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Missile Technology Control Regime (MTCR) and International Code of Conduct Against Ballistic Missile Proliferation (ICOC): Background and Issues for Congress

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Summary

On November 25, 2002, ninety-two countries, including the United States, signed a draft international code of conduct (ICOC) intended to control the proliferation of ballistic missiles. This code of conduct joins the 1987 Missile Technology Control Regime (MTCR) as the primary means by which the international community attempts to regulate missile proliferation. Both are arrangements, not treaties, requiring voluntary application of standards and measures by participating countries. While the MTCR has been credited with a number of successes over the years, critics point out that it lacks treaty status and only addresses the supply side of the missile proliferation equation. The ICOC was developed primarily to focus on the demand aspect of proliferation but a great deal of work may lie ahead for the drafters and signatories of the ICOC in order to craft the code into a useful nonproliferation tool.

The MTCR has been credited by many analysts with slowing or impeding missile proliferation and preventing many countries from advancing beyond SCUD-based missile technology. The ICOC, created by MTCR members, is intended to employ confidence building measures (CBMs) as a means to promote transparency and hopefully decrease the demand for ballistic missiles among developing nations. The existence of two multilateral missile nonproliferation arrangements leads to the possibility of potential synergies but also could result in conflicts that could reduce the overall effectiveness of the arrangements.

The Bush Administration cites both the MTCR and ICOC in the 2002 National Strategy to Combat Weapons of Mass Destruction. While U.S. commitment to the MTCR is acknowledged by the international community, many countries feel there is less U.S. commitment to the ICOC. The United States sees useful roles for both arrangements in dealing with missile proliferation but appears to place a great deal more emphasis on the MTCR than the ICOC.

Both arrangements are administered through the interagency process with the U.S. State Department assuming lead agency responsibilities in both cases. While no laws related to the U.S. involvement in the ICOC currently exist, there are a number of key pieces of legislation dealing with the MTCR. There are several proposals that might be put before Congress which proponents believe could potentially improve the efficacy of both the MTCR and ICOC, and increase their usefulness as a means of addressing the global issue of missile proliferation. This report will be updated as significant events occur.

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Background

This report provides information and analysis on the MTCR and the ICOC which are components of the United States Government's missile nonproliferation policy. This report also provides historical background and a focus on potential issues for Congress regarding these two arrangements. In addition, information on the U.S. administration of the MTCR and ICOC, as well as related U.S. laws, is included in this report.

Provisions of the Arrangements

Missile Technology Control Regime[1]

The MTCR is not a treaty or an international agreement but instead a voluntary arrangement among like-minded countries wishing to slow the spread of missile proliferation. The Regime consists of guidelines and an associated Annex and each member country honors their commitment to the Regime by the application of their nation's export control laws and regulations. The MTCR Guidelines call on each of the member countries to exercise restraint when considering transfers of equipment or technology that would provide or help a recipient country build a missile capable of delivering a 500 kilogram (kg) (1,100 pound) warhead to a range of 300 kilometers (km) (186 miles) or more. The 500 kg weight threshold was intended to limit transfers of missiles that could carry a relatively crude nuclear warhead. A 1993 addition to the Guidelines calls for particular restraint in the export of any missiles or related technology if the nation controlling the export judges that the missiles are intended to be used for the delivery of weapons of mass destruction (WMD). With the 1993 addition, some missiles with warheads weighing less than 500 kg now fall under MTCR Guidelines . The MTCR Annex divides equipment and technologies into two categories. Category I items include complete missile and rocket systems and complete subsystems. Category II items consist of other components, equipment, material, and technology that could be used in the development, production, or

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[1] Guidelines and Annexes at [http://www.state.gov/t/ac/trty/5073.htm]

testing of a missile. According to the Guidelines**,** the export of Category I items is subject to a presumption of denial.[2] Category I items include:

- Complete rocket systems including ballistic missile systems, space launch vehicles (SLVs), and sounding rockets;
- Unmanned aerial vehicles (UAVs) such as cruise missiles and target and reconnaissance drones;
- Specially-designed production facilities for the aforementioned systems; and
- Certain complete subsystems such as rocket engines or stages; re-entry vehicles (RVs); guidance mechanisms; thrust-vector controls; warhead safing devices; and missile arming, fuzing, and firing devices.

Category II items include an extensive collection of parts, components, and subsystems such as propellants, missile structural materials, test equipment, and flight instrumentation. Category II items can be exported at the discretion of MTCR member governments for acceptable end-uses on a case-by-case basis. Category II items can also be exported with government-to-government assurances that the items will not be used for proscribed purposes.

MTCR Guidelines specifically state that the Regime, is "not designed to impede national space programs or international cooperation in such programs as long as such programs could not contribute to delivery systems for weapons of mass destruction."[3]

The MTCR has no secretariat to administer the Regime. The publication and distribution of relevant working papers is carried out through a "point of contact" in the French Ministry of Foreign Affairs.

