I. INTRODUCTION

Phase II of the project to draft the McGill Manual on International Law Applicable to Military Uses of Outer Space (MILAMOS Project) began on 22 February 2018. Having heavily invested and contributed human and financial resources to the Project to date, McGill University, joined by a host of partner and collaborating institutions, is continuing the Project as it was originally envisioned and launched in May 2016.

Phase II of the MILAMOS Project will involve intensified engagement with and the participation of new global partners. The Project will operate under a slightly different organisational structure and more efficient working process. This McGill-led effort, buoyed with the support of a representative array of global partners, will ensure the Project steadily progresses toward completion and maintains the original objectives and scope of the Project.

Experts taking part in a session. Rule-drafting and consensus-forming workshops form the backbone of the MILAMOS Project.
II. DESCRIPTION

The MILAMOS Project was originally conceived and publicly inaugurated at McGill University in May 2016. The Project, as proposed, promoted and presented to various stakeholders and financial benefactors, is to develop a widely-accepted manual (the McGill Manual) that clarifies the fundamental lex lata (existing) rules applicable to military uses of outer space by both States and non-State actors in times of peace, in times of rising tensions, and in times of armed conflict. The resultant manual will fill the legal lacunae with respect to issues that for decades have been the source of debate and disagreement among policy makers, legal practitioners, military strategists, and academics.

The uniqueness of the McGill Manual lies in its objective to encompass the perspectives of a wide-range of space stakeholders. The target audience will be much broader than just the military establishments, and the scope and practical use of Manual will be beyond periods of armed conflict.

Undoubtedly, we believe that clarification of rules during armed conflicts (international humanitarian law, or jus in bello) in outer space is needed. However, such conflicts hopefully might not happen in the near future. An independent, international, neutral and objective clarification of the rules of international law applicable to military uses of outer space during peacetime and during the periods of tensions could dissuade the actual use of force and avoid future conflicts (wars) in outer space. Thus the clarification of lex lata rules governing military uses of outer space in times of peace and in times of rising tensions (international law on the resort to war, or jus ad bellum) is currently more important and urgently needed, particularly as the military uses of outer space, as well as the number of States and non-State actors involved in such activities, are rapidly increasing.

Phase II of the Project is pressing forward without significantly deviating from the original vision, scope, and methodology of the Project, and follows the following roadmap and principles:

1. Military uses of outer space have important political and strategic implications for all spacefaring nations and for humanity in general. In particular, assured access to space is for many spacefaring States an essential national security concern. Therefore, from the moment of inception, the vision of the MILAMOS Project is:

   To contribute to a future where all space activities are conducted in accordance with the international rules-based global order, without disrupting, and preferably contributing to, the sustainable use of outer space for the benefit of present and future generations of all humanity.
2. The Phase II of the Project maintains its original aim to develop a widely-accepted manual that clarifies the fundamental rules applicable to military uses of outer space by both States and non-State actors in times of peace, in periods of rising tensions, and in times of armed conflict.

From the outset, the Manual is intended to cover the legal ramifications of all military uses of outer space, to reflect legal viewpoints from across the globe, and to attract a broad audience in academia, the legal profession, and policy circles. Reflecting the fact that many space objects may be used simultaneously for military and non-military purposes (i.e. are ‘dual-use’ capable), and that many space activities may entail a military use of outer space despite not being performed or owned by military establishments or personnel (e.g., if armed forces contract services from the private sector), the McGill Manual will be intended for use by a wide spectrum of space operators, stakeholders, experts, and interest groups (e.g., officials from various ministries or department of government, private space actors, civil society, academics and others) with an interest in the security and sustainability of space activities.

Methodologically speaking, the Manual will examine the broad range of military uses of outer space (as widely understood) and determine, through an intensive and interactive process of deliberations and consensus-forming between members of a select Group of International Experts, the relevant principles and rules of international law that apply to such military uses of outer space;

3. The McGill Manual will be a practical manual, which means that it aims at clearly and precisely restating the lex lata as determined in accordance with the provisions of Article 38 of the Statute of the International Court of Justice and/or Articles 31 and 32 of the Vienna Convention on the Law of Treaties.

