Promoting the European network of independent non-proliferation and disarmament think tanks

### NON-PROLIFERATION AND DISARMAMENT PAPERS

No. 78 May 2022

## NAVIGATING CHINESE-RUSSIAN NUCLEAR AND SPACE CONVERGENCE AND DIVERGENCE

LORA SAALMAN

### I. INTRODUCTION

In the wake of the release of the 'Joint Statement of the Russian Federation and the People's Republic of China on the International Relations Entering a New Era and the Global Sustainable Development' in February 2022, a range of analysts have argued that the two countries have become strategically aligned. Certainly, as contained in this document, both share security concerns relating to the United States and its allies that shape their nuclear and space policies. Both also refer to 'active defence' as central to maintaining their national sovereignty, territorial integrity and overall security. While such similarities exist, however, the manner in which such concepts are operationalized is not the same—at least not yet. When applied to nuclear deterrence, the Chinese version of active defence is currently limited to retaliation against a nuclear attack while the Russian version suggests pre-emption in the face of either non-nuclear or nuclear aggression. And while both are jointly pursuing a treaty on nonweaponization of space, China's defence white papers tend towards a brief mention of challenges, as opposed to pervasive concerns over an attack launched from space in Russia's military doctrines.<sup>2</sup> Thus, while there is similarity between the two countries' official white

<sup>1</sup> President of Russia, 'Joint Statement of the Russian Federation and the People's Republic of China on the International Relations Entering a New Era and the Global Sustainable Development', 4 Feb. 2022; Kempe, F., 'The world's top two authoritarians have teamed up. The US should be on alert', Atlantic Council, 6 Feb. 2022; and Yesmin, S. and Noor, M. S., 'China–Russia strategic alignment: Is international relations entering a new era?', BRICS Information Portal, 24 Feb. 2022.

<sup>2</sup> Conference on Disarmament, Letter dated 12 Feb. 2008 from the Permanent Representative of the Russian Federation and the Permanent Representative of China to the Conference on Disarmament addressed to the Secretary-General of the Conference transmitting the Russian and Chinese texts of the draft 'Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects (PPWT)' introduced by the Russian Federation and China, CD/1839, 29 Feb. 2008.

### **SUMMARY**

Following the release of a China-Russia joint statement in February 2022, analysts have argued that the two countries have become strategically aligned. While both share security concerns and even use similar terminology on 'active defence', the manner in which they address these concerns and operationalize these concepts is not the same—at least not yet. When applied to nuclear deterrence, the Chinese version of active defence suggests retaliatory action against a nuclear attack while the Russian version indicates pre-emption in the face of either non-nuclear or nuclear aggression. In terms of space, while both are jointly pursuing a treaty on non-weaponization, China's defence white papers tend towards a brief and vague mention of challenges, as opposed to Russia's pervasive concerns over an attack in its military doctrines. Thus, while there is similarity between the two countries, there remain notable differences. This paper explores China's and Russia's most recent official documents and statements on their respective nuclear and space postures, combined with some corresponding technological advances. It then makes recommendations to European Union member states on topics that could be addressed in future strategic stability talks that include either one or both countries.

### **ABOUT THE AUTHORS**

Dr Lora Saalman (United States) is a Senior Researcher within SIPRI's Armament and Disarmament, and Conflict, Peace and Security research areas. She also serves as a Member of the Committee on International Security and Arms Control (CISAC) and as an Adjunct Senior Fellow at the East-West Center (EWC). Her research focuses on China's cyber, nuclear and advanced conventional weapon developments in relation to India, Russia and the United States.

papers and military doctrines, there remain notable differences.

To assess these points of convergence and divergence, this paper reviews China's and Russia's most recent official documents and statements on their respective nuclear and space postures, as well as some related technological advances. It then makes recommendations to European Union (EU) member states on topics that could be addressed in future strategic stability talks that include either one or both countries. Recognizing the fact that the USA will serve as the primary interlocutor with Russia and China in bilateral—or even trilateral—strategic stability talks, EU member states still have a role to play in potentially facilitating such discussions and even hosting more multilateral versions of strategic stability talks in the future. As recent examples of this mediator role, EU member state France has sought to serve as an intermediary in the context of the 2022 Ukraine crisis, while 15 European countries jointly advocated for the 'relaunch of conventional arms control' in 2017.3 Further, both Chinese and US experts have detailed the constructive role that European countries can play in China-USA and Russia-USA arms control.4

Given the recent events in Ukraine and the demise of a number of pre-existing arms control treaties, strategic stability talks carry an increasingly significant weight when addressing nuclear and space issues. This is because they offer a venue to discuss escalation and weapon system employment, as opposed to the strict controls or limits on weapon numbers and capabilities imposed by arms control negotiations that are likely to be non-starters in the current environment. While both types of engagement can play stabilizing roles and aid in crisis management, the format of strategic stability talks allows for greater latitude that will be crucial when trying to engage China and to re-engage Russia in the longer term.

