
The Global Control System and the International Code of Conduct: Competition or Cooperation?

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As the world enters the 21st century, the essential outlines of future global geopolitics are appearing. In the place of the old “petrified” international system formed by the Cold War, a highly volatile, strongly asymmetric and less predictable—or perhaps barely predictable—security environment is emerging. While opportunities for rapid economic development and enhanced political stability are expanding, the world faces a wide variety of actual and probable threats: various forms of extremism and terrorism; domestic disputes and conflicts; local and regional interstate wars; and the dangers generated by proliferation of weapons and military technologies. The tragic events of September 11, 2001 underlined the prospect of a new war—a global fight between terrorist networks and responsible political entities and nations. All these developments suggest that instead of arriving at “the end of history,” as some predicted a decade ago, mankind now finds itself facing “the return of history.” This new era will be full of opportunities, but will also hold uncertainties, temptations, risks, and challenges.

The growing horizontal and vertical proliferation of missiles and missile technologies is among the principal factors shaping the new global political climate and strategic milieu. Being closely linked with the spread of weapons of mass destruction (WMD), missile proliferation magnifies the risks of escalation of regional and local con-

flicts and wars. It also provides a few “states of concern” with an expanding ability to attack countries far from their borders. Consequently, missile proliferation can be highly damaging to both global and regional strategic stability.

A strategy to deal with the effects of the proliferation of missiles and missile technologies should include three basic, complementary elements:

- preventing proliferation;
- deterring hypothetical use of missiles, especially those armed with WMD warheads;
- protecting potential target areas from missile attacks.

International nonproliferation regimes may play a role in preventing the spread of missiles and missile technologies. The Missile Technology Control Regime (MTCR) was established for this purpose in 1987. Many believe that the MTCR has contributed significantly to a reduction in global missile proliferation threat. Yet others insist that the MTCR failed to prevent the development of missile programs by at least five countries: India, Pakistan, Iran, North Korea, and Israel. Several proposals to enhance the MTCR regime are now under discussion: the French proposal calling for countries to provide notifications of missile launches in advance; the Russian suggestion to establish a Global Control System for the

Nonproliferation of Missiles and Missile Technology (GCS); and a draft International Code of Conduct against Ballistic Missile Proliferation (ICoC), developed within the MTCR.

This article focuses on two basic questions:

- Will the GCS and the ICoC compete with each other or complement each other?;
- Will the GCS and the ICoC form an efficient nonproliferation regime if they are implemented?

MISSILE PROLIFERATION TRENDS

Any efficient nonproliferation regime must adequately take into account the specifics of the type of proliferation it is designed to prevent, especially the driving factors and mechanisms of proliferation. Currently available information about missile proliferation is incomplete, fragmentary, sometimes controversial, and often distorted. Such a murky picture creates serious obstacles to political and strategic analysis; it either stimulates excessively alarmist assessments or leads to the underestimation of real dangers. Nonetheless, some basic facts about missile proliferation are broadly accepted.

Northeast and South Asia along with the Middle East are the three main areas of horizontal and vertical missile proliferation. These regions are also widely viewed as zones of actual or probable international and domestic conflicts. Currently, more than twenty countries in these regions possess ballistic missiles, mostly with ranges under 1,000 kilometers (km). Seven of these nations—China, Saudi Arabia, Israel, North Korea, Iran, India, and Pakistan—have built or imported missiles with ranges greater than 1,000 km. China is modernizing its missile force by developing two new types of intercontinental ballistic missiles (ICBMs) and one new submarine-launched ballistic missile (SLBM) able to deliver multiple independently-targetable (MIRVed) warheads. North Korea, Iran, India, Pakistan, and Israel (sometimes referred to as emerging missile countries) are implementing programs for the development and production of longer-range missiles. India and Israel, for example, now have space launch vehicles (SLVs) demonstrating the ability—at least theoretically—to build ICBMs.