It has always been maintained that the McGill Manual would treat disciplines of general international law, international space law, international law on the use of force and international humanitarian law as equal and essential parts of the Manual. In objectively determining the applicability of lex lata rules of international law, legal maxim (such as Lex posterior generalis non derogat priori specialis (“A later, general law does not repeal an earlier, specialised law”), Lex posterior derogat (legi) priori (“A later law repeals an earlier (law)”), Lex specialis derogat legi generali (“Special law repeals general laws”), etc.) will be used after careful examination and having taken into account the applicable rules of various branches of international law as well as specificities of the outer space environment, which are invariably different from other terrestrial domains. Analogies from other domains, as well as the processes and successes of other manuals, may be drawn as a guide to identifying the applicable rules, but only after very careful analysis of the nature, scope, impact and implications of each space activity/action that directly or indirectly are military in nature.
The McGill Manual will be innovative in reflecting the unique nature of outer space environment and distinctive character of international space law;

4. **A truly global partnership of stakeholders and representation of perspectives** is crucial to the ultimate success and acceptance of such an ambitious international endeavour.

Partners from across the globe are actively engaged to ensure that the McGill Manual accurately captures the nuances and perspectives of different States and relevant stakeholders, and is reflective of the wide spectrum of interests and concerns relating to the military uses of outer space. Since the beginning of Phase II, the Beijing Institute of Technology (China), the Cologne Institute of Air and Space Law (Germany), and St Petersburg State University (Russian Federation) have all joined the MILAMOS Project, thereby adding much valued global perspectives, weight and credibility this international collaborative endeavour. Only by embracing partners around the globe will the manual-drafting and consensus-forming process, and the resultant Manual, achieve the intended objective of being an accepted, independent, neutral, objective, and authoritative document of practical use and value. Partner institutions may divide tasks by taking lead in the drafting of separate but fully coordinated parts of the Manual (i.e. Part I: Law applicable in times of peace; Part II: Law applicable in times of rising tensions; and Part III: Law applicable in times of armed conflict);

5. **To ensure the rule-drafting process and work product is truly the result of group effort, and not of individuals, intellectual property rights (including copyright) in all the materials produced for the MILAMOS Project is vested in McGill University** (The Royal Institution for the Advancement of Learning) until the final product (McGill Manual) is transferred to a publisher for publication.

To this end, participants contribute in a personal capacity on the basis of their own views on what the law is, independent of any official position or preference of their respective States or organisations. Each participant in the MILAMOS Project is expected to:

(1) not participate directly or indirectly in another project similar to MILAMOS;
(2) keep confidential all MILAMOS-related contributions, drafts, discussions and commentaries (except where required by the participant’s respective employer) until the final publication of the McGill Manual;
(3) provide only such material or information that is his/her own original work and has not been copyrighted by other(s);
(4) not to publish, use or disclose any MILAMOS copyright material;
(5) not submit or disclose to the MILAMOS Project any material or information that is deemed confidential or subject to legal restrictions;
(6) acknowledge that at all meetings and at all stages of drafting in the McGill Manual, the Chatham House Rule of non-attribution apply;
(7) given the international, interdisciplinary, intercultural and politically sensitive nature of the MILAMOS Project, accord utmost respect to all other participants and their views and opinions; and
(8) not damage or bring into disrepute, or attract public or media attention which may be detrimental to, the reputation of the MILAMOS Project and other participants.