## II. CHINA'S OFFICIAL STANCE ON NUCLEAR AND SPACE DOMAINS

# China's Military Strategy (2015) and China's National Defence in the New Era (2019)

### Active defence

A review of China's two most recent defence white papers, 'China's Military Strategy' from 2015 and 'China's National Defence in the New Era' from 2019, reveals prominent reference to the term 'active defence' with a particular focus on self-defence. 5 While applied to the entirety of its defensive structure, active defence has also become a lynchpin of China's nuclear posture. Both versions of China's white papers renounce preemption by stating that when 'others do not attack me, I will not attack them', yet 'for those that attack me, I must attack them'. While this description of active defence may indicate that pre-emption is not part of China's calculus, there remains some ambiguity as to its application. The character '犯' that is translated in the phrase above as 'attack' can also be read as violate, offend or assail. This suggests some latitude as to the nature of the aggression against which China will retaliate. Further, the same paragraph refers to the use of active defence to 'contain wars and win wars' with an emphasis on 'strategic defence and offensive combat'. This rhetorical combination of 'containment and winning' and 'defence and combat' suggests that the dividing line between deterrence and use remains unclear.

### No first use

These points of ambiguity become all the more crucial, as the concept of active defence informs China's no-first-use (NFU) pledge. This concept, which came under debate following its omission from a 2013 defence white paper, has returned in full force in more recent official declarations. 6 China's 2015 and 2019 defence

<sup>&</sup>lt;sup>3</sup> Weber, G., 'A case for French leadership on Ukraine', War on the Rocks, 8 Mar. 2022; and Reif, K., 'Europeans seek conventional arms talks', *Arms Control Today*, Jan./Feb. 2017.

<sup>&</sup>lt;sup>4</sup> Zhao, T., 'Europe's role in promoting US–China arms control cooperation', Hague Centre for Strategic Studies, Feb. 2022; and Pifer, S., 'Germany's role in US–Russian nuclear arms control', Brookings, 3 June 2021.

<sup>&</sup>lt;sup>5</sup> Chinese State Council Information Office, '中国的军事战略' [China's Military Strategy], People's Republic of China, 26 May 2015; and Chinese State Council Information Office, '新时代的中国国防' [China's National Defence in the New Era], People's Republic of China, 24 July 2019.

<sup>&</sup>lt;sup>6</sup> Acton, J. M., 'Debating China's no-first-use commitment: James Acton responds', Carnegie Endowment for International Peace, 22 Apr. 2013; Pan, Z., 'China's no first use of nuclear weapons', eds B. Li and T. Zhao, *Understanding Chinese Nuclear Thinking* (Carnegie Endowment for International Peace: Washington, DC, 2016), p. 68; Xu, W., 'China's security environment and the role of nuclear weapons', B. Li and T. Zhao, *Understanding Chinese Nuclear Thinking* (Carnegie

white papers state that China has always pursued the nuclear policy of not being the first to use nuclear weapons at any time and under any circumstances, and unconditionally not using or threatening to use nuclear weapons against non-nuclear weapon states and nuclear weapon-free zones. In fact, the 2019 defence white paper features this NFU declaration in its section on active defence, arguing that China 'has always maintained its nuclear force at the minimum level required by national security' and has a self-defence strategy aimed at 'deterring other countries from using or threatening to use nuclear weapons against China and ensuring national strategic security'.

However, as with the term active defence, the phrasing relating to NFU merits greater scrutiny. The 'minimum level required by national security' allows for China to undertake quantitative and qualitative changes to address a dynamic threat environment, as has already become evident from its recent nuclear expansion of its intercontinental ballistic missile (ICBM) silos, testing of a hypersonic glide vehicle (HGV) coupled with a fractional orbital bombardment system (FOBS), fielding of multiple independently targetable re-entry vehicles (MIRVs), among other advances. Moreover, while some Chinese strategists have argued that China does not practice 'deterrence' but instead 'counter nuclear coercion', the statement explicitly refers to 'deterring other countries from using or threatening to use nuclear weapons'. This indicates that China is not only employing deterrence, it is prepared for more than the political use of nuclear weapons in a crisis. Furthermore, nuclear weapons are more consequential than what former chairman Mao Zedong referred to as 'paper tigers'. 8 In fact, China's 2019 defence white paper explicitly states that 'nuclear forces are the strategic cornerstone for safeguarding national sovereignty and security'.

Endowment for International Peace: Washington, DC, 2016), pp. 44–49; and Juzizhoutou.net, '沙祖康大使在军控协会成立20周年纪念大会暨军控工作座谈会上的发言' [Ambassador Sha Zukang's speech at the 20th Anniversary Meeting of the Arms Control Association and the Arms Control Working Symposium], 22 Sep. 2021.

<sup>7</sup> Chase, M. S., 'China's transition to a more credible nuclear deterrent', *Asia Policy*, no. 16 (July 2013), pp. 69–102.

<sup>8</sup> Mao, Z., '毛泽东外交文轩' [Mao Zedong's selected works on diplomacy] (Central Party Literature Press: Beijing, 1994), pp. 57–62; and Wu, R., 'Assessing China–US inadvertent nuclear escalation', *International Security*, vol. 46, no. 3 (Winter 2021/22), pp. 128–162.

### Multidomain deterrence

The centrality of nuclear weapons also features in the structure of China's defence white papers. In terms of subsections, the 2015 paper lists nuclear forces prior to counterterrorism, maritime, space and cyberspace, while in the 2019 paper they precede space and cyberspace. Further, this joint discussion suggests not only their rank of importance, but also a shift towards multidomain concepts of deterrence. Driving this trend are Chinese concerns over the US approach towards China's regional security interests in air, land and sea. Thus, the 2019 defence white paper highlights the USA's 'adjustment of its national security strategy and national defense strategy, policies of unilateralism, provocations and intensified competition with major powers, substantially increased military spending, and accelerated the enhancement of nuclear, space, cyber, and missile defense capabilities as factors in weakening global strategic stability'. This connection among domains indicates China's required lines of effort in developing its own capabilities.