Schematic views of MTCR Annex items used in ballistic missiles and cruise missiles are contained in Figures 1 and 2, respectively. A current listing of MTCR members is at Table 1.

International Code of Conduct Against Ballistic Missile Proliferation

The ICOC, like the MTCR, is not a treaty but instead a set of fundamental behavioral norms and a framework for cooperation to address missile proliferation. The draft code signed on November 25, 2002 consists of approximately 3 pages of written text and provides a fairly basic statement of the Code's principles, general measures, and organizational aspects. The ICOC urges countries "to exercise maximum possible restraint" in the testing and deployment of WMD-capable ballistic

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[2] Presumption of denial means that permission to export the item in question is assumed to be denied unless a compelling case is made for export of the item.

[3] Arms Control and Disarmament Agency Fact Sheet on the Missile Technology Control Regime, November 15, 1996.

missiles and also to reduce their holdings of these systems if possible. The Code also calls for "vigilance" in assisting countries with their space launch vehicle (SLV) programs recognizing that such programs can serve as surrogate ballistic missile programs. The ICOC encourages cooperation between subscribing states that choose to eliminate their ballistic missile and or SLV programs. The Code aspires to achieve its goals by means of confidence building measures (CBMs) specifically designed to promote transparency. In this regard, the Code calls upon subscribers to make annual declarations on their national ballistic missile policies, including relevant information on systems and test and launch sites. Furthermore, the ICOC requests that subscribers provide annual information on the types and numbers of ballistic missiles launched during the preceding year. Space launch vehicles are also addressed in a similar manner with the exception that the Code asks that subscribers voluntarily invite international observers to their SLV land-based launch and test sites. Finally under CBMs, the ICOC encourages bilateral or regional transparency measures.

From an organizational perspective, the draft Code calls for regular meetings (annual or as required) to review, define, and further develop the Code. The development of a mechanism to exchange notifications and other information, and to resolve questions is also encouraged. Like the MTCR, the ICOC does not call for the formation of a standing international body to administer the Code. Because The Hague, The Netherlands was the scene for much of the Code's developmental work and also the location of its initial signing, the ICOC is also sometimes referred to as the Hague Code of Conduct Against Ballistic Missile Proliferation (HCC). A current listing of ICOC members is at Table 2 and the draft ICOC is at Table 3..

Histories of the Arrangements

Missile Technology Control Regime

The origins of MTCR can be traced back to the late 1970s and early 1980s when the Soviet Union transferred several SCUD-Bs (280 km range) to a number of Arab countries. During its later stages, the Carter Administration, began to publically acknowledge the threat posed by the regional proliferation of nuclear-capable missiles and also began to realize that the problem extended far beyond the Soviet Union's provision of SCUD-Bs to Arab states. Industrialized countries such as France, Italy, West Germany, the United Kingdom, and the U.S. were providing dual-use technology to include components, manufacturing technology, and scientific and engineering expertise to a number of potential proliferants.[4] The Reagan Administration took steps to address the problem in its November 1982 National Security Decision Directive 70 (NSDD-70) which instructed U.S. agencies to initiate appropriate measures to develop both domestic and international controls aimed at halting the spread of ballistic and cruise missiles.[5] Between 1983 and 1987, the U.S.

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[4] U.S. Policy on Ballistic Missile Proliferation: The MTCR's First Decade (1987-1997), Wyn Q. Bowen, *The Nonproliferation Review*, Winter 1994, p. 66.

[5] Ibid.

negotiated the MTCR with its G-7 Partners[6] and, on April 16, 1987, member states announced the Regime's formation.

One of the first challenges to the MTCR was the revelation in late 1987 that several Western European MTCR members were supplying technology and scientific and engineering expertise to Argentina's[7] Condor II SLV program.[8] During this period, the Soviet Union also continued to supply missiles, including SCUD-B and SS-21 missiles, to Arab countries which served to further heighten regional tensions. Between 1989 and 1993, a number of other revelations about proliferation involving China, Pakistan, Israel, South Africa, North Korea, Iran, Syria, and India led the first Bush Administration and Congress to push for reforms to the MTCR designed to bring more countries into the MTCR as well as to enhance relevant export controls. In January 1993, the Regime's technical working group revised the Guidelines and Annex to include export controls for any systems capable of delivering any payload to a range of 300 kms or any system of any range or payload intended to deliver WMDs.[9]

