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Gstaad Process 2010 Beyond Geopolitics: Common Challenges, Joint Solutions?

Rapporteur: Gustav Lindstrom





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Introduction

The 2010 Gstaad Process meeting was held in Switzerland from 16-18 September. Entitled "Beyond Geopolitics – Common Challenges, Joint Solutions?", the event was organised by the Geneva Centre for Security Policy (GCSP) with the financial support of the Swiss Federal Department of Foreign Affairs (FDFA). Additional partners and contributors were the James Martin Center for Non-proliferation Studies in Monterey (California) and the PIR Center (Moscow).

The Gstaad Process aims to give senior officials and academics from the United States, the Russian Federation, and Europe a platform to discuss and examine their relations in the domain of security. In 2010, participants focused on issues such as non-proliferation and disarmament, the strategic use of outer space, cybersecurity, and challenges to the Chemical Weapons Convention.

This report presents the principal themes that emerged out of the discussions, following the sequential order of the sessions. A special note of gratitude is extended to those speakers who shared their speaking points to facilitate the production of this report.

Beyond Geopolitics – Common Challenges, Joint Solutions?

The first session focused on general trends in international relations and security policy, in order to set the stage for follow-on discussions. Three tendencies impacting both common challenges and joint solutions were identified. First, an increasingly accelerated mode of globalisation means that events in one country or region can quickly produce ripple effects in other regions. Examples of such challenges range from piracy to state failure. Second, new uses and advances in communication technologies - including applications such as Twitter - are creating a virtual world alongside the real one. Policy-makers continually need to examine the implications of these new tools and how they affect international relations. Third, there is growing recognition among policy-makers of the importance of joint analysis to deal with shared security challenges. However, the transition towards a multipolar world may make it more difficult to address certain challenges. For example, in the disarmament arena, the Conference on Disarmament in Geneva has been deadlocked for over a decade. Negotiating a Fissile Material Cut-off Treaty has likewise stalled as one country has prevented the negotiations from starting. In a more multipolar world such "blocking activities" are likely to become more common.

With respect to regional developments, participants examined recent trends in US-Russia relations. Several participants noted that they could see the beginnings of change towards a more positive relationship. Beyond the desire to "reset" relations was a commitment to open dialogue, in spite of important differences in specific areas (e.g., missile defence or the need for new institutional architectures). The leaders on both sides have sent new signals, such as the expectation that force should not be used to resolve areas of contention. Some participants did not share this analysis, arguing that there still is a Cold War rhetoric present in US-Russia relations replete with old stereotypes and images. Moreover, both sides are still spending substantial resources on nuclear weapons and laborato-

ries, a questionable strategy that is increasingly a burden. Some also pointed to the precarious situation of the New START Treaty in the US Senate – even though some concerns are related to domestic issues such as the modernisation of the US nuclear stockpile.

In spite of these perceived differences, both the United States and Russia sense that challenges such as the financial crisis and natural catastrophes (e.g. forest fires or oil spills) require new thinking about international organisations and internal government procedures. This is essential as there are several long-term challenges ahead, including climate change, terrorism, and state failure – all requiring international co-operation. For example, with respect to state failure, some forty to sixty states are thought to be on the verge of failure. Resolving these will require a complex set of tools that will not translate into quick and unilateral fixes.

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Nuclear Disarmament and Non-Proliferation

The 2010 Nuclear Non-Proliferation Treaty (NPT) Review Conference was trademarked by its multiple layers of decision-making, most of which were visible only to a few select stakeholders. Discussions took place in a variety of constellations, including focus groups consisting of around sixteen participants and small gatherings with less than five individuals. Some deliberations took place in capitals, effectively clouding the overall picture of how some bargains were made.

In general, the outcomes of the Review Conference were deemed positive given the agreement on a final document. In particular, the reference to the convening of a conference in 2012 to discuss the potential for a Weapons of Mass Destruction Free Zone (WMDFZ) in the Middle East was significant. A WMDFZ in the Middle East represents one of the greatest challenges for the international community and its handling will affect both the NPT and future Review Conferences. A reference was made to the Israeli nuclear capabilities resolution that was discussed at the International Atomic Energy Agency (IAEA) General Conference and which may affect the prospects for a WMDFZ in the Middle East.