Thus, while China's defence white papers are clear that nuclear weapons are to deter other countries from using or threatening to use nuclear weapons, the contingencies in which nuclear deterrence may be applied are broad. For example, the 2015 defence white paper places 'safeguarding sovereignty and security of national territory, airspace and territorial sea' at the top of a list of defence priorities that also features maintaining strategic deterrence and nuclear retaliation. Moreover, in the 2019 defence white paper, the link between nuclear forces and 'safeguarding national sovereignty and security' is heavily laden with protection of territorial integrity. China's dual-capable command and control and platforms, including the DF-21 medium-range ballistic missile (MRBM), the DF-21D MRBM and the DF-26 intermediate-range ballistic missile, further strengthen this link between territorial contingencies and potential non-nuclear and nuclear escalation.<sup>10</sup>

### Countermeasures

Compared with the 2019 defence white paper, China's previous 2015 defence white paper is much more granular in detailing China's efforts to develop

<sup>9</sup> Saalman, L., 'Multidomain deterrence and strategic stability in China', SIPRI Insights on Peace and Security no. 2022/2, Jan. 2022.

<sup>10</sup> Acton, J. M. (ed.), Entanglement: Russian and Chinese Perspectives on Non-nuclear weapons and Nuclear Risks (Carnegie Endowment for International Peace: Washington, DC, 2017).

countermeasures and efforts to: (a) independently innovate in weapons and equipment; (b) enhance the safety, reliability and effectiveness of missile weapons; (c) improve its nuclear and non-nuclear capabilities; (d) strengthen its strategic deterrence and nuclear counterattack with medium- and long-range precision strike capabilities; (e) build and improve its nuclear forces; and (f) improve strategic early warning, command and control, missile penetration, rapid response and survivability. By contrast, particularly on space, the 2019 defence white paper vaguely cites China's need to 'accelerate the development of corresponding technologies and forces' in the face of challenges. While this lack of specificity does not indicate that the priorities of 2015 no longer exist, it introduces even greater ambiguity into how China applies active defence in practice. As a result, China's defence white papers must also be weighed against the de facto transparency offered by its recent technological advances in nuclear and space domains, such as its expanded ICBM silos, HGV tests on FOBS and fielding of MIRVs. On balance, these developments suggest that the ambiguities inherent in the wording of China's defence white papers provide room for sizeable nuclear and space modernization.

# III. RUSSIA'S OFFICIAL STANCE ON NUCLEAR AND SPACE DOMAINS

The Military Doctrine of the Russian Federation (2010 and 2014) and Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence (2020)

### Active defence

Compared with China, Russia's official documents offer greater detail and continuity about the tenets guiding its nuclear modernization, particularly through 'The Military Doctrine of the Russian Federation' from 2010 and 2014, and 'Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence' from 2020.¹¹ While its 2010 and 2014 military doctrines make no direct reference to the term 'active defence', this strategy appears in a 2019 speech at the Russian Academy of Military Sciences, by Russia's chief

<sup>11</sup> President of Russia, 'The Military Doctrine of the Russian Federation', English translation by Carnegie Endowment for International Peace, 5 Feb. 2010; Russian Embassy to the UK, 'The Military Doctrine of the Russian Federation', 25 Dec. 2014; President of Russia, [Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence], 2 June 2020 (in Russian); and New Defence Order, Strategy, 'Fundamentals of Russia's nuclear deterrence state policy', [n.d.].

of general staff, Valery Gerasimov, and seemingly underpins much of the posture contained within these documents. He described Russia's military strategy as 'active defence', constituted by 'pre-emptive neutralization of threats to the security of the state' by 'achieving surprise, decisiveness, and continuity of strategic action'. 12 Gerasimov detailed this approach when he stated: 'Acting fast, we must pre-empt the adversary with our preventive measures, engage in the timely discernment of his weak spots and create threats of inflicting unacceptable damage. This allows the capture and the continued possession of strategic initiative.'13 From this quote, the focus on pre-emptive action differs from the Chinese concept of retaliation. Nevertheless, there are similarities with China in terms of ambiguity as to what may be construed as foreign aggression and the lack of clear distinction between offensive and defensive action.

Beyond its military doctrines, Russia's 2020 basic principles represent the most recent official written declaration of the conditions under which it may use or threaten to use nuclear weapons. Notably, the contents of this document are reflected in official statements on the heightened alert status and 'engagement readiness' of Russia's nuclear forces surrounding events in Ukraine in 2022, from Russian President Vladimir Putin, Deputy Chairman of the Russian Security Council Dmitry Medvedev and Russian Defence Minister Sergei Shoigu. 14 At the outset, the basic principles document declares that Russia seeks 'guaranteed deterrence of a potential adversary from aggression' as ensured by its 'entire military strength', including nuclear weapons. In terms of the quantitative and qualitative composition of its nuclear forces, Russia seeks to maintain them 'at the level sufficient for nuclear deterrence' to 'guarantee protection of national sovereignty and territorial integrity' and to prevent 'an escalation of military actions and their termination on conditions that are acceptable' for itself and its allies. These statements are noteworthy for several reasons. First, they place an emphasis on aggression as the key driver of nuclear deterrence. Second, they remain ambiguous about the force size and composition necessary to achieve this aim. Third, they make explicit

<sup>&</sup>lt;sup>12</sup> Kofman, M. et al., Russian Military Strategy: Core Tenets and Operational Concepts (CNA: Arlington, VA, Aug. 2021), pp. 10–11.

