



ADVANCING SPACE SECURITY THROUGH NORMS, RULES AND PRINCIPLES OF RESPONSIBLE BEHAVIOUR?

WEBINAR SUMMARY REPORT

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Secure World Foundation is a private operating foundation dedicated to the secure and sustainable use of space for the benefit of Earth and all its peoples. It works with governments, industry, international organizations and civil society to develop and promote ideas and action for international collaboration. The Foundation's aim is to achieve secure, sustainable and peaceful uses of outer space.

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INTRODUCTION

In recent years, outer space has become more economically and strategically important as human activities have become more dependent on space activities and technology. Thus there are growing concerns about events of catastrophic consequences if tensions between space actors mount. The Open-ended Working Group on reducing space threats through norms, rules and principles of responsible behaviours was established by the United Nations General Assembly resolution 76/231 to address such concerns.

The OEWG is tasked with (i) taking stock of existing regulatory frameworks related to threats arising from State behaviours concerning outer space; (ii) considering current and future threats by States to space systems, and actions, activities and omissions that could be considered irresponsible; and (iii) providing recommendations on possible norms, rules, and principles of responsible behaviours regarding space threats. Lastly, the Group is tasked with (iv) producing a report containing such recommendations, which is to be submitted to the General Assembly at its seventy-eighth session.

Upon the conclusion of the first meeting of the OEWG, held in Geneva from 9–13 May 2022, UNIDIR co-organized a virtual conference on 23–24 May with the Republic of Korea and the Secure World Foundation to foster dialogue towards a common understanding on responsible behaviours within countries from the Association of Southeast Asian Nations (ASEAN). The conference gathered participants from countries across the entire ASEAN region and heard from diverse stakeholders representing industry, government, civil society, and academia. The conference was convened under the Chatham House Rule where “participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed”.

This document summarizes the key discussions and takeaways of that conference.



PANEL 1

THE PROCESS OF THE OEWG ON REDUCING SPACE THREATS THROUGH PRINCIPLES OF RESPONSIBLE BEHAVIOURS: TOWARDS SUSTAINABLE SPACE SECURITY

The first panel discussed the value of the peaceful and sustainable use of space and identified some of the critical threats and risks faced. It also addressed the international community's attempts to ensure peace in outer space, focusing on the OEWG process, and exploring the issues discussed during its first substantive session.

PANEL 1. THE PROCESS OF THE OEWG ON REDUCING SPACE THREATS THROUGH PRINCIPLES OF RESPONSIBLE BEHAVIOURS: TOWARDS SUSTAINABLE SPACE SECURITY

SUMMARY DYNAMICS OF THE FIRST MEETING

Panellists highlighted the active engagement of diverse delegations at the first meeting of the OEWG as a positive outcome, which evidenced a shared desire by participants to work towards the strengthening of international frameworks on outer space matters. Panellists remarked that geopolitical and dogmatic difficulties remain, however—a challenge to negotiations on space security matters which have traditionally resulted in two camps disagreeing on the ideal outcome. One camp generally envisions legally binding agreements and the other prefers non-binding measures. Panellists underscored that during the OEWG process there has been a change in this regard and, even though States have their diverse interests and preferences regarding the characteristics of an ideal space security mechanism, legally binding and non-binding options are no longer seen as firmly opposing alternatives, but rather complementary options. Panellists agreed that the OEWG's inclusivity of experts from a wide range of backgrounds is useful in bridging the two camps by coordinating communications and providing information to facilitate common understanding. Panellists stressed that eventually non-binding mechanisms could lead to binding agreements on space security.

With acknowledgement of the overlapping topics discussed in other forums such as the Conference on Disarmament and the Committee on the Peaceful Uses of Outer Space, panellists thought multi-forum discussions can create synergy with new and ongoing processes like the OEWG. Delegations participating in different forums can build capacity through cross-forum exchanges. Established and emerging spacefaring States can both benefit from this as they have a platform to take ownership of international negotiations, which enhances the legitimacy of the process.