A clearly positive result of the 2010 NPT Review Conference was the establishment of an action plan across all three pillars (nuclear disarmament, nuclear non-proliferation, and the peaceful use of nuclear energy). This provides a good base for continued work, although it will require careful follow-through and implementation to produce success. In essence, continued efforts will be needed even if some parts of the action plan remain unfulfilled. In total, there are sixty-four specific benchmarks to which countries can be evaluated over the next five years, as well as the section on the WMDFZ in the Middle East.

Participants underlined that some issues were not dealt with effectively in the Review Conference. Examples include: how to reduce the role of tactical nuclear weapons in security policy and to strengthen existing language on several key issues such as transparency, negative security assurances, and dealing with

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nuclear terrorism. In addition, no breakthroughs were made in resolving the following contentious issues:

- 1. The role and place of the Additional Protocol to the Safeguards Agreements;
- 2. How to deal with Treaty non-compliance by State Parties;
- 3. The right to withdraw from the NPT and the implications for previouslyobtained nuclear technology through international co-operation, and;
- 4. The evaluation of the effectiveness and transparency of export controls on the exchange of equipment, materials, and scientific know-how.

With this in mind, the discussion gradually shifted to the future demand of nuclear energy. According to the IAEA's Nuclear Technology Review 2009¹, there will be a nuclear renaissance over the coming years. It forecasts that the capacity of nuclear power plants (NPP) in 2030 will be 473 Gigawatts-electric (GWe) under a "pessimistic" scenario and 748 GWe under an "optimistic" scenario. Currently, twenty-nine countries operate NPPs with a total installed capacity of 375.8 GWe. One power plant with a 60 GWe capacity is under construction and another eight countries have ordered or planned NPPs with a total capacity of 163.7 GWe. Overall, fifty-five IAEA Member States have shown interest in acquiring nuclear power plants in the future. It seems that the possession of at least an NPP is considered by some countries as a demonstration of their level of development and economic power.

Nearly 80 percent of today's reactor fleet is made up of light water reactors (LWR). Given their long life span, this trend will continue during the 21st century. This will sustain the demand for low-enriched uranium for the production of reactor fuel. While this may not necessarily translate to greater risks of nuclear weapons proliferation, it raises the possibility of nuclear technologies proliferation. This trend may be exacerbated by a lack of necessary infrastructure and qualified personnel to ensure the safe operation of new NPPs, management of spent fuel and radioactive waste among newcomer countries. And although more NPPs – including floating NPPs – may not encourage nuclear weapons proliferation, they may indirectly provide valuable targets (in particular the spent fuel pools).

With respect to policy responses, participants noted that there are multiple initiatives and ideas on-going. These include the "thirteen practical steps" agreed upon at the 2000 NPT Review Conference, initiatives forwarded by the 1 IAEA, *Nuclear Technology Review 2009*, GC (53)/INF/3, 31 July 2009.

International Commission on Nuclear Non-proliferation and Disarmament, UN Secretary-General Ban Ki-moon's five-point plan, and recommendations offered by former government officials in the media.² An unexpected consequence of this plethora of initiatives is that some countries with limited human resources – many of which are part of the Non-Aligned Movement – are increasingly finding it difficult to keep up with all of the new developments within international fora.

Several initiatives focus primarily on the operational aspects of a nuclear power plant. For example, there is a 2006 Russian Presidential Initiative to create and operate an International Enrichment Centre in Angarsk. Some materials were transferred to this centre in November 2010. Russia has also recently introduced a "build-own-operate" model that will be applied to a new NPP construction in Turkey. To minimise proliferation concerns, the spent fuel will be sent back to Russia.