The visible progress of India, Israel, and North Korea toward acquiring key staging technologies necessary to produce two- and three-stage missiles is of particular importance. The ability to master staging is crucial for the

construction of longer-range ballistic missiles, including these of intercontinental range. There is also a strong body of evidence that North Korean and Chinese missile technologies, and perhaps even complete missiles, have been transferred to Iran and Pakistan. Many also believe that a few Russian missile research and design centers are responsible for delivering certain missile expertise, technologies, and materials to Iran.

Most of the medium-range missiles built in emerging missile countries—the Indian Agni-2, the Pakistani Ghauri; and the Iranian Shahab-3—are still test models. The North Korean Nodong-1 seems to be the only exception. These missiles, however, could be fitted with warheads in an emergency. Many experts believe that within a few years, all these countries listed will test and deploy operational missiles with ranges over 2,000 km and payloads up to one metric ton. Such missiles would be capable of delivering second-generation nuclear devices. Thus, recent developments confirm the worrisome assessments about missile proliferation made by the U.S. intelligence community over the last few last years; Table 1 details these U.S. assessments.

Missile proliferation is fueled by at least three fundamental factors. Emerging missile countries see the acquisition of missiles and missile technologies as:

- A way to increase their own military potential against actual or hypothetical regional adversaries;
- A potent instrument enabling them to restrain or prevent intervention by outside powers in a regional conflict and to counter the military and technological superiority of powers outside the region, such as the United States;
- A means to improve their international status or obtain additional bargaining chips for use in international negotiations.

Owing to their low accuracy, most of the missiles currently manufactured or under development in Asia and the Middle East will serve as cost-effective weapons only if armed with WMD warheads.² As a result, the acquisition of these missiles is military pointless if not accompanied by the development of nuclear and perhaps biological weapons. So “an arc of WMD and missile proliferation” supplements the “an arc of conflicts and instabilities” that has emerged in the vast areas stretching between the Far East and the western Mediterranean.

According to forecasts and analyses developed by the U.S. intelligence community in recent years, by 2015 North Korea, Iran, Pakistan, India, and Israel will each have up to a few dozen intermediate-range ballistic missiles (IRBMs) and ICBMs armed with first- or second-generation nuclear warheads. China may build a more modern strategic nuclear force, including several dozen first-generation MRV and MIRV warheads on its new-generation ICBMs and up to a few hundred such warheads on SLBMs.

Nevertheless, many analysts (especially those in Russian government agencies) insist that these forecasts are too alarming, and that none of the emerging missile states will be able to build a missile capable of striking U.S. territory in the foreseeable future. These disputes, however, were heavily influenced by the political controversy over the fate of the 1972 Anti-Ballistic Missile (ABM) Treaty. Since the United States withdrew from the treaty in June 2002, this issue has been resolved. In the new environment following the U.S. withdrawal, perhaps discussions about the missile proliferation threat can reflect technical realities more than political posturing. In any case, it should not be forgotten that a number of forecasts produced by intelligence services over the last century underestimated

the ability of some countries to develop and build WMD and missiles.

AN IDEAL MISSILE NONPROLIFERATION REGIME

There are three strategies to avert threats generated by a missile proliferation. The first one is technical—to develop and deploy robust missile defenses, thus undermining the asymmetric deterrence strategy pursued by many emerging missile powers. The second one is military—to strike pre-emptively and destroy missiles before they are launched. The third strategy is political—to rely on diplomatic and economic measures to decrease the risks of potential conflicts with emerging missile countries and involve them in various international arms control and non-proliferation regimes.