DUAL-USE TECHNOLOGY AND DENOTATION PROBLEMS

Cross-forum cooperation on outer space matters is particularly challenged where national security is concerned because States do not share common understandings of space law and policy concepts, such as what constitutes 'peaceful purposes' as established in the Outer Space Treaty. Increasingly blurred lines between civilian and military dual-use capabilities in space—driven by the advent of private space actors engaged in strategic space operations, compounded with the wide range of space-enabled security risks including non-kinetic threats to national critical infrastructure—exacerbate the lack of consensus on important terms. Not only do dual-use technologies complicate verification regimes in calculating strategic capabilities, seeking to reach consensus on terms among States with different national priorities, legal interpretations, and space-enabled capacities could risk technological advancement overtaking the process.

IDEAL END RESULTS OF THE OEWG PROCESS

Panellists envisaged an ideal outcome to be a balanced package of agreements that all delegations are satisfied with. These agreements would establish norms and principles and address threat reduction, likely containing aspects from past proposals. The development of the process should be gradual, transparent, and pragmatic for delegations to reach collective affirmation on terms, such as activities below and above the use of force threshold in outer space. The 'outcome agnostic' feature of the process that focuses on behaviours rather than on producing a binding or non-binding document per se can buttress bargaining.



PANEL 2

NORMS, RULES, AND PRINCIPLES: ADVANTAGES AND LIMITATIONS

The second session provided an overview of norms, rules and principles and their role and limitations in keeping space secure and sustainable, including potentially through feeding into future legal measures.

PANEL 2. NORMS, RULES, AND PRINCIPLES: ADVANTAGES AND LIMITATIONS

DEFINING NORMS, RULES AND PRINCIPLES

As defined by one panellist, norms are non-legally binding instruments rooted in shared values, reflected through behaviour, and serve as the glue of society and governance that guides social and moral obligations to compliance. Citizen behaviour is affected by norms because they form identities by signalling right and wrong actions. Those violating a norm may not be legally punished but will receive social sanction, notwithstanding legally binding laws which are formed based on norms. For example, a State's threat perception is a norm forming the basis for national security legislation. Rules are principles, as non-legally binding, soft law instruments are often general and can be adopted by States Parties in agreements. Norms are specific and can be established by non-State actors, but they can be insufficient to address security issues due to the difficulty of enforcing compliance. Conversely, legally binding treaties are harder to conclude due to States' resistance to implementing corresponding national legislation.

ADHERING TO NON-BINDING MECHANISMS

While both binding and non-binding instruments can be violated, the value of norms is in their moral weight as violations trigger social and moral condemnation against the violator. Compliance with norms may be less rigorous in practice, and non-binding political agreements are more prone to non-compliance issues. Political condemnation by the international community is a core tool of norm compliance and maintenance, but this requires leadership and collective action. With the stimulation of common understanding, norms creation can crystallize already existing core principles in the dynamic legislative process. The principle of due regard was cited as an example that could benefit from additional clarification through norms. Constantly delineating norms as a lesser tool than hard law undermines their utility.

FORMING NORMS AT THE OEWG

Panellists remarked that agreeing on norms at the OEWG will require good communication, a platform for States to regularly discuss compliance and bridging different interpretations of national security. Another panellist cautioned against 'verbatim' transposition of norms from other domains like maritime law, and expressed that the specific characteristics of the space domain must be taken into account when debating the establishment of norms for it.



PANEL 3

PAST INITIATIVES TO ADDRESS SPACE SECURITY: WHAT HAS WORKED AND WHAT HAS NOT

This panel looked at the past initiatives that States have undertaken to address space security concerns to draw lessons and insights for current initiatives like the OEWG.

PANEL 3. PAST INITIATIVES TO ADDRESS SPACE SECURITY: WHAT HAS WORKED AND WHAT HAS NOT

REFLECTING ON PAST INITIATIVES

All panellists stressed the important role of the Outer Space Treaty as a foundational legal framework for how States should conduct themselves in outer space. It was stressed that the Treaty, through the establishment of principles such as for the peaceful use of outer space, inadvertently became a measure for conflict prevention in space, to avoid tensions and conflicts present on Earth from spreading to the space domain. However, it was noted that, at the time of negotiation, both the number and the nature of space actors were very different than today. There are currently more actors and stakeholders than ever before, and as technology has developed over time so have threats to space security.