^{2 &}quot;A five-point plan to rid world of nuclear bombs", *Gulf Times*, 3 August 2009, available at http://www.un.org/sg/articleFull.asp?TID=105&Type=Op-Ed.

The Strategic Use of Outer Space

Modern society is increasingly space dependent. Sectors which rely substantially on space-related assets include communications, banking, navigation, weather, agriculture, and humanitarian aid. The increased demand for such services similarly highlights the challenges facing policy-makers. Among the most pressing issues are:

- 1. The increasing crowdedness of useful orbital bands. Useful space is rapidly getting crowded, especially geostationary orbit. For example, access to polar areas where many low earth observation satellites are stationed to support mobile communications and earth observation is crowded to the point that satellites cross paths.
- 2. A greater number of actors in space with different levels of skill. Currently, forty-seven nations own or operate 900 to 1,000 active satellites in space. In addition, a substantial number of multinational commercial firms, including universities, are exploring ways to have their own assets in space. This trend is likely to contribute to an increasing crowdedness in space.
- 3. The lack of rule sets for space activities. With no "traffic management", manoeuvres in space are still unregulated. There are no pre-launch notification requirements and no rules for communicating with other operators. Some guidance is provided by the International Telecommunications Union (ITU) which governs frequency interference and orbital slots. However, with no enforcement powers, its impact depends largely on the collaboration of stakeholders. With respect to the placement of weapons in space, the 1967 Outer Space Treaty prevents weapons of mass destruction being placed in space and on celestial bodies; however, it does not cover conventional weapons in space or weapons against space-based targets.
- 4. The rise of space debris. An object the size of a thumbnail can destroy a satellite. These cannot be tracked effectively, with detection, tracking and avoidance-measures still being developed (only the US Air Force provides a reliable source of open data). The amount of debris in space has grown substantially over the last years, especially

following the collision and destruction of satellites. An estimated 19,000 pieces of debris which are greater than 10 centimetres are currently being tracked.

5. A greater reliance on space by the military. There are nine states with dedicated military satellites (China, France, Germany, Israel, Italy, Russia, Spain, United Kingdom, and the United States) but many others are seeking such assets, e.g., Iran and North Korea who are examining ways to leverage civilian satellites. This trend results in less transparency, less knowledge about the positions of satellites, and a greater reluctance to share data when there are problems. It may also revive anti-satellite (ASAT) warfare. China's 2007 ASAT test was an initial signal which was followed by the United States in 2008. The United States, Russia, India, Israel, France, and perhaps other states are now looking into options to counter and deter such possibilities.

Several opportunities for joint collaboration are available to address some of these challenges. First, the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) has come up with Debris Mitigation Guidelines (COPUOS/GA 2007 Guidelines). While these are voluntary in nature, they are comprehensive, covering launch, on-orbit, and end of life dimensions. Article IV of the Guidelines sets a norm against the deliberate creation of debris, effectively discouraging the use of ASAT tests. In the future, the National Aeronautics and Space Administration (NASA) will lead an international effort to research debris removal techniques.

Second, several telecommunications companies, e.g. Intelsat, Eutelsat, Inmarsat, and SES Global, have joined efforts to promote collision avoidance via a data-sharing mechanism. In February 2010, a Space Data Association was incorporated in the Isle of Man to facilitate such work. Members of the association are able to receive and share satellite tracking data from others via a "black box" mechanism. Several participants noted that this foundation could provide a relative cost free and attractive entry point for governments to join in order to boost transparency and confidence building measures.

Third, there are on-going efforts to leverage the 1967 Outer Space Treaty. In 2008 Russia and China presented to the Conference on Disarmament (CD) a draft "Treaty on the Prevention of Placement of Weapons in Outer Space and the Threat and Use of Force Against Outer Space Objects" (PPWT). Although some ideas are getting increasing support – especially in areas relating to transparency and confidence-building measures – it remains to be seen whether the PPWT can find

traction. In a separate effort, Russia is pushing for the development of specific UN-agreed Transparency and Confidence-Building Measures (TCBMs) for space. It is currently proposing the set-up of a Group of Governmental Experts to conduct a more in-depth study on the issue. The United States, on the other hand, is giving priority to terrestrially based ASATs, particularly destructive ones.