All participants in the Project are asked to sign copyright assignment agreements;

6. Completing the Manual as originally scheduled (i.e. by the end of 2019) may present a challenge, yet in cooperation with our current and new sponsors, partners, collaborators, experts and participants we resolve to abide by the timeline to the best of our abilities. **To streamline the work process, and ensure seamless synergy between different areas of law applicable to military activities in outer space, rule-drafting will take place in incremental stages.**

The Group of Experts will initially give priority to drafting and finalising the Stage I rules (*Law applicable in times of peace*). To speed up the rule-drafting process, two rule-drafting sub-groups working alongside one another will be created. All the while, preparatory work and the framework for the rules under Stages II and III (respectively, the *Law applicable in times of rising tensions*, and *Law applicable in times of armed conflict*) will be continuously structured and refined in preparation for the actual rule-drafting process to begin.
III. Organisational Structure and Rule-Drafting Process

In order to ensure world-wide participation, neutrality, objectivity and academic rigour, the Manual will be drafted by experts from across the globe, each acting in their personal capacity. The organisational structure of the Project has therefore been designed to reflect and capture legal viewpoints from across the globe, and to ensure that the Manual and associated commentary are truly the result of global input and global consensus.

The MILAMOS Project is headed by Professor Ram Jakhu, the Project Director who assumes a leadership role in guiding the intellectual direction of all research-related activities. The Project Director also assumes administrative and financial responsibility for the Project, and heads the partnership of global institutions and stakeholders involved in the Project. The Project Director is assisted by Managing Editor Mr. David Kuan-Wei Chen, who heads the MILAMOS Secretariat that is responsible for providing the necessary administrative and logistical support for the Project, and assists in the editing of the text of the Manual.

The Board of Advisors and External Consultants consists of prominent and experienced persons from various States and stakeholder institutions. The Board is present to advise the Project Director in the strategic direction and management of the Project, and to ensure that all relevant perspectives are adequately considered and reflected during the Manual-drafting process. The Board also functions as a conduit to inform and engage States and governments about the manual-drafting process.

The Co-Editors of the Manual have the ultimate responsibility for directing the drafting of the Rules and Commentaries and the compilation of the Rules and Commentaries into the final text of the Manual. The Co-Editors are Professor Ram Jakhu and Professor Steven Freeland, who co-chair and lead the Editorial Committee.

Major editorial decisions in the MILAMOS Project are formally made by the Editorial Committee. The Committee amalgamates draft rules, and ensures the final text of the black-letter rules and associated commentary of the Manual is coherently and consistent drafted in accordance with the standardised drafting guidelines. All major editorial decisions in the Committee are made by consensus; and if consensus is not possible, the Co-Editors will have final say while acknowledge majority/minority views. Once the first drafts of all the rules have been adopted at Plenary, they will be carefully and thoroughly edited and integrated in the clear and cohesive final text of the Manual. The text will be appropriately peer-reviewed by External Advisers/Experts and State representatives before submission for publication by a highly credible academic publisher.
The Editorial Committee is composed of the Co-Editors, Co-Chairs of each Rule-Drafting Group, the Lead Technical Expert, and invited External Experts or External Advisors. Care has been taken to ensure the Editorial Committee members are recognised and experienced persons from the public or private sector space operators or academia from various States, with particular participation of experts from the major spacefaring States of China, Russia and the United States.

Current members of the Editorial Committee are:

- Prof. Setsuko Aoki (Japan);
- Prof. Roy Balleste (United States);
- Dr. Philip de Man (Belgium);
- Mr. Gilles Doucet (Canada);
- Prof. Steven Freeland (Australia);
- Prof. Stephan Hobe (Germany);
- Prof. Ram Jakhu (Canada);
- Ms. Elina Morozova (Russia); and
- Prof. Jinyuan Su (China).

The Rule-Drafting Groups consist of two groups composed of Core Legal Experts, and Technical Experts, who are scientists and persons with specialist technical expertise in the space domain. All decisions in the Rule-Drafting Groups are made by consensus, and if consensus is not possible, the Co-Chairs will make final decision by recording majority/minority views.

Each Rule-Drafting Group enjoys equal importance in the Project, and is composed of (5 to 7) Core Experts with balanced representation from all regions of the world and military, public, civilian and academic sectors. Associate Experts may also be members of the Rule-Drafting Groups, and called upon to initiate, contribute and/or review rules on an as-needed basis. The Research Coordinator, Mr. Bayar Goswami, is present to initiate, supplement and ensure progress of the drafting process and coordinate the research efforts of the Core Experts. Research Assistants and Post-doctoral candidates will be present to assist the work of the Rule-Drafting Groups.

