satellites and would therefore be in a position to produce remote sensing data, and grant or refuse access to such data. Although the practice of powerful states should not be accorded more weight than the practice of other states, powerful states will necessarily be included in the evaluation of relevant state practice relating to the refusal of access to remote sensing data.

This study will be limited to the evaluation of state practice and *opinio juris* in respect of states which have launched remote sensing satellites and which have national laws or policies supporting the refusal of access to remote sensing data for security reasons. These states are the US, Canada, India, Japan and certain countries in Europe, namely France and Germany.

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<sup>82</sup> M Byers 'Introduction: Power, Obligation, and Customary International Law' (2001) 11 *Duke Journal of Comparative and International Law* 81, 84.

<sup>83</sup> M Byers *Custom, Power and the Power of Rules* (1999) 205.

<sup>84</sup> Petersen (n 62 above) 277.

<sup>85</sup> Petersen (n 62 above) 277.

The Russian Federal Space Agency provides free access to information via the Internet for a wide range of users and Russia does not seem to support a policy of refusal of access to any remote sensed data for reasons of national security.<sup>86</sup> Consequently, Russia is not included in the study. China and the United Kingdom (UK) are excluded as China provides online access to remote sensing data<sup>87</sup> while the UK government and firms in the UK do not operate as imagery providers.<sup>88</sup>

### 5.2.1 The United States of America

The focus of the US on the protection of national security concerns when providing access to remote sensing data started with the commercialisation of the remote sensing industry and the growth of the civilian market for remote sensing imagery. The intelligence community was worried that the sale of high-resolution remote sensing imagery would increase the vulnerability of US forces by providing valuable intelligence information such as information regarding US military operations to countries without their own reconnaissance satellites.<sup>89</sup>

As a consequence, the US incorporated national security safeguards into its policies and laws governing remote sensing. These safeguards were designed to protect the US by preventing remote sensing imagery from falling into the wrong hands. Sneifer is of the view that although these restrictions resulted in a regime restricting the sale of remote sensing imagery, it does not provide any clear legal standard regarding the manner in which the restrictions must be applied.<sup>90</sup>

The ability of the US Secretary of Commerce to request a commercial operator to limit data collection or distribution is known as 'shutter control.' The US Secretary of Commerce will make a decision in this regard in consultation with the Secretaries of State and Defence. Shutter control, however, has rarely been exercised. The closest example is when the US government, following the 2001 invasion of

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<sup>86</sup> Russian Federal Space Agency report (2012) <http://www.unoosa.org/pdf/pres/stsc2012/2012ind-06E.pdf> (accessed on 9 May 2015).

<sup>87</sup> Y Ling 'Remote Sensing Data Distribution and Application in Environmental Protection, Disaster Prevention, and Urban Planning in China' (2010) 36 *Journal of Space Law* 445.

<sup>88</sup> JC Kessler 'Leadership in the Remote Sensing Satellite Industry: US Policy and Foreign Competition' (2009) [http://www.nesdis.noaa.gov/CRSRA/files/NOAA\\_Report\\_Northraven\\_final.pdf](http://www.nesdis.noaa.gov/CRSRA/files/NOAA_Report_Northraven_final.pdf) (accessed on 5 June 2015) 15.

<sup>89</sup> Sneifer (n 42 above) 541.

<sup>90</sup> Sneifer (n 42 above) 541.

Afghanistan, purchased exclusive rights to all high-resolution (one metre) commercial satellite imagery of Afghanistan that was on the market at the time for national security reasons. This was quite simple as all the imagery came from the US licensed IKONOS satellite. However, such a situation is unlikely to occur in future with more and more commercial satellite imaging companies being licensed.<sup>91</sup>

In 1996, the Kyl-Bingaman Amendment was passed as part of the US Defence Authorisation Act. This amendment allows for the collection and dissemination of satellite imagery of Israel by US companies only 'if such imagery is no more detailed or precise than satellite imagery of Israel that is available from commercial sources.'<sup>92</sup> According to Yedda, this means an effective limit to imagery with an approximately two metre resolution, and thus a statutory protection for Israel from high resolution observation.<sup>93</sup> The US justified this concession on the basis that Israel is a significant ally of the US and is surrounded by enemies. Although other states may have similar arguments to Israel, they do not enjoy the same concession.<sup>94</sup> Accordingly, shutter control can be applied arbitrarily.<sup>95</sup>

According to Gabrynowicz, nations look to other nations for precedent when developing remote sensing regimes.<sup>96</sup> Various states followed the example of the US in restricting access to remote sensing data for national security reasons, as will be discussed below.

### **5.2.2 Canada**

Canada closely followed the US when developing its remote sensing policies. Radarsat is Canada's commercial earth observation satellite, and Canada's controls on the distribution of Radarsat imagery are based on a bilateral agreement with the United States as well as national legislation and regulations.<sup>97</sup>

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<sup>91</sup> Yedda (n 14 above) 16.