Furthermore, panellists noted the extensive history and work of the Conference on Disarmament on the prevention of an arms race in outer space. However, all panellists noted the limited progress that has been made over the years. Panellists explained that criticism of the draft Treaty on the Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force Against Outer Space Objects was largely due to definitional issues and lack of verification mechanisms. It was expressed that the entrenchment of some Parties to one position was at odds with progress. The initiative of the European Union to establish an International Code of Conduct for Outer Space Activities was discussed and panellists recalled the criticism over the lack of transparency in the process and concerns of States over the possibility of "the right to self-defence clause" to be used as a legitimizing argument for the weaponization of outer space.

CONSIDERATIONS ON THE CURRENT OEWG PROCESS

It was expressed by panellists that the pursuit of transparency and confidence-building measures was a pragmatic 'stepping stone' approach. It was also stated that the less restrictive mandate of the OEWG may enable a successful outcome. However, it was reiterated by a panellist that although such measures are important they cannot substitute for a legally binding instrument and that norms should be compliant with international law and the Charter of the United Nations. It was proposed by a panellist that adopting the recent Open-ended Working Group on security of and in the use of information and communications technologies as a model could lead to a promising outcome. There was acknowledgement that the recent tonal shift in issues of outer space security may be attributed to States' realization of their self-interest to pursue outer space security due to its ever-increasing relevance.

ADVICE FOR THE CHAIR, MOVING FORWARD WITH THE OEWG

All panellists agreed that one of the greatest impediments to progress is the political obstacles. Panellists expressed that the chair of the OEWG would have to transcend these obstacles, and not repeat the mistakes of 'steamrolling' over resistance and opposition to issues. It was advised to seek out States that have historically been fixed on a particular view and to understand their margins of flexibility and priorities. It was stated that even if the outcome of the OEWG is not the most ideal or if it does not satisfy the desires of all States, the chair should seek endorsement from as many States as possible. It was argued that broader endorsement enhances prospects for future success by increasing national incentives of Member States to pursue the implementation of their corresponding contribution. Finally, panellists indicated that it would be beneficial for the chair to seek broad participation from non-spacefaring and emerging spacefaring States, civil society, and commercial industry.



PANEL 4

THE ROLE OF NON-GOVERNMENTAL ENTITIES IN ACHIEVING SPACE SECURITY

Over 80 per cent of stakeholders in space are non-governmental entities in the commercial space industry. This panel explored the role of such stakeholders in informing space security by providing States with valuable insight that could aid in the optimization of policymaking.