Experts involved in the Project, who collectively form the MILAMOS International Group of Experts, have been carefully selected based on their recognised expertise and experience in the domain of military uses of outer space, and based on ensuring adequate geographical representation, gender diversity and civilian and military perspectives.
The Rule-Drafting Groups are headed by Co-Chairs Dr. Setsuko Aoki and Dr. Philip de Man (Group 1), and Ms. Elina Morozova and Dr. Jinyuan Su (Group 2).

**Group 1 (confirmed)**

1. **Prof. Setsuko Aoki**  
   (Keio University)
2. **Dr. Philip de Man**  
   (Leuven Centre for Global Governance Studies, KU Leuven)
3. Dr. Guoyu Wang  
   (Beijing Institute of Technology)
4. Maj. John Goering  
   (US Air Force)
5. Mr. Ulf Haeussler  
   (Federal Ministry of Defense of Germany)
6. Prof. Ksenia Shestakova  
   (St Petersburg State University)
7. Dr. Bin Li  
   (University of Newcastle)
8. Mr. Chris Johnson  
   (Secure World Foundation)

*Technical Expert*
9. Mr. Gilles Doucet  
   (Spectrum Space Security Inc.)

**Group 2 (confirmed)**

1. **Ms. Elina Morozova**  
   (INTERSPUTNIK)
2. **Dr. Jinyuan Su**  
   (Xi’an Jiatong University)
3. Dr. Roy Balleste  
   (St Thomas University)
4. Cpt Jérémie Ayadi  
   (French Joint Space Command)
5. Ms. Deborah Housen-Couriel  
   (Interdisciplinary Cyber Research Center at Tel Aviv University and Haifa University’s Law Faculty)
6. Mr. Peter Hulsroj  
   (Comprehensive Nuclear-Test-Ban Treaty Organisation)  
   *Technical Experts*
7. Ms. Rada Popova (Cologne Institute of Air and Space Law)  
   *Technical Expert*

8. Dr. Jonathan McDowell  
   (Harvard-Smithsonian Center for Astrophysics)
9. Dr. Stuart Eves  
   (Vaeros Ltd, Aerospace Corporation UK)

The **rule-drafting and consensus-forming Workshops** form the backbone of the MILAMOS Project. The Experts meet in plenary sessions at each Workshop to discuss draft rules and associated commentary on a basis of non-attribution and will seek consensus on the articulation of the rule and commentary. The commentary accompanying each rule includes discussions on the origins, scope and sources of disagreement, as well as examples or scenarios of military uses of outer space relevant to the rule. Invited Observers may attend the plenary meetings of these Workshops.
Workshops have been held in various States (Canada, Australia, India and the United States) to date. In addition to being a valuable opportunity for the MILAMOS International Group of Experts to meet and collaborate in person, they form the platform to engage States, relevant stakeholders, and inform the general public around the world of the progress and developments in the MILAMOS Project.

A rule-drafting and consensus-forming Workshop is scheduled to take place in Montreal, Canada from **10 to 14 July 2018**. The follow-up workshop will be held toward the end of **October 2018**, most likely in Beijing, China.
Organisation Structure of the Project to draft the McGill Manual on International Law Applicable to Military Uses of Outer Space

MILAMOS Phase II

Co-Chairs of Rule-drafting Group 1
Setsuko Aoki & Philip de Man

Co-Chairs of Rule-drafting Group 2
Elisa Morócco & Thierry Stéf

Core Legal Expert
Technical Expert

Group of Technical Experts
Lead: Gilles Doucet

Technical Experts

Research Coordinators
Daniele Cesare

Research Assistants

MILAMOS Project Director
Ram Jakhu

Co-Editors of the McGill Manual
Ram Jakhu & Steven Freeland

Board of Advisors & External Consultants
Chair: Brian Hames

Prominent Persons
State officials
Stakeholders
NGOs
Observers

Peer Reviewers
Associate Experts