<sup>92</sup> Kyl-Bingaman Amendment, National Defence Authorisation Act for Fiscal Year 1997 (1996) 'Prohibition on Collection and Release of Detailed Satellite Imagery Relating to Israel' House Report <http://www.nps.gov/legal/laws/104th/104-201.pdf> (accessed 1 June 2014).

<sup>93</sup> Yedda (n 14 above) 16.

<sup>94</sup> Hanley (n 9 above) 435.

<sup>95</sup> Gabrynowicz (n 15 above) 7.

<sup>96</sup> Gabrynowicz (n 15 above) 7.

<sup>97</sup> Gabrynowicz (n 15 above) 7.

In Canada, specific types of data imagery are authorised for distribution to certain customers on the basis of governmentally approved agreements.<sup>98</sup> In terms of the 2006 Remote Sensing Space Systems Act, the Minister of Foreign Affairs may grant an application to a commercial remote sensing firm taking into account considerations of national security and the defence of Canada.<sup>99</sup>

### 5.2.3 India

India has an aggressive national space program including remote sensing satellites. All India's space programs are sponsored and directed by the national government.<sup>100</sup>

In 2011, the Indian Parliament approved and adopted a comprehensive Remote Sensing Data Policy (RSDP) for the acquisition and distribution of satellite remote sensing data. Satellite data and imagery are regarded as a 'public good' in India, intended to support commerce, knowledge and national development. All data up to 5.8 meter are available on a non-discriminatory basis.<sup>101</sup>

The Indian security community, however, remains concerned as regards enemies on India's borders<sup>102</sup> and restrictions apply in relation to high resolution data. Data of more than a one metre resolution must be screened and cleared by an appropriate agency prior to distribution and a formal procedure must be followed.

Furthermore, the Indian government reserves the right to impose controls over remote sensing data when it is of the opinion that 'international obligations and / or foreign policies of the Government so require.'<sup>103</sup> Arguably, this provides the government with a wide discretion to refuse access to remote sensing data.

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<sup>98</sup> JC Kessler (n 88 above).

<sup>99</sup> Government of Canada Laws website <http://laws-lois.justice.gc.ca/eng/acts/R-5.4/> (accessed 6 June 2015).

<sup>100</sup> Gabrynowicz (n 15 above) 20.

<sup>101</sup> Indian Space Research Organisation Earth and Ocean Sciences Remote Sensing Data Policy (RSDP), ISRO: EOS: Policy-01:2001 (2011).

<sup>102</sup> 'Google Earth prompts Indian fears' <http://news.bbc.co.uk/go/pr/fr/-/1/hi/technology/6331033.stm> (accessed 8 March 2015).

<sup>103</sup> Indian RSDP (n 103 above).

### 5.2.4 Japan

Similar to India, Japan's remote sensing policy is focused on the public good. Remote sensing data are used in national and international science projects and the Japan Aerospace Exploration Agency (JAXA) co-operates with agencies in Japan such as the Meteorological and Fishing Agencies for research purposes.<sup>104</sup>

The Japanese Basic Plan for Space Policy was approved in 2009. There are numerous action plans contained in this policy, and Action Plan 2 proposes a data management plan for commercial users including 'shutter control' or restrictions on the distribution of the commercial data in a certain area during a certain period of time. The action plan further states that the Japanese government should formulate rules on satellite image distribution, given the capabilities of satellites to product high resolution imagery in future.<sup>105</sup>

In 2014, JAXA started making available high resolution images of up to 2 metre resolution taken by its advanced land observing satellite. The Remote Sensing Technology Centre of Japan, however, distributes remote sensing data to users, with no indication of whether there are any restrictions applicable as regards access to this data.<sup>106</sup>

### 5.2.5 Western Europe

In Western Europe, France was established as a leader in the commercial remote sensing satellite industry with the launch of the Satellite Pour l'Observation de la Terre (SPOT) series of electro-optical satellites in 1986. The SPOT satellites provide both national reconnaissance capabilities to the French Government and imagery for SPOT Image to distribute on a commercial basis. The commercial distribution of SPOT imagery is monitored by the French Government. If individual transactions are deemed sensitive, they may be subject to governmental review.<sup>107</sup>

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<sup>104</sup> TA Warner et al *The SAGE handbook of remote sensing* (2009) 26.

<sup>105</sup> S Aoki 'Japanese Law and Regulations Concerning Remote Sensing Activities' (2010) 36 *Journal of Space Law* 338.