PANEL 4. THE ROLE OF NON-GOVERNMENTAL ENTITIES IN ACHIEVING SPACE SECURITY

THE ROLE OF THE COMMERCIAL INDUSTRY AND CIVIL SOCIETY

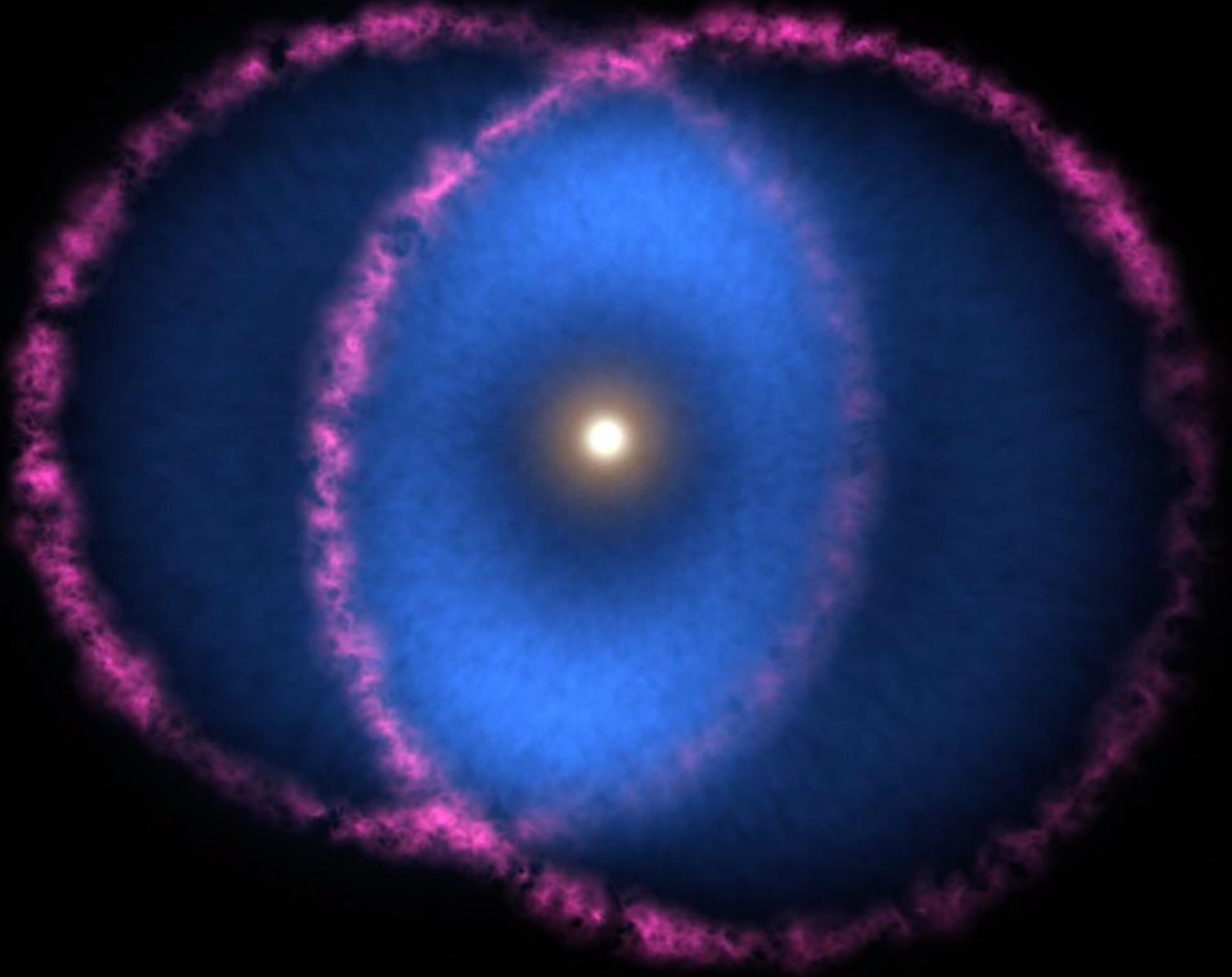
Panellists acknowledged that historically States were the main actors in outer space, but that nowadays non-governmental entities have gained increasing relevance. Panellists stressed the unique perspective that commercial actors can bring to the space security discussion, explaining that they view space as a long-term investment with the need to protect prospects for monetization. It was underscored that by not pursuing the safety, security, and sustainability of space the commercial sector jeopardizes billions of dollars of industry investment. It was recognized that civil society comes with cross-sectoral networks of expertise and training across industry and government and so it is appropriately placed to build bridges between industry and government. It was also noted that civil society can provide localized capacity-building and training, and that by engaging with a diversity of regions not only does it increase perspectives and understanding of best practices but helps in the universalization of treaties and norms through relationship-building.

THE NECESSITY FOR INCLUSIVE DIALOGUE, DATA COLLECTION AND SHARING, AND CONSIDERATION OF A BOTTOM-UP APPROACH

Panellists stated that the commercial sector is too large not to contribute or be considered, and that only by understanding what is happening within the largest sector of space activity can the international community agree on effective regulation. Panellists highlighted the risk of siloed approaches to solving security issues and emphasized that implementation of robust policy instruments is dependent on an inclusive approach. One panellist stated that arguments without data to support them were merely opinions and not helpful in achieving concrete conclusions. Through collection of data on space systems, actions and occurrences in outer space, as well as compliance with regulations, can be more easily and accurately verified. It was explained that the private space sector is already pushing forward to create best practices, and panellists cited examples such as the Space Safety Coalition and the Consortium for Execution of Rendezvous and Servicing Operations. There was a point of consensus among panellists that a bottom-up approach was ideal because it is important to understand feasibility and behaviours through the science first. However, the value of pursuing both approaches was recognized so as not to overlook the human element that is sometimes not within the scope of technically dense bottom-up practices.

KEY TAKEAWAYS

Panellists encouraged the continuation of workshops, industry partnerships, academic research, and ad hoc events to facilitate exchanges among stakeholders. It was expressed that regulating bodies need to capitalize on the extremely strong incentives that exist within the commercial sector and that there is an increased need for civil society to build clear channels of communication between industry and governmental bodies. The final takeaway from panellists was a sense of urgency to securing the outer space environment.