<sup>&</sup>lt;sup>13</sup> Kofman et. al. (note 12).

<sup>&</sup>lt;sup>14</sup> Bugos, S., 'Putin orders Russian nuclear weapons on higher alert', Arms Control Today, Mar. 2022; and Boffey, D., 'Russia reasserts right to use nuclear weapons in Ukraine', *The Guardian*, 26 Mar. 2022.

reference to the use of nuclear weapons to prevent escalation and to terminate military actions by an adversary, indicating support for the strategy of active defence cited by Gerasimov.

### Non-nuclear and nuclear deterrence

Despite the common use of the term active defence, there are notable differences when it comes to Russian posture when compared with that of China, particularly regarding non-nuclear versus nuclear deterrence. Russia's 2010 and 2014 military doctrines provide much greater nuance as to the range of both non-nuclear and nuclear threats that are shaping its deterrent. Both documents make reference to what some have labelled as an 'escalate-to-de-escalate' strategy that posits the use of nuclear weapons not only in response to nuclear and other forms of weapons of mass destruction, but also against the use of nonnuclear weapons when the country faces an existential threat.<sup>15</sup> The 2010 military doctrine is noteworthy for providing even greater insight into this non-nuclear and nuclear dynamic, stating:

Nuclear weapons will remain an important factor for preventing the outbreak of nuclear military conflicts and military conflicts involving the use of conventional means of attack (a large-scale war or regional war) . . . In the event of the outbreak of a military conflict involving the utilization of conventional means of attack (a large-scale war or regional war) and imperilling the very existence of the state, the possession of nuclear weapons may lead to such a military conflict developing into a nuclear military conflict.

As such, Russian nuclear deterrence is much more categorical than that of China in its recognition of a crossover between non-nuclear and nuclear escalation. In detailing these non-nuclear and nuclear threats, Russia's 2010 and 2014 military doctrines and 2020 basic principles are also more detailed than Chinese defence white papers citing 'drastic aggravation' of the military-political situation, impeding the operation of systems of state governance and military command and control, disruption of the functioning of strategic nuclear forces, missile early warning systems, systems of outer space monitoring, nuclear munitions storage

<sup>15</sup> Bell, J., 'Escalate to de-escalate: Russia's nuclear deterrence strategy', *Global Security Review*, 7 Mar. 2022.

facilities, nuclear energy facilities, nuclear, chemical, pharmaceutical and medical industry facilities and other potentially dangerous facilities. While this broader focus may be explained by China's NFU pledge, this difference may increasingly become more rhetorical than real, given the alleged entanglement of Chinese nuclear and non-nuclear command and control and platforms, and the trend towards multidomain deterrence. Thus, much of understanding deterrence, particularly in China, is left to comparing force structure and posture. By contrast, unlike the Chinese shift away from detail in its 2019 defence white paper, Russia's 2014 military doctrine and 2019 basic principles mark a significant increase in transparency.

### External threats and escalation

Still, there remains some correlation with China's defence white papers. Russia's 2020 basic principles refer to its deterrent as 'defensive by nature', with an emphasis on (a) 'maintaining the nuclear forces potential at the level sufficient for nuclear deterrence', (b) guaranteeing 'protection of national sovereignty and territorial integrity of the State', and (c) deterring 'a potential adversary from aggression against the Russian Federation and/or its allies'. Moreover, both countries are ambiguous on the exact requirements of maintaining a 'level sufficient for deterrence', suggesting that both China and Russia maintain a level of fungibility. While the Russian declaration is more direct than that of China, both have strongly worded clauses on the importance of protecting national sovereignty and both include territorial integrity as part of this aim. As both countries face a threat surface that includes the USA and its alliances, the basic principles document is similar to China's 2015 defence white paper in its concerns over 'medium- and shorterrange cruise and ballistic missiles, non-nuclear highprecision and hypersonic weapons, strike unmanned aerial vehicles, and directed energy weapons ... missile defence assets and strike systems in outer space . . . deployment of nuclear weapons and their delivery means in the territories of non-nuclear weapon states'.

Despite the crossover of threats with those faced by China, however, Russia's basic principles detail areas that are largely absent in the Chinese defence white papers, namely the application of nuclear deterrence in escalation, specific activities that constitute aggression against Russia or its allies and the non-nuclear

<sup>&</sup>lt;sup>16</sup> Acton (note 10); and Saalman (note 9).

conditions under which Russia would use nuclear weapons. Russia's basic principles are clear that rather than in retaliation simply against nuclear threat or attack, its nuclear weapons are a means to prevent or to terminate escalation of military actions. Given that this does not limit the scope of nuclear use or threat of use, the Russian concept of nuclear deterrence is broader than that found in China.

The basic principles are also explicit that nuclear deterrence would be employed in the following contingencies: (a) the build-up by a potential adversary of forces that possess nuclear weapons delivery means in territories and waters adjacent to or contiguous with Russia or its allies; (b) the deployment by adversaries of missile defence systems and means, medium- and shorter-range cruise and ballistic missiles, non-nuclear high-precision and hypersonic weapons, strike unmanned aerial vehicles and directed energy weapons; (c) the development and deployment of missile defence assets and strike systems in outer space; (d) the possession of nuclear weapons and other types of weapons of mass destruction and delivery systems that can be used against Russia or its allies; (e) the uncontrolled proliferation of nuclear weapons, delivery systems, and technology and equipment for their manufacture; or (f) the deployment of nuclear weapons and their delivery systems in the territories of non-nuclear weapon states.