To be effective, such nonproliferation regimes should consist of at least six principal elements:

- Definitions of particular activities with respect to missile development and missile building that are prohibited or restrained;
- Legally binding obligations on participants to refrain from such activities;
- Incentives to join the regime;

Table 1. U.S. Assessments of the Capability of Emerging Missile States and China to Develop ICBMs Capable of Delivering Nuclear Warheads against the United States

North Korea	May at any time test the Taepodong-2 missile, which is capable of delivering a several hundred kg payload to U.S. territory. This payload would be sufficient to carry a primitive nuclear explosive device. The Taepodong-2 has not yet been tested mainly for political, rather than technical reasons.
Iran	May use Russian technologies and assistance to develop and test an ICBM capable of delivering a several hundred kg warhead to a significant portion of U.S. territory. Estimates differ regarding the likely date of such a test, ranging from before 2010 (probably), to before 2015 (more probably), and after 2015 (low probability).
Iraq	May test an ICBM of the North Korean type in the late 2010s if it receives substantial foreign technological assistance. Without such assistance, Iraq is unlikely to test such ICBM before 2015.
China	By 2015, will probably have several dozen land-based mobile missiles and sea-based ballistic missiles armed with MIRVs and capable of striking U.S. territory.

Source: National Intelligence Council, “Foreign Missile Developments and the Ballistic Missile Threat to the United States through 2015” Washington, DC, September 1999, <http://fas.org/spp/starwars/congress/2000_h/index.html>.

- Transparency measures;
- Procedures to verify compliance with the regime;
- Sanctions to be applied against state(s) that violate the regime or do not want to join it.

It also would be important to make a legal distinction between states that have already developed ballistic missiles, like the United States, Russia, China, France, and Great Britain, and nations striving to build ballistic missiles. Most probably, these two groups of nations have some conflicting interests with regard to missile proliferation. It remains an open question whether it is possible to combine their interests when designing an effective non-proliferation regime.

THE GCS AND THE ICoC: A COMPARISON

The Russian proposal to establish the GCS was advanced initially in 1999 and then further developed in international conferences held in Moscow as an alternative to U.S. plans to build a national ballistic missile defense. Andrey Efimov, the Deputy Director of the Russian For-

eign Ministry Department of Security and Disarmament Issues, has confirmed that the development of an alternative to U.S. missile defense plans motivated the development of the GCS proposal. Efimov has stated that

The idea of creating the Global Control System for the Non-Proliferation of Missiles and Missile Technologies initiated by Russia presents a constructive alternative to unilateral building of a national ABM defense.³

The ICoC was proposed by the MTCR member states in 1999 and is intended to supplement, yet not replace, the MTCR. It consists of a set of broad principles, commitments, and some confidence-building measures.

The GCS and the ICoC have much in common and actually may complement each other. Both of them aim at preventing and curbing proliferation of ballistic missiles designed to deliver WMD. Participation in both of them is voluntary and open to all states.

There are some differences between general characteristics of the ICoC and the GCS. The draft ICoC, in contrast to the proposed GCS, does not envision operat-

Table 2. General Characteristics of the GCS and the ICoC

The GCS	The ICoC
The essence of the GCS is to motivate a state to reduce to the maximum extent the danger of using missiles in peacetime, including the risk of misperception by other states of launches conducted, to work out "norms of conduct" in the missile field, to encourage states to voluntarily follow those norms and also renounce the possession of missile delivery systems for WMD.	Recognizes "the need to prevent and curb the proliferation of ballistic missile systems capable of delivering weapons of mass destruction and the need to undertake appropriate international endeavors." Mentions an obligation to "exercise maximum possible restraint in the development, testing and deployment of Ballistic Missiles capable of delivering weapons of mass destruction, including, where possible, to reduce national holdings of such missiles."
The GCS is voluntary and open for the participation of all interested states.	Participation in the ICoC is voluntary and open to all states.
Equal rights of all participants.	Does not mention equal rights.
Operation of the GCS under the aegis of the United Nations	Does not mention operating under the aegis of any international organization
The GCS is to be developed on a multilateral basis	The ICoC is to be developed and discussed on multilateral basis

ing under the aegis of the United Nations. The ICoC also refers to the obligation of members to reduce national holding of ballistic missiles, which is not discussed in the GCS. Also, a Russian Foreign Ministry expert from the Foreign Ministry has said that the proposed GCS should be “based on legally binding foundation,” while the draft ICoC says that the Code “will complement and strengthen existing national, regional, and multilateral security arrangements and disarmament and non-proliferation regimes.”⁴

The most developed parts of both the ICoC and the GCS are related to the missile transparency and launch notification regimes, as detailed in Table 3.