PANEL 5

NOT INCOMPATIBLE: THE RELATIONSHIP BETWEEN NORMATIVE AND LEGALLY BINDING INSTRUMENTS

This session explored the inter-relationship between non-binding and legally binding instruments for space security and analysed the extent to which these different instruments are compatible, as well as how one form can lead to the other.

PANEL 5. NOT INCOMPATIBLE: THE RELATIONSHIP BETWEEN NORMATIVE AND LEGALLY BINDING INSTRUMENTS

MUTUALLY FORTIFYING MECHANISMS

Non-legally binding and legally binding mechanisms are not incompatible and can be developed in concert with each other. The 2021 UNIDIR space conference was mentioned by panellists as an example where delegations that have traditionally supported the adoption of one or the other type of mechanism expressed openness to both types. As remarked by a panellist, soft law discussions could be conducive for hard law negotiations as the former can aid in creating common understandings and in building the confidence necessary to establish binding agreements. Another benefit of soft law is that it encourages unilateral measures of good faith. For example, The Hague Code of Conduct against Ballistic Missile Proliferation was established as a normative document while unilateral assurances from States bolsters norm compliance and diplomatic relations. A document akin to the Code that encourages trust and confidence-building measures like unilateral declarations and transparent information-exchange adapted to the outer space context could facilitate the commitment to space law and Outer Space Treaty ratification, and strengthen space security.

A panellist theorized that State preferences are influenced by the subject matter discussed, critical junctures, and rational-choice reasoning base on cost-avoidance. A State chooses soft law when the marginal cost of violating an agreement exceed the benefits gained from compliance. The panellist claimed that emerging spacefaring States prefer soft law due to its flexibility for capacity-building, and the cost of suffering from malicious behaviours in space due to the absence of legally binding rules could see States become interested in hard law. Strategic losses like deterrence impairment could see States reject either type of instrument. For the international community, soft law is preferred when technical standards and altruism are lacking because the cost of escalation in space with no governance agreement poses substantial risk. However, hard law interpretations could be called for internationally when mistrust is high if *lex lata* is pursued. The panellist remarked that hard law is suitable for issues regarding fundamental rights, responsibilities and liability, while soft law is best for urgent issues requiring the formation of specific technical standards and best practices.



PANEL 6

EXPECTATIONS FOR THE OEWG ON REDUCING SPACE THREATS THROUGH PRINCIPLES OF RESPONSIBLE BEHAVIOURS

This session looked at how certain trends arising from stakeholder activities could result in the emergence of space norms to address potential security threats, and how these activities could contribute to areas of agreement in the work of the OEWG.

PANEL 6. EXPECTATIONS FOR THE OEWG ON REDUCING SPACE THREATS THROUGH PRINCIPLES OF RESPONSIBLE BEHAVIOURS

IMPORTANCE OF INCLUSIVITY, AN AGNOSTIC OUTCOME, AND A BEHAVIOUR-BASED APPROACH

Panellists stressed that space security is no longer an issue relevant only to major spacefaring States but to all human-kind thereby marking the importance of the OEWG to facilitate an inclusive discussion. All panellists spoke to the unique framework of the OEWG as not overly focusing on form of outcome but rather on the process and content. They argued that this format allows the OEWG process to be a genuine transparency and confidence-building measure in itself, as its primary focus is to act as a forum in which States can express their concerns and understandings of space security issues. Panellists spoke to the opportunity that a novel approach presents for progress on issues of space security. It was argued that traditional bans on capabilities are not always effective for outer space, and that the international community must consider a wider range of threats to space and to space actors through a behavioural lens for a more comprehensive outer space governance regime. A working guideline for what constitutes responsible behaviours was put forward, suggesting that responsible behaviours avoid surprise, respect the security of others, avoid provocation of tensions, be predictable, and avoid raising tensions and miscalculations. On the other hand, irresponsible behaviours do not meet those criteria, and could create debris, require orbital manoeuvres to reduce the potential for collision or interfere with normal operation of space objects.