In March 2008, Canada introduced a working paper to the CD entitled "The Merits of Certain Draft Transparency and Confidence-Building Measures and Treaty Proposals for Space Security" which aims to find a compromise between voluntary confidence-building measures and a simple space weapons ban. The working paper also calls on the CD to consider means, such as a declaration of legal principles or a code of conduct, to ban the placement of weapons in space, prohibit the use of satellites themselves as weapons, and prohibit the use of weapons on satellites for the purposes of damaging or destroying them.

Lastly, in late 2008, the EU unveiled a draft Space Code of Conduct. The code covers civilian, commercial, and military activities, and encourages states to take all responsible measures to "prevent space from becoming an area of conflict". Consistent with other efforts, the document calls for voluntary commitment to refrain from intentionally harming space objects, new mechanisms for co-operation and consultation, and measures to address space debris.

Assessing the Cybersecurity Threat

The increasing relevance of cyberspace for the proper functioning of modern society, while a positive enabler, also introduces a degree of vulnerability. Among well-known categories of threats are:

- 1. State-sponsored cyber attacks that can take on different forms, e.g. cyber espionage or distributed denial of service attacks;
 - 2. The use of cyberspace for ideological and political extremism;
 - 3. Organised crime;
 - 4. Low-level hacking and individual crime.

Less known are the risks facing critical infrastructures such as banking, air traffic control, water supply, the electric grid, etc., where impacts in one infrastructure can rapidly "cascade" to another. Four trends, driven primarily by the need to cut costs, are notable:

- 1. A transition towards national critical infrastructures that are increasingly connected to the Internet, making them more vulnerable to outside attacks;
- 2. The replacement of custom IT systems with less expensive, off-the-shelf Windows and UNIX packages that may invite malicious targeting;
- 3. The connection of traditionally closed networks such as supervisory control and data acquisition (SCADA) to the Internet. Since these control systems are not designed for resilience they are vulnerable to attack;
- 4. The increased availability of user-friendly hacker tools. Interested individuals with limited skills can buy and trade malicious software.

Beyond the impact of a cyber attack, three issues complicate the possibility of quick solutions. First, cyber attacks are often difficult to detect or attribute. This limits the ability of the target to respond effectively. One example is that there is still no clarity whether or not the cyber attacks on Estonia in 2007 were government-sponsored or sanctioned – even though many fingers are being pointed at Russia. This dilemma is also evident in ongoing discussions regarding NATO's new Strategic Concept and how cyber attacks can be deterred or be dealt with.

For example, what is the role of NATO's Washington Treaty Article IV or V in addressing these new threats?

Second, and related to the first point, the response to a cyber attack needs to be carefully calibrated. If the response is forceful and the Internet environment is impacted, it may affect a multitude of other perfectly legal activities. Crafting a national response should thus be based on a national posture that includes all relevant stakeholders. Experience from the United Kingdom suggests that a comprehensive response that is achieved by co-ordination rather than centralisation (such as a "cyber czar") is more effective.

Third, there are still outstanding issues concerning Internet governance. Can or should cyberspace be controlled by some entity to enhance order and security? Some participants argued that one could only aim to regulate but not govern cyberspace. In their view, placing the Internet under an international authority was not a viable or desirable solution. Other participants pointed out that there are a variety of options short of international governance, including internal restrictions placed by national governments (who have substantial power over their Internet space).

Divergent views also arose concerning the role of the Internet Corporation for Assigned Names and Numbers (ICANN). Some participants argued that its role of co-ordinating the Internet's naming system was worrisome given its status as a non-governmental organisation with strong links to the business sector. Others maintained that better representation could be achieved within the ITU, especially given mounting pressure from developing countries to shift such responsibilities from the ICANN to the ITU.