It seems that a strong point of the ICoC, as compared to the GCS, is that it includes not only exchange of notifications, but also declarations of ballistic missile and SLV policies. Nevertheless, although they differ on this point

and on a number of technical details and approaches, the GCS and the ICoC can probably be combined to form a rather effective transparency and notification regime.

There are also some similarities between these two systems of international measures designed to curb missile proliferation. Both the GCS and the ICoC presume the formation of some kind of international mechanism for consultations and further development of joint efforts aimed at nonproliferation of missiles. The serious difference is whether this mechanism is to be associated in one way or another with the United Nations, as suggested in the proposed GCS, or whether it would be independent, as in the draft ICoC. These features of the two proposals are outlined in Table 4.

Together with substantial similarities and compatible elements, there are also a number of serious differences.

Table 3. Basic Outlines of Transparency and Launch Notification Regimes Suggested by the ICoC and the GCS

GCS	ICoC
<p>The establishment of a global missile launch transparency regime in three stages:</p> <p>Multilateral pre-launch and post-launch notification regime for SLVs and for missiles with a range of more than 500 km or a maximum altitude at the apex of the trajectory greater than 500 km.</p> <p>Notifications include:</p> <ul style="list-style-type: none"> • Nation conducting the launch • Date and time of the launch • Class of missile • Launch area • Re-entry impact area • Launch indication: multiple or single. <p>The establishment of a regime for monitoring missile launches as a verification measure to ensure correct notifications of missile launches by national detection means or by means specially created by the international community.</p> <p>Establishment of a multilateral center for processing and distributing missile-related information.</p>	<p>Member states issue declaration on their ballistic missile and SLV policies, including, possibly, relevant information on ballistic missile systems and test sites, as well as annual information on the number and generic class of ballistic missiles and SLVs launched during the preceding year.</p> <p>Member states consider, on a voluntary basis (including on the degree of access permitted), inviting international observers to their missile test sites.</p> <p>Member states issue pre-launch notifications of ballistic missile and SLV launches and test flights, including information about the generic class of the ballistic missile or SLV being tested, the planned launch notification window, the launch area and the planned direction.</p> <p>The establishment of a mechanism for the exchange of notifications and other information in the framework of the ICoC.</p>

The ICoC emphasizes the necessity to prevent any use of SLV programs for contributing to the development of WMD missile delivery systems. This provision is driven by fears that SLV programs may be used to conceal ballistic missile programs because of the similarities between both types of programs in terms of technology, facilities, and expertise. By contrast, the GCS does not pay special attention to this important issue.

For its part, the GCS includes two elements that are seen in its framework as particularly important:

- Providing security assurances for states participating in GCS and renouncing the possession of missile delivery systems for weapons of mass destruction. Such assurances, Russia suggests, are to be provided on the basis of the UN Security Council resolutions and in specific cases may include investigations and measures to settle disputes and restore peace.
- Providing incentives to states that join the GCS to renounce the possession of WMD missile delivery systems, such as assisting them develop peaceful space programs and sharing with them information about the results of space research.

There are some rationales for these security guarantees and incentives. Theoretically, they can help promote missile nonproliferation, as they may dampen some motivations for developing ballistic missiles. Still, fundamental difficulties remain owing to the practical infeasibility of assuring the security of nations threatened by ballistic missiles. Another set of challenges is posed by the com-

plexity of building substantial multilateral cooperation in the space and missile areas between missile states, emerging missile states, and non-missile states. These complexities, most probably, account for the very general language the draft ICoC uses to describe possible international cooperation in these fields as a tool for promoting missile nonproliferation. It states:

Subscribing states resolve to consider engaging, on a voluntary and case-by-case basis, in cooperative measures with Subscribing States who choose to eliminate their existing Ballistic Missile and/or Space Launch Vehicle programs, as appropriate, and who commit to forgo such programs in the future.

Cooperative measures would be arranged on a case-by-case basis between those Subscribing States requesting such cooperation and those Subscribing States willing and able to provide it.