<sup>106</sup> NTT Data and RESTEC add high-detail 2-meter resolution maps and 3D printing data to their Global Digital 3D Map Distribution Service - providing more useful 3D maps (25 May 2015) <https://www.restec.or.jp/en/business/observation> <https://www.restec.or.jp/en/notice/6115> (accessed 1 June 2015).

<sup>107</sup> JC Kessler (n 88 above).

In Germany, national security is a priority and access to remote sensing imagery is managed by the German government. The government considers the sensitivity of a specific transaction in light of the nature of the data to be provided, the location observed, and the recipient. Special cases are subject to review by the German Foreign Office and German Defence Ministry.

Italy operates the COSMO-SkyMed constellation of satellites as part of a joint French - Italian system. These satellites provide high resolution imagery for national reconnaissance and commercial sale. Italy's practices and policies as regards data dissemination are similar to those of France and Germany.<sup>108</sup>

### **5.2.6 Israel**

Israel is a significant builder and operator of high resolution remote sensing satellites. Israel's remote sensing satellites are owned by ImageSat International. ImageSat International openly promotes secrecy and exclusivity as its starting point regarding remote sensing activities. Customers 'acquire a completely autonomous, secret, regional high-resolution imaging capability' and can choose to acquire exclusive images of specified areas.<sup>109</sup>

From what is said above, it appears that all the states included in this study has some form of national security provision governing access to remote sensing data. The question then arises as to the meaning of the term 'national security.'

## **5.3 The meaning of national security**

The words 'in the interests of national security' are not capable of legal or precise definition. The circumstances are infinite in which the national security may be imperilled, not only by spies in espionage but in all sorts of indefinite ways.<sup>110</sup>

In the years since the above statement was made by Lord Denning in the House of Lords, the term 'national security' has remained open for interpretation. Sneifer

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<sup>108</sup> Kessler (as above).

<sup>109</sup> Gabrynowicz (n 15 above).

<sup>110</sup> House of Lords Debates (6 June 1985) column 869.

argues that the meaning and scope of the term 'national security' will necessarily vary with the changing policies of the administration in power due to the political nature of the term.<sup>111</sup> Hanks agrees that national security has become a political concept and mentions to the reference by the United States Supreme Court in *Berger v New York* to 'national security – whatever that means.'<sup>112</sup>

According to Sarkesian, Williams and Cimbala, 'US national security is the ability of national institutions to prevent adversaries from using force to harm Americans or their national interests and the confidence of Americans in this capability.'<sup>113</sup> Sneifer notes that when the meaning or use of this term was challenged, US courts consistently deferred to the power of the executive branch in matters relating to national security and foreign affairs.<sup>114</sup>

Jablonsky notes that the concept of national security in the US today is far more complex than at any time in its history.<sup>115</sup> The meaning of the US 'national interests' is similarly vague and interpreted differently by each generation of Americans in terms of their own perspectives. Sarkesian, Williams and Cimbala are further of the view that between the two world wars, Americans presumed that 'US interests were also world interests.'<sup>116</sup>

In the modern era, threats are unpredictable and consequently the concepts of US national security and national interests have become complicated, ambiguous, and often inconsistent.<sup>117</sup> Arguably, the same applies to the national security interests of other states, who have adopted a similar stance in respect of national security.

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<sup>111</sup> Sneifer (n 42 above) 563.

<sup>112</sup> P Hanks 'National Security - A Political Concept' (1988) 14 *Monash University Law Review* 114; *Berger v Court of Appeal* (September 1987) New York 388 US 41, 88 (1967).

<sup>113</sup> SC Sarkesian et al *US National Security: Policymakers, Processes & Politics* (2008) 2.

<sup>114</sup> Sneifer (n 42 above) 564.

<sup>115</sup> D Jablonsky 'The State of The National Security State' in D Jablonsky, R Steel, L Korb, MH Halperin & R Ellsworth *US National Security: Beyond The Cold War* (1997) Carlisle Barracks Pennsylvania Strategic Studies Institute, US Army War College 39 - 40.

<sup>116</sup> Sarkesian et al (n 116 above) 14.

<sup>117</sup> Jablonsky (n 115 above) 7-8.

Canada fears that it is vulnerable to terrorism and its federal Court stated that ‘there can be no public interest more fundamental than national security.’<sup>118</sup> In Europe, national security is of prime concern after the terrorist attacks of 9/11 and the subsequent attacks on certain European countries.<sup>119</sup> India is of the view that it faces major national security challenges from China and Pakistan<sup>120</sup> while Israel fears radical elements in various Arab states.<sup>121</sup>

#### 5.4 Conclusion

In the era of international terrorism, various states followed the example of the US and included provisions allowing for refusal of access to high resolution remote sensing data for reasons of national security in their national legislation and policies. Although this conduct does not yet meet the requirements for state practice or *opinio juris*, a clear pattern is emerging where states seem to deem such a refusal as generally accepted.