### Conditions for nuclear use

Much as in Russia's 2014 and 2010 military doctrines, its basic principles appear to apply an 'escalate-to-deescalate' strategy, such that nuclear weapons could be used 'in the event of aggression against the Russian Federation with the use of conventional weapons when the very existence of the state is in jeopardy'. 17 This is but one within a list of cases in which Russia may consider nuclear weapons use, including (a) the arrival of reliable data on a launch of ballistic missiles against its territory or that of its allies; (b) the use of nuclear weapons or other types of weapons of mass destruction by an adversary against it or its allies; and (c) an attack against critical governmental or military sites, the disruption of which would undermine nuclear forces response actions. This last tenet is again significant for its departure from Chinese declaratory posture in that it allows for nuclear retaliation against a non-nuclear attack. Further, in Russian contingencies,

there is greater specificity about the difference between nuclear deterrence and nuclear use. Thus, while China's defence white papers broadly apply the concept of active defence against aggression, their blanket NFU statement means that they lack the context offered by Russia's 2010 and 2014 military doctrines and 2020 basic principles.

Russia's greater specificity, as opposed to China, carries over into details on space-related military applications. Its basic principles cite nuclear deterrence as a means of addressing 'development and deployment of missile defence assets and strike systems in outer space'. When viewed in light of Russia's 2010 and 2014 military doctrines, it becomes clear that space issues are heavily intertwined with nuclear issues in Russian military doctrine. References to space permeate these documents with explicit concerns over the use of space by adversaries to launch attacks on territory, to engage in militarization and strategic missile defence, and to impede operation of Russian command and control, strategic nuclear forces, missile early warning systems and monitoring systems. Within this discussion, space 'supremacy' receives special attention alongside the need to establish an international treaty prohibiting the deployment of weapons in outer space. Thus, while Russia shares concerns with China about the exploitation of space for strategic advantage, a comparison of their official documents indicates that—much as in the nuclear domain—China's contain greater ambiguity as to the conditions under which deterrence will be applied.18

### Countermeasures

Despite their differences in ambiguity, Russia's 2010 and 2014 military doctrines tend to align with China in terms of shared concerns over the USA's missile defence systems, prompt global strike capability, weaponization of outer space and 'strategic non-nuclear systems of high-precision weapons'. Much as in the case of China's defence white papers, Russia's military doctrines prioritize the role of nuclear weapons, while factoring in a range of other security domains with a notable focus on the development and deployment of missile defence assets and strike systems in outer space. Similar to China's 2015 defence white

<sup>&</sup>lt;sup>17</sup> Bell (note 15).

<sup>&</sup>lt;sup>18</sup> This is all the more salient given off-the-record track-1.5 USA-China strategic dialogues that revealed China may consider an attack on US space assets during a conflict. Santoro, D. and Gromoll, R., 'On the value of nuclear dialogue with China', *Issues and Insights*, vol. 19, no. 1 (Nov. 2020), p. 19.

paper, Russia's 2014 military doctrine discusses the imperative of developing a range of countermeasures, including 'new types of high-precision weapons and means of counteracting them, aerospace defense assets, communication systems, reconnaissance and command systems, radio jamming systems, complexes of unmanned aerial vehicles, robotic strike complexes, modern transport aviation and individual protection systems for military personnel'. In doing so, Russian conduct and statements largely reinforce, rather than contradict, its military white papers. This is evident in terms of Russia's recent operations in Ukraine, including raising the alert status of its nuclear weapons to 'special combat readiness'; testing the Tsirkon and Kinzhal hypersonic cruise missiles, Yars mobile ICBM, Sineva submarine-launched ballistic missile, and air-launched cruise missiles; and developing platforms such as the Sarmat ICBM, Poseidon autonomous underwater vehicle, Burevestnik nuclear-powered cruise missile, Barguzin rail-mobile ICBM and Rubezh ICBM.19

## IV. CONVERGENCE, DIVERGENCE AND TOPICS FOR TALKS

A review of the white papers, military doctrines and basic principles of China and Russia indicates that there are points of convergence and divergence in the two countries' approaches towards nuclear and space trends. While they have notable similarities, there remain differences in China's and Russia's articulation and operationalization of their respective postures, particularly as they relate to active defence, nuclear weapon use, and civil and military space affairs. When viewed in light of the 2022 China-Russia joint statement, which provides both a list of shared concerns and means of addressing them, recognizing these nuances is of particular importance. 20 While the joint statement has been largely viewed as a challenge to strategic stability, there are benefits to better understanding how it may be read in the context of China's and Russia's defence white papers, military doctrines and basic principles. Their combination can provide a road map of some of the topics that China and Russia may be willing to engage through future

strategic stability talks, which would offer a platform for engagement on escalation and crisis management.<sup>21</sup>