Key recommendations forwarded to address security and accessibility requirements in cyberspace include balancing:

- 1. Internet anonymity and the identification requirements a mid-point being more desirable than going overwhelmingly in one direction;
- 2. The international "character" of the Internet and the exercise of state sovereignty. Several models exist, including "shared sovereignty" (e.g. the EU's Schengen model) and the UN Convention on the Law of the Sea, which restricts access to some parts of the sea but otherwise offers a lot of freedom;
- 3. The right to the free flow of information and the commercial interests of intellectual property right holders protected by law.

Additional options may be leveraged from on-going initiatives. For example, the

Council of Europe (CoE) is producing a draft Framework of General Principles on Internet Governance and the Duties of States. The document also includes elements on the protection of fundamental rights and freedoms. The Internet Governance Forum may provide guidance when it comes to sharing best practices and encouraging the sustainability, security, and development of the Internet. Lastly, the ITU's 2007 Global Cybersecurity Agenda provides some direction vis-à-vis cooperation and efficiency.

Overcoming the Challenges to the Chemical Weapons Convention

The Chemical Weapons Convention (CWC) represents the most "inclusive and intrusive convention today" with its 188 State Parties. The Organisation for the Prohibition of Chemical Weapons (OPCW) has already verified the destruction of over 60 percent of the world's declared stockpile of chemical agents (72,000 metric tons). Concerning chemical munitions, almost half of the world's declared stockpile has been destroyed. In spite of these achievements, the CWC and the OPCW face substantial challenges. Among the most pressing four challenges are:

1. Successfully managing the 2012 stockpile destruction deadline. Both the United States and Russia are unlikely to meet the 2012 deadline. The United States has successfully destroyed 75 percent of its stockpile but is unlikely to reach above 90 percent by the extended CWC deadline of April 29, 2012. Russia is in a similar situation and there are also lingering questions over Japan's abandoned chemical weapons in China.

On the positive side, there is a sense of confidence that all countries struggling to meet the deadline are committed to completing destruction goals as soon as possible. Also, the CWC will not be a failure if all stocks are not destroyed by this extended deadline. However, amending Article XV of the CWC to establish a new deadline does not seem a reasonable option, especially as the amendment process is long and cumbersome.

2. Examining options for more flexible tenure policies. Proper staff tenure is important to ensure that the OPCW remains an effective international organisation in the post-2012 period. The limited authority of the Director-General to extend contracts beyond the seven-year tenure limit expires in December 2012. With chemical weapons (CW) destruction projected by some State Parties to continue post 2012, the Director-General will need to retain the right mix of inspectors and headquarters staff to ensure the success of the CW demilitarization mission.

One option to address this issue might be to reset the seven-year clock after staff members are promoted to different positions or return to the Technical Secretariat after being gone for a period of time. Another option might be to renew the Director-General's authority to extend contracts beyond the seven-year limit for critical key functions. Such flexibility may help ensure that the OPCW has adequate staff and resources to deal with future acceding states – some of whom may join as possessors. There may also be some flexibility via Article XI of the CWC ("Economic and Technological Development") which might facilitate the acquisition of operational capability.

- 3. Coping with advances in science and technology. With rapid advances in science and technology in areas such as nanotechnology, it is getting increasingly difficult to distinguish between biology and chemistry. While the OPCW has a mechanism to follow such developments the Scientific Advisory Board its work has not been promoted much over the last decade. An area that will require careful analysis and study is the impact of chemicals in regulating human emotions. Specifically, when would such developments become a concern or be classified as a weapon? Advances in science and technology may eventually require a review of what constitutes a riot control agent and what personnel can be labelled "law enforcement".
- 4. Recalibrating OPCW mission objectives. As the CW demilitarization function winds down, the future of the OPCW may be increasingly challenged. Thus, the OPCW will need to recalibrate its mission objectives. It is likely that the OPCW will evolve naturally into an organization whose core mission is strengthening international security against the misuse of chemicals for hostile purposes by both state and non-state actors.