Accordingly, it is submitted that this conduct constitutes emerging state practice which (due to the increasing threats and massive impact of global terrorism) may eventually be supported by *opinio juris* and crystallise into a new rule of customary international law.

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<sup>118</sup> *Re Goguen and Albert and Gibson* (1984) 7 DLR (4th) 144, 156; *Re Kevork and The Queen* (1984) 17 CCC (3rd) 426, 431; M Coulombe ‘Welcome to Canadian Security Intelligence Service’ <https://www.csis.gc.ca/index-en.php> (accessed 1 June 2015).

<sup>119</sup> Archick et al ‘European approaches to homeland security and counterterrorism’ (2006) Library of Congress Washington DC Congressional Research Service.

<sup>120</sup> SP Chidambaram (2013) ‘India’s national security: Challenges and priorities’ K Subrahmanyam Memorial Lecture <http://www.idsa.in/key speeches/IndiasNationalSecurityChallengesandPriorities> (accessed 9 June 2015).

<sup>121</sup> E Inbar ‘Israel’s National Security amidst Unrest in the Arab World’ (2012) 35 3 *The Washington Quarterly* 59.

## CHAPTER 6: CONCLUSION

As pointed out by Lyall and Larson, the denial of access to remote sensing data on basis of national security is controversial.<sup>122</sup> According to Gabrynowicz, data distribution policies worldwide in relation to high-resolution remote sensing data are increasingly taking into account national security concerns.<sup>123</sup> National legislation often makes provision for a form of shutter control, where the relevant government can authorise the prevention or interruption of remote sensing data access.

Although state practice seem to be reflected in the national legislation of the affected states as well as in the conduct of certain states such as the US, it is submitted that this is merely 'normal custom' or voluntary repeated usage for convenience. No evidence could be found of statements by states stating why they believe they can refuse access to remote sensing data for national security reasons<sup>124</sup> - arguably because states do not wish to be seen as deviating from the non-discriminatory access policy set out in the RSP.<sup>125</sup> There is no evidence that states included these provisions because of a belief that it was under a legal obligation to do so.

As discussed earlier, many states simply followed the precedent set by other states. Since the US was one of the first states to be capable of undertaking space activities, it followed that it was one of the pioneers of early space law<sup>126</sup> and other states followed its example.

This study seems to support possible emerging state practice as regards the refusal of access to high resolution remote sensing data for reasons of national security. It is further submitted that the nature of current threats to international security, notably international terrorist attacks, may lead to the accelerated development of a rule of customary international law in this regard.

Scharf states that customary international law can form far more rapidly and with less state practice in the context of fundamental change or what he refers to as a 'Grotian moment' (with reference to Hugo Grotius as the architect of the Peace of

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<sup>122</sup>F Lyall & PB Larson *Space law: a treatise* (2009) 427.

<sup>123</sup>Gabrynowicz (n 15 above) 22.

<sup>124</sup>Sneifer (n 42 above) 539.

<sup>125</sup>Gabrynowicz (n 15 above) 13.

<sup>126</sup>Scharf (n 40 above) 316.

Westphalia).<sup>127</sup> Similarly, Slaughter and Burke-White refers to the terrorist attacks of 9/11 on the US as a 'constitutional moment' evidencing a change in the nature of threats to the international community. They are of the view that such an event paves the way for the accelerated development of new customary international law rules.<sup>128</sup> Johnstone argues that 9/11 resulted in an emergent right relating to the use of force in self-defence against non-state actors.<sup>129</sup>

As is evident from the views of states relating to their national security, the term is predominantly used with reference to the threat of terrorism. The terrorist attacks of 9/11 was indeed a Grotian moment. This event, arguably, then supports the conduct by states to reserve the right to refuse access to high resolution remote sensing data for national security reasons such as terrorist threats.

As noted by Scharf, 'customary international law must have the capacity in unique circumstances to respond to rapidly evolving developments by producing rules in a timely and adequate manner.'<sup>130</sup> Although there is not yet sufficient and consistent conduct to support state practice (or *opinio juris*) with regard to the refusal of access to remote sensing data for national security reasons, there is arguably emerging state practice in this regard. Due to the massive threats posed by international terrorism, increased state practice may eventually be supported by the requisite *opinio juris*, resulting in a new rule of international customary law.

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<sup>127</sup> Scharf (n 40 above) 306, 308.

<sup>128</sup> A Slaughter & W Burke-White 'An International Constitutional Moment' (2002) 43 *Harvard International Law Journal* 1, 2.

<sup>129</sup> I Johnstone 'The Plea of 'Necessity' in International Legal Discourse: Humanitarian Intervention and Counter-Terrorism' (2005) 43 *Columbia Journal of Transnational Law* 337, 370.

<sup>130</sup> Scharf (n 40 above) 341.

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