In the early 1990s, the United States began to reform its export control system to better address the new strategic situation. Indicative of the need to reform was the Commerce Department's (DOC) legal inability to restrict the export of dual-use items not included in the MTCR Annex but which still had missile proliferation applications. Dr. Gary Milhollin, Director of the Wisconsin Project on Nuclear Arms Control, testified to the Senate Committee on Banking, Housing, and Urban Affairs that over 40 U.S. companies had obtained more than 100 export licenses to export sensitive dual-use nuclear and missile related technologies to Iraq.[10] To resolve this and other export issues, the first Bush Administration enacted the Enhanced Proliferation Control Initiative (EPCI) in December 1990. The EPCI required U.S. companies to obtain licenses for "any export destined for a publically-listed company, ministry, project, or other entity engaged in missile or WMD proliferation activities."[11] The Administration also assisted Italy and Germany in improving their export control systems after both countries were rebuked for exporting prohibited items to Iraq and Argentina. [12] A significant improvement was made to the Regime in 1994 when the MTCR partners agreed to a "no undercut" policy on license denials

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[6] Canada, France, Germany, Italy, Japan, and the United Kingdom.

[7] Formally acceded to the MTCR in 1993.

[8] Bowen, p. 24.

[9] *The MTCR and Missile Proliferation: Moving Toward the Next Phase,* Jing-dong Yuan, Canadian Department of Foreign Affairs and International Trade, May 2000, p. 7.

[10] U.S. items found by U.N. inspectors in Iraq or reported as licensed by the Commerce Department included electron beam welders for work on missiles, high-speed computers, compasses, gyroscopes and accelerometers used in missile guidance systems, and time-delay relays used to separate the stages of ballistic missiles.

[11] Bowen, p. 27.

[12] Ibid.

whereby if one partner denies the export of a missile technology then the other partners must also deny the export of the item in question.[13]

In 1990, the Soviet Union pledged adherence to the guidelines and Russia re-affirmed this commitment after the demise of the Soviet Union[14]. In 1992, the U.S. gained China's written pledge that it would observe the MTCR's guidelines, largely attributed to the lifting of sanctions imposed on Chinese firms accused of transferring M-11 missile technology to Pakistan.[15] In 1998, three new countries, the Czech Republic, Poland, and Ukraine, were approved for MTCR membership. In March 2001 after five years of consultations with the United States, South Korea became the 33rd member of the MTCR. With U.S. support, South Korea was permitted to build missiles with a range in excess of 300 kms for research purposes and were also permitted to develop rocket boosters of unlimited range for civilian purposes.[16] This unprecedented arrangement, while viewed by some as necessary to counter North Korea's missile threat and to enhance regional security, has been criticized as a double standard by many MTCR members and non-members alike. In September 2002, MTCR members modified the definitions of cruise missile"range" and "payload" to close a perceived loophole in the MTCR. The range definition was revised to reflect the missile's "range maximizing" range and not the shorter range at lower altitudes for stealth purposes. This shorter range, often a third less than the range maximizing range, can fall under the MTCR's 300 km range guidelines for export control. The payload definition was revised to include on-board countermeasures which are common features of some advanced cruise missiles.

International Code of Conduct Against Ballistic Missile Proliferation

The ICOC's origins date back to 1999 when a number of MTCR members began to discuss methods to address the "demand side" of the missile proliferation equation. A draft code was circulated among MTCR members during the Regime's October 2000 plenary meeting and the draft code was finished in September 2001. The European Union (EU) took over the draft code in early 2002 and convened a series of meetings designed to involve non-MTCR members in the Code. All U.N. member states with the exception of Iraq were invited to join and on November 25, 2002 ninety three countries, including the United States signed the Code of Conduct. Notable non-signatories included Syria, North Korea, Iraq, China, Pakistan, India, and Israel. Libya, a country with a ballistic missile program, did sign the code at the Hague meeting. The Netherlands was appointed the first Chair of the Code for one year and Austria will initially serve as the administrative Central Contact for the Code and will be responsible for collecting and disseminating information relevant

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[13] *Bans on Missile Technology, The Last Fifteen Minutes,* Lora Lumpe, Federation of America Scientists, June 2002, p. 4..

[14] The Russian Federation was subsequently admitted to the MTCR in 1995.

[15] Bowen, p. 29.

[16] *South Korea, U.S. Agree on Missile Guidelines, MTCR Membership,* Alex Wagner, Arms Control Today, March 2001.

to proposed confidence building measures and receiving petitions for new membership.

A Spring 2003 meeting for ICOC members was anticipated at the close of November's proceedings. A U.S. State Department official speculated that the likely next step would be to develop the details for the Code's implementation which would initially focus on the requirements for pre-launch notification for ballistic missile and SLV launches and test flights.[17] A number of issues that were introduced in November 2002 will likely be on the upcoming meeting's agenda. Selection of a chairman, the creation of financial arrangements, establishing a point of contact and information exchange procedures, as well as scheduling a date for the next annual meeting are possible topics.[18] One issue that will likely dominate initial deliberations is that of what institutional form the ICOC will take. There are basically three options available to members: a U.N.-controlled organization, an independent organization like the Organization for the Prohibition of Chemical Weapons (OPCW), or a central point of contact, as is the case with the MTCR, run out of a participating member's foreign ministry.[19] Several countries, including Germany and Ireland, are strongly in favor of bringing the Code under U.N. auspices but it remains to be seen if the ICOC's 93 members will choose this or some other option.