In utilizing this road map, EU member states can play a longer-term role. Currently, their ability to serve as facilitators for strategic stability talks is complicated by the events in Ukraine and the participation of a number of EU member states in the North Atlantic Treaty Organization (NATO). Nevertheless, France has already attempted to serve as an intermediary during the 2022 Ukraine crisis, while Austria, Belgium, Bulgaria, Czechia, Finland, France, Germany, Italy, Netherlands, Norway, Romania, Slovakia, Spain, Sweden and Switzerland jointly called in 2017 for the 'relaunch of conventional arms control'.22 Further, both Chinese and US experts have written on the constructive role that European countries can play in furthering China-USA and Russia-USA arms control.<sup>23</sup> Moreover, in terms of willingness to engage, both China and Russia still largely blame the USA for NATO actions and the recent events in Ukraine.24 In the case of China, even prior to the 2022 joint statement with Russia, its 2019 white paper notes its own concerns over NATO's membership expansion, strengthened military deployment and frequent military exercises. This is important in the context of broader Chinese misgivings about US expansionism, hegemonism and utilization of its allies to encircle countries like China and Russia.<sup>25</sup> China's white paper also justifies Russia's strengthening of its nuclear and non-nuclear strategic deterrence capabilities to 'safeguard its strategic security space and its own interests', while citing the EU's 'independence' in its pursuit of its own security and accelerated integration of security and defence.

Thus, both official and non-official views in China have long maintained that the EU is capable of diverging from US policy to serve as a relatively impartial third party. <sup>26</sup> Some of this may shift, given the critical stance towards China of the 2019 EU strategy paper and the involvement of some

<sup>&</sup>lt;sup>19</sup> Woolf, A. F., Russia's Nuclear Weapons: Doctrine, Forces, and Modernization, Congressional Research Service (CRS), Report for Congress R45861 (US Congress, CRS: Washington, DC, 21 Mar. 2022). <sup>20</sup> President of Russia (note 1).

<sup>&</sup>lt;sup>21</sup> See Saalman, L., 'China's recent military advances strengthen the case for strategic stability dialogues', East-West Center, forthcoming 2022; and Saalman (note 9).

<sup>&</sup>lt;sup>22</sup> Weber (note 3); and Reif (note 3).

<sup>&</sup>lt;sup>23</sup> Zhao (note 4); and Pifer (note 4).

<sup>&</sup>lt;sup>24</sup> Nechepurenko, I. and Hopkins, V., 'On Ukraine, many Russians have no doubt: It's the fault of the US', *New York Times*, 4 Feb. 2022.

<sup>&</sup>lt;sup>25</sup> Xinhua, '美国同盟体系 "七宗罪" [The 'Seven Deadly Sins' of the US Alliance System], 8 Apr. 2021; and Cfisnet.com, '吴心伯: 美国霸权地位的演变' [Wu Xinbo: The Evolution of the American Hegemonic Position', 26 Dec. 2019.

<sup>&</sup>lt;sup>26</sup> Hao, W., '国际观察: '美国回来了'?欧洲有取舍'[International watch: 'America is back'? Europe has trade-offs], Xinhua, 25 Mar. 2021.

EU member states in maritime operations in the Indo-Pacific, but the current general view in China is that the EU is a more objective and independent actor.<sup>27</sup> Beyond China, even in the case of Russia, the national response and narrative remains that the USA is the country directing these threats towards its sovereignty, allowing EU member states a window for future engagement potentially through facilitating strategic stability talks. 28 In terms of topics that could be discussed within such talks, the following list is built from the aforementioned points of convergence and divergence in China's 2015 and 2019 defence white papers, Russia's 2010 and 2014 military doctrines and 2020 basic principles, and the 2022 China-Russia joint statement. It covers active defence and nuclear deterrence, high-precision guidance non-nuclear weapons, medium- and intermediate-range systems, missile defence and outer space.

#### Active defence and nuclear deterrence

China's and Russia's official statements and documents suggest that both have a concept of active defence and prioritize the role of nuclear weapons. Within their respective defence white papers, military doctrines and basic principles, they place a premium on maintaining national sovereignty and security, with an emphasis on territorial integrity. While Russian official documents do not contain the term active defence, instead appearing in official statements, it is embedded in its military doctrines and basic principles. Russia's version of active defence is pre-emptive in nature and the range of external aggression includes conventional attacks in which the survival of the state is in question. By comparison, China's defence white papers reveal that its active defence is retaliatory in nature, falling under an NFU declaration that it would not use nuclear weapons to retaliate against non-nuclear attacks. Nevertheless, China's interpretation of active defence and nuclear deterrence may be shifting towards a more proactive stance as its emerging technologies and dual-capable systems evolve under multidomain

deterrence.<sup>29</sup> Engagement on these shifts to mitigate both misunderstanding and escalation would be a salient topic for strategic stability talks.

### High-precision guidance non-nuclear weapons

The topic of high-precision guidance non-nuclear weapons appears in the China-Russia joint statement, as well as China's defence white papers and Russia's military doctrines and basic principles. These systems have been of ongoing concern for both countries, particularly following a US reference to developing 'non-nuclear prompt global strike' capabilities—often referred to as prompt global strike or conventional prompt global strike—in its 2010 Nuclear Posture Review.<sup>30</sup> Since then, the USA has been working on HGVs intended to carry out such missions, while both China and Russia have made sizeable advances with their own respective dual-capable and nuclear versions. Russia's Avangard system is one example, while China's test of an HGV coupled with a FOBS demonstrates its aim to penetrate US missile defences. Such advances strengthen China's nuclear deterrent, eroding its longheld argument that asymmetric weakness precludes its participation in track-1 nuclear dialogues and reflected in recent US statements that China may be willing to engage in strategic stability talks.31 Further, Russia has made efforts to table discussions on high-precision guidance non-nuclear weapons during negotiations surrounding the 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START), suggesting that exchanges on the escalatory nature of these weapons is likely to be welcomed as part of strategic stability talks.32

### Medium- and intermediate-range systems

The China–Russia joint statement and the countries' respective defence white papers, military doctrines and basic principles detail common concerns over the deployment of medium- and intermediate-range

<sup>&</sup>lt;sup>27</sup> European Commission and HR/VP contribution to the European Council, 'EU–China: A strategic outlook', Joint Communication to the European Parliament, the European Council and the Council, 12 Mar. 2019; and Brattberg, E. and Le Corre, P., 'The EU and China in 2020: More competition ahead', Carnegie Endowment for International Peace, 19 Feb. 2020.