To facilitate this trend, it may be useful to re-energize consultation with the industrial sector, especially regarding Other Chemical Production Facilities (OCPF) and site selection methodology. With the global spread of OCPF and the technological advances within the chemical industry, additional efforts are needed to make it a more complete and robust verification regime. A starting point could be to ensure that only the most relevant OCPF are subjects for inspection. Following-up on the advances in science and technology, the OPCW might also be able to serve as a platform for discussing these issues and perhaps promoting joint work between the CWC and the Biological Weapons Convention (BWC).

Lastly, the OPCW could also serve as a platform for experts from industry, government, industry associations, and academia to exchange views on chemical safety and security best practices as a means for preventing acts of chemical terrorism.

Concluding the Gstaad Process 2010, general observations regarding the linkages found between the topics were made. For example, participants noted the parallels between the need to avoid rivalries both in outer space and cyberspace. Others noted the reflex to try to equate the effects of a cyber attack with that of a WMD attack. The observation highlighted the continued need for joint analysis and finding joint solutions to shared challenges.

Seminar Program

Thursday, 16 September 2010

Welcoming Remarks Ambassador Georges MARTIN, Head of Political Affairs Secretariat, Fed-

eral Department of Foreign Affairs of Switzerland (FDFA), Bern

Friday, 17 September 2010

Session 1: Beyond Geopolitics - Common Challenges, Joint Solutions?

Chair Ambassador Fred TANNER, Director, Geneva Centre for Security Policy (GCSP)

Speakers Professor Catherine KELLEHER, University of Maryland and Senior Fellow,

Watson Institute for International Studies, Brown University

Mr. Victor VASILIEV, Deputy Permanent Representative, Permanent Mission of

the Russian Federation to the United Nations in Geneva

Session 2: Nuclear Disarmament and Non-Proliferation: Taking stock of 2010 (e.g. NPT Review

Conference, START, Nuclear Security Summit)

Chair Dr Vladimir ORLOV, PIR Center President, and Advisor to the delegation of the

Russian Federation at the NPT Review Conference, Moscow

Speakers Mr Vladimir KUCHINOV, Advisor of Director General, State Atomic Energy Cor-

poration Rosatom, Moscow

Ms Alison KELLY, Director, Disarmament and Non-proliferation Department,

Department of Foreign Affairs, Ireland

Dr William POTTER, Director, James Martin Center for Non-proliferation Stud-

ies, Monterey Institute of International Studies, Monterey

Session 3: The Strategic Use of Outer Space: Challenges and Opportunities

Chair Professor Catherine KELLEHER, University of Maryland and Senior Fellow,

Watson Institute for International Studies, Brown University

Speakers Ms Theresa HITCHENS, Director, UNIDIR, Geneva

Mr Andrey MALYUGIN, 2nd Secretary of the Department of Security and Disarmament, Ministry of Foreign Affairs of the Russian Federation Dr Xavier PASCO, Senior Research Fellow, Foundation for Strategic Re-

search, Paris

Friday, 18 September 2010

Session 4: Assessing the Cybersecurity Threat

Chair Dr Gustav LINDSTROM, Head, Euro-Atlantic Security Programme, Geneva Cen-

tre for Security Policy (GCSP)

Speakers Mr Mikhail YAKUSHEV, President of the Coordination Center of the Russian

Top-Level Domain (RU), DST Advisors Managing Director, Moscow Dr Paul CORNISH, Head, International Security Programme and Carrington Professor of International Security, Chatham House, London Mr Kenneth GEERS, Scientist / US Representative (NCIS), The Cooperative

Cyber Defence Centre of Excellence (CCD CoE), Tallinn

Session 5: Overcoming the Challenges to the Chemical Weapons Convention

Chair Dr Paul F. WALKER, Director, Security and Sustainability, Global Green USA

Speakers Ambassador Eric JAVITS, former US Permanent Representative to the

OPCW

Ambassador Sergei BATSANOV, Director, Geneva Office Pugwash Conferences on Science and World Affairs, Member of the Pugwash Council Dr Ralf TRAPP, International Disarmament Consultant CBW, former Senior

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