CHALLENGES TO CONSENSUS AND DRAWING INSPIRATION FROM OTHER REGIMES

Panellists considered the variety of challenges facing the OEWG process. One challenge considered was the fact that space technology development and deployment is outpacing the growth and regulatory abilities of the outer space governance regime. A reoccurring topic was the geopolitical obstacles and diverging support of legally binding and behaviour-based approaches. One panellist explained that some States view the novel behaviour-based approach as a method to dilute the PAROS process and distract from a legally binding mechanism. Regarding inspiration from other regimes, panellists pointed to the usefulness of understanding the applicability of concepts such as due regard and consultations in adjacent regimes governing maritime issues and air space. It was emphasized that States can look to these regime mechanisms for inspiration and not to transpose identical implementations. Panellists discussed how a protocol similar to the Code for Unplanned Encounters at Sea could be implemented in the context of outer space.

BUILDING ON IDEAS FROM THE FIRST SESSION OF THE OEWG AND CONSIDERATIONS FOR THE NEXT

It was agreed that the OEWG could reaffirm the applicability of international law to the outer space regime. Potential broad-consensus topics, such as testing of direct-ascent kinetic ASATs, due regard, and consultations, were considered positive discussion points from the first session likely to encourage further progressive debate. There was consensus on the idea that the onus of ensuring, implementing, and committing to norms is heavier on more advanced spacefaring States. It was also underscored that the development of norms and rules should take care not to exclude or hinder States with developing space capabilities. All panellists underlined the importance for States to take advantage of the OEWG as a forum to openly express their concerns and understandings of outer space security in a constructive manner.

CONCLUSION

Over the course of the event, panellists collectively generated a rich, insightful and timely discussion on the prospects for the OEWG and outer space security broadly. It was acknowledged that such informal discussions are important in advancing the security environment of outer space, especially as the domain is undergoing significant and rapid change.

Dialogue across panels recognized past efforts to address space security concerns and extracted lessons learned for future initiatives. In addition, panellists reflected on the possible value and synergy to be gained by discussing the concurrent efforts taking place in the United Nations context on space safety and security. Panellists across both days of the conference contributed to surveying the critical threats and risks to outer space. Moreover, the complexity of quantifying threats by capabilities was revealed as panellists discussed the integration of national civilian and military infrastructures dependent on outer space services and resources.

The event heard discussion on the potential and limits of norms, rules and principles in keeping space secure and sustainable. In distinguishing non-legally binding mechanisms from legally binding laws, panellists offered explanations about the meaning and features of the former. There were also definitional proposals for what constitutes responsible and irresponsible behaviours. It was highlighted that binding and non-binding outcomes are not mutually exclusive, and the latter can serve as foundation for binding agreements. Moreover, the conference prompted debate on the difference of efficacy between legally binding to non-legally binding measures. Such questions led to an original consideration of the concept of social punishment and social sanctions.

Importantly, panellists considered the role of other stakeholders, notably the largest group of actors in outer space—the commercial space industry. The event heard concrete suggestions on ways to develop the future of the space security architecture from members of non-governmental sectors. Importantly, panellists left the event having brainstormed new initiatives to act on, such as increased network mapping to enhance cross-sectoral dialogue.

Participants across panels gave their shared expectations and ideas for the OEWG. A successful outcome of the OEWG envisaged by some panellists constituted a balanced package of agreements that would garner support from as many delegations as possible. An overarching perception of success was agnostic of the outcome product and focused more on the process and opportunity for a genuine exchange of concerns. Facilitating such dialogue was seen as an important transparency and confidence-building measure in its own right.

The final tone provided both a sense of urgency and optimism for sessions going forward. The importance of continued collaborative work to build common understandings ahead was emphasized. The conference provided a successful demonstration of cross-sectoral thought-exchange, interim work and collaboration, and dialogue catered to enhancing the participation of important emerging spacefaring States.

ADVANCING SPACE SECURITY THROUGH NORMS, RULES AND PRINCIPLES OF RESPONSIBLE BEHAVIOUR?

WEBINAR SUMMARY REPORT

The “Advancing Space Security through Norms, Rules and Principles of Responsible Behaviours?” Conference was held on 23–24 of May 2022 in virtual format. UNIDIR co-organized the conference with the Republic of Korea and the Secure World Foundation.

The discussion over the course of the virtual conference is summarized in this document.

This two-day event provided a unique regional approach approach within countries from the Association of Southeast Asian Nations (ASEAN) to foster dialogue towards a common understanding of responsible behaviours concerning outer space and to jointly consider challenges to outer space security.