<sup>&</sup>lt;sup>28</sup> TASS, 'Kremlin hits back at White House remark: Russians, not Biden, elect president of Russia', 26 Mar. 2022.

<sup>&</sup>lt;sup>29</sup> Saalman (note 9).

<sup>&</sup>lt;sup>30</sup> Saalman, L., *China and the US Nuclear Posture Review* (Carnegie Endowment for International Peace: Washington, DC, 28 Feb. 2011); and US Department of Defense (DOD), *Nuclear Posture Review Report* (DOD: Arlington, VA, Apr. 2010), p. 24.

<sup>&</sup>lt;sup>31</sup> Brookings Institution, 'Readout from the Biden–Xi virtual meeting: Discussion with National Security Advisor Jake Sullivan', Webinar transcript, 16 Nov. 2021, p. 11.

<sup>&</sup>lt;sup>32</sup> Boese, W., 'Russia wants limits on prompt global strike', *Arms Control Today*, June 2008, updated 3 Sep. 2008.

systems by external powers in their region. Following the demise of the 1987 Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF Treaty), the issue of such ground-based missiles has come to prominence, as also highlighted in the China-Russia joint statement which laments their deployment 'in the Asia-Pacific and European regions . . . undermining global strategic stability'. Given that both the USA and Russia have been engaged in work on intermediaterange systems, such as the 9M729 ground-launched cruise missile, this is an important topic for discussion in relation to escalation. The fact that these systems are mentioned in the China-Russia joint statement, even if directed at US deployments, suggests that China might be more willing to discuss some of its own nuclear-capable medium-range and intermediaterange systems. Since these platforms—such as the DF-21 MRBM, the DF-21D MRBM and the dual-capable DF-26 IRBM—are central to China's anti-access/ area-denial (A2/AD) operations, it is highly unlikely to put them on the table in a traditional arms control negotiation. However, providing a forum to discuss the issues related to such systems, such as entanglement, escalation and employment, is precisely the role of strategic stability talks.

### Missile defence

The China-Russia joint statement and the countries' respective defence white papers and military doctrines detail similar concerns over US missile defences. While both connect missile defence and space-based systems as threats, this linkage is much clearer in Russian military doctrine than in Chinese defence white papers that largely allocate the space domain to civilian and peaceful aims. Thus, while the two countries have been working on both countermeasures and alleged joint development of early warning and missile defence system, their definitions may not fully align. Despite this, missile defence has been a long-standing concern for China and Russia. While their aversion to US missile defence predates the 2010 US Nuclear Posture Review, the two became inextricably linked when that document listed it alongside conventional prompt global strike. Even the recent China-Russia joint statement connects the two-the shield and the sword respectively—as threats to strategic stability.<sup>33</sup>

Deployed in tandem, these defensive and offensive systems have the potential to provide the USA and its allies with what Chinese and Russian strategists describe as 'absolute security'. This makes missile defence, particularly when discussed alongside high-precision guidance non-nuclear weapons, an essential component of any proposed strategic stability talks.

### **Outer space**

China and Russia emphasize the non-weaponization of outer space in their defence white papers, military doctrines and recent joint statement 'promoting international cooperation, maintaining and developing international space law and regulation in the field of space activities'. Given this convergence of interests, there may be channels for greater engagement on limits to anti-satellite (ASAT) testing under the auspices of strategic stability talks. China, Russia and the USA have each conducted kinetic ASAT tests that have generated significant space debris. Russia's 15 November 2021 ASAT test is the most recent and highlights the importance of including these activities in strategic stability discussions.<sup>34</sup> Like incidents at sea, there is increased potential for intentional and unintentional collisions in space. Given the central role of space in both civilian and military operations, including nuclear command, control and communications, engagement on how best to prevent or de-escalate incidents is imperative. While strategic stability talks may not result in a ban on ASATs, they can still play a role in laying the groundwork, particularly following the unilateral US commitment not to conduct destructive, direct-ascent ASAT missile testing.35 Given Chinese and Russian initial willingness to participate in the now delayed United Nations openended working group on reducing space threats, there may be a future for such discussions.<sup>36</sup>

### **V. CONCLUSIONS**

Navigating China's and Russia's convergence and divergence in nuclear and space policies requires a comprehensive understanding of their official

<sup>&</sup>lt;sup>33</sup> Saalman, L., 'Prompt global strike: China and the spear', Asia-Pacific Center for Security Studies, Apr. 2014.

 $<sup>^{34}</sup>$  Raju, N., 'Russia's anti-satellite test should lead to a multilateral ban', SIPRI Essay, 7 Dec. 2021.

<sup>&</sup>lt;sup>35</sup> White House, 'Fact sheet: Vice President Harris advances national security norms in space', 18 Apr. 2022.