Cooperation between Subscribing States could take various forms, the nature of which would depend on what is requested by the recipient and what could be offered by the provider(s).

THE GCS AND THE ICOC: PRACTICAL IMPORTANCE FOR MISSILE NONPROLIFERATION?

What can the ICoC and the GCS—jointly or alone—contribute to missile nonproliferation?

In certain cases, incentive measures can play an important role as part of an overall approach to countering missile technology proliferation. If implemented, the GCS

Table 4. Consultation Mechanisms in the GCS and the ICoC

GCS	ICoC
International consultation mechanism under the aegis of the United Nations.	<p>Regular meetings, annual or as needed, to define, review, and further develop the workings of the ICoC.</p> <p>An appropriate mechanism for the voluntary resolution of questions arising from national declarations, and/or questions pertaining to SLV and ballistic missile activity.</p>

and the ICoC would likely form effective launch notification and transparency regimes. Wide access to the information contained in launch notifications, ballistic missile and SLV policy declarations, and universal launch monitoring, would be an important tool in building trust. Thus, broad international participation is important to the success of launch notifications. But there remains the possibility that the participation of an emerging missile state in this regime could be used to legitimize its missile programs. In this light, transparency and notification regimes must be supplemented by effective verification measures. However, the GCS does not include verification and the ICoC suggests a very limited set of verification activities: invitation of international observers to test or launch sites on a voluntary basis.

There are also some other weak points of both the ICoC and the GCS:

- Safeguarding the security of states that halt their missile programs is probably neither politically nor militarily feasible.
- Both the ICoC and the GCS focus on missiles able to deliver WMD. As a result, it is necessary to distinguish missile programs designed to produce WMD delivery vehicles from those programs producing missiles intended for other military missions or non-military missions. Yet, making such a distinction will require extremely intrusive international inspections of missile production facilities, design bureaus, and test sites. It is unlikely that emerging missile countries will allow foreign inspectors sufficient access to determine whether a particular missile can deliver WMD. Without such inspections, however, which the GCS does not envision and the ICoC suggests remain voluntary, the value of the regimes they establish will be limited.
- Neither the GCS nor the ICoC envision any international sanctions against states that violate their provisions or refuse to join them.
- Both the GCS and the ICoC presume broad international participation, which is theoretically

very important. Yet it means that these regimes must include three disparate groups of states: those having developed missile assets, emerging missile states, and states without missile programs. Each of these groups has its own specific interests, and some of them are incompatible.

CONCLUSIONS

Overall, the ICoC and the GCS are compatible. If implemented, they may jointly form an effective transparency and notification regime. Yet this regime may well prove to be of only limited importance, as neither the GCS nor the ICoC is adequately supported by effective verification and compliance measures.

Even if supported by verification and compliance procedures, a transparency and notification regime can form only one element of a much broader set of international measures aimed at promoting missile nonproliferation. Such a set of measures should also include strong and legally binding restrictions on the export of missiles, missile technologies, and know-how; a system of international sanctions against countries that violate missile nonproliferation norms; and joint ballistic missile defenses to protect regime participants against missile attack.

Bearing in mind the inevitable divergence of interests between various groups of states, it seems important to begin actual discussions and implementation of measures aimed at joint prevention of missile proliferation on bilateral basis, in the framework of the Group of Eight (G8), the MTCR, and the new structure of Russia-NATO cooperation established in May 2002.

¹ The views and assessments presented in this paper are solely those of the author, and do not represent the views of the PIR Center or any other organization.

² The circular error probable (CEP) of these missiles is reportedly about 2,000-3,000 meters, making their use with conventional warheads ineffective against military targets, although they still have some value as terror weapons if aimed against large cities, as Iran and Iraq did with inaccurate Scud missiles during their 1980-1988 war.

³ Andrey Efimov, "New Challenges to the International Non-Proliferation Regime and Nuclear Suppliers Group" (in Russian), *Yaderny Kontrol* No. 3 (May-June 2000), p. 55.