<sup>&</sup>lt;sup>36</sup> United Nations Office for Disarmament Affairs, 'Open-ended working group on reducing space threats', 2022.

statements and documents. While there are numerous similarities found within their stances on active defence and nuclear deterrence, high-precision non-nuclear weaponry, medium- and intermediate-range systems, missile defence, and outer space, important differences remain in terms of how they approach these various concepts, weapon systems and threats. Both practice active defence and nuclear deterrence, yet China maintains a retaliatory form of active defence and limits nuclear deterrence to responding to nuclear use or threat of use, while Russia practices a preemptive form of active defence and nuclear deterrence against both non-nuclear and nuclear contingencies.

Moreover, both have concerns over high-precision guidance non-nuclear weapons, yet China has engaged in greater entanglement between nuclear and non-nuclear systems than Russia, which tends to be more transparent on the nuclear payload of its related systems.<sup>37</sup> For China, such ambiguity is integral to its deterrent. Both cite the need for constraints on medium- and intermediate-range systems, yet China has more to lose from such controls given its strong arsenal that is integral to A2/AD in the region, while Russia previously remained constrained under the INF Treaty. Both advocate for limits to missile defence, yet the current scale and geographic proximity of China's nuclear force deployments to these systems suggest that it has greater concerns than Russia. Both support non-weaponization of outer space, yet China confines much of its discussion of space in its defence white

<sup>37</sup> Woolf (note 19); and Wesolowsky, T., 'Here's what we know: Russia's new generation of nuclear-capable weapons', Radio Free Europe Radio Liberty, 19 Feb. 2019.

papers to vague challenges, while Russia's review of security threats in space is much more pervasive.

While these differences do not necessarily outweigh the similarities in Chinese and Russian official stances on nuclear and space domains, they are important in the context of engaging the two countries in strategic stability talks in the future. This is because the interaction needs to be more tailored than the traditional approach of simply pairing the two countries as a unit in official documents and statements.38 Such an approach glosses over the nuances found in their strategies. It also has the effect of driving the two even closer together out of exasperation at being treated as a strategic unit. In changing this dynamic and offering a new perspective, individual EU member states or groups of them can play a role as facilitators in bringing countries like China and even Russia to the table. Their contribution can range from providing a venue for strategic stability talks among countries like China, Russia and the USA to multilateralizing these talks to include other nuclear weapon states. Despite recent events in Ukraine, there remains a view in both China and Russia that the USA is the primary adversary and that EU member states can serve as relatively independent actors. This unique position offers European countries the opportunity to not only better navigate China's and Russia's nuclear and space convergences and divergences, but also to potentially facilitate strategic stability talks in the future.

<sup>&</sup>lt;sup>38</sup> Saalman (note 30).

## **ABBREVIATIONS**

A2/AD Anti-access/area-denial

ASAT Anti-satellite

FOBS Fractional orbital bombardment system

HGV Hypersonic glide vehicle

ICBM Intercontinental ballistic missile INF Treaty 1987 Treaty on the Elimination of

Intermediate-Range and Shorter-Range

Missiles

MIRVs Multiple independently targetable

re-entry vehicles

MRBM Medium-range ballistic missile
NATO North Atlantic Treaty Organization
New START 2010 Treaty on Measures for the Further

Reduction and Limitation of Strategic

Offensive Arms

NFU No first use



This document has been produced with the financial assistance of the EU. The contents are the sole responsibility of the EU Non-Proliferation and Disarmament Consortium and can under no circumstances be regarded as reflecting the position of the EU.

### **A EUROPEAN NETWORK**

In July 2010 the Council of the European Union decided to support the creation of a network bringing together foreign policy institutions and research centers from across the EU to encourage political and security-related dialogue and the long-term discussion of measures to combat the proliferation of weapons of mass destruction (WMD) and their delivery systems. The Council of the European Union entrusted the technical implementation of this Decision to the EU Non-Proliferation Consortium. In 2018, in line with the recommendations formulated by the European Parliament the names and the mandate of the network and the Consortium have been adjusted to include the word 'disarmament'.

#### **STRUCTURE**

The EU Non-Proliferation and Disarmament Consortium is managed jointly by six institutes: La Fondation pour la recherche stratégique (FRS), the Peace Research Institute Frankfurt (HSFK/PRIF), the International Affairs Institute in Rome (IAI), the International Institute for Strategic Studies (IISS), the Stockholm International Peace Research Institute (SIPRI) and the Vienna Center for Disarmament and Non-Proliferation (VCDNP). The Consortium, originally comprised of four institutes, began its work in January 2011 and forms the core of a wider network of European non-proliferation and disarmament think tanks and research centers which are closely associated with the activities of the Consortium.

#### **MISSION**

The main aim of the network of independent non-proliferation and disarmament think tanks is to encourage discussion of measures to combat the proliferation of weapons of mass destruction and their delivery systems within civil society, particularly among experts, researchers and academics in the EU and third countries. The scope of activities shall also cover issues related to conventional weapons, including small arms and light weapons (SALW).

www.nonproliferation.eu

#### **EU Non-Proliferation and Disarmament Consortium**

Promoting the European network of independent non-proliferation and disarmament think tanks



FOUNDATION FOR STRATEGIC RESEARCH

www.frstrategie.org



## PEACE RESEARCH INSTITUTE FRANKFURT

www.hsfk.de



#### INTERNATIONAL AFFAIRS INSTITUTE

www.iai.it/en



www.iiss.org



STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

www.sipri.org



VIENNA CENTER FOR DISARMAMENT AND NON-PROLIFERATION

www.vcdnp.org