Issues for Congress

MTCR's and ICOC's Role In U.S. National Security

Many experts believe that the United States confronts not only a very perilous but also an extremely complex security environment characterized by global terrorism and the proliferation of WMDs. Potential issues exist concerning the role of both the MTCR and ICOC in the overall national security scheme and the appropriate U.S. level of support and involvement for both arrangements.

Relation to the National Security Strategy. The MTCR and ICOC are elements of the Bush Administration's 2002 National Strategy to Combat Weapons of Mass Destruction. Specifically, President Bush is committed to "strengthening the Missile Technology Control Regime (MTCR), including support for universal adherence to the International Code of Conduct Against Ballistic Missile

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[17] Code of Conduct Aims to Stop Ballistic Missile Proliferation, Paul Kerr, *Arms Control Today*, January/February 2003.

[18] Missile Code of Conduct Launches in The Hague, Mike Nartker, Global Security Newswire, November 26, 2002.

[19] During the November 2002 Session, Austria proposed that the Code's central point of contact be in Vienna. Some analysts believe that this proposal will be accepted because there were no other volunteers and also because Vienna would be attractive for cost reasons due to the U.N.'s presence in Vienna. Major U.N. organizations in Vienna include the International Atomic Energy Agency (IEA), The Wassenaar Arrangement, and the Comprehensive Test Ban Treaty (CTBT) Organization.

Proliferation."[20] This proclamation renews U.S. support for the MTCR and implies an active and continued U.S. role in strengthening the Regime and support for adherence to the ICOC. The proclamation does not, however, call for strengthening the ICOC or the eventual creation of a missile nonproliferation treaty. This would seem to indicate that the Administration does not intend to play a leading or active role in further developing the ICOC. If this is indeed the intent of the Administration, then the MTCR emerges as the preferred means for promoting missile nonproliferation with the ICOC playing a lesser or supporting role.

U.S. Support for the ICOC. While U.S. support for the MTCR has been relatively unquestioned over the course of its 16 year history, the same can not be said for the ICOC. Much of the developmental work on the Code was done by the EU and U.S. Undersecretary of State John Bolton's presence at the Code's signing ceremony at the Hague surprised many experts "who perceived that the Bush Administration did not consider the code to be of major significance."[21] U.S. participation in the ICOC's negotiations has been inconsistent -- during the Code's February 2002 round of negotiations the United States did not provide any input during the proceedings.[22]Many experts have also characterized Secretary Bolton's remarks at the Hague as "less than supportive." Secretary Bolton called the Code "an important addition to the wide range of tools available to countries to impede and rollback the proliferation threat."[23] Also included in this range of tools were the MTCR and the U.S. missile defense program which is consistent with the current U.S. national security strategy for combating WMD proliferation. The reference to the controversial U.S. missile defense program may have contributed to the "less than supportive" perception held by some countries.

The MTCR and ICOC in U.S. Policy. Discussions with various U.S. State Department officials about the MTCR and ICOC provides additional insight on the role that each plays in U.S. policy. In order for a country to become an MTCR member, it must be approved for membership by all current members. The U.S. criteria for membership is fairly extensive:

- Be a significant supplier of missile technology;
- Be a member in good standing of international nonproliferation norms such as the Chemical Weapons Convention and Biological Weapons Convention.;
- Demonstrate unilateral adherence to the MTCR Guidelines and Annex;
- Demonstrate effective enforcement of legally-based export controls consistent with MTCR standards;

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[20] *National Strategy to Combat Weapons of Mass Destruction,* U.S. Government, December 2002, p. 4.

[21] Nartker, p. 1.

[22] *International Response:Countries Agree to Ballistic Missile Code of Conduct,* Global Security Newswire, February 1, 2002.

[23] *Low Key Launch of Hague Code of Conduct Against Ballistic Missile Proliferation,* Ian Davis, British American Security Information Council, December 3, 2002, p. 10.

- Possess a proven track record on export control enforcement; and
- Forgo MTCR Category 1 offensive military missiles.[24]

Given these criteria, not every country that applies for MTCR membership qualifies under U.S. standards and there may also be instances when a country that meets these standards might not be a desirable member. Even though MTCR membership does not guarantee access to missile technologies of other members, countries could potentially get access to missile equipment and technology by virtue of their association with other MTCR members. In both of these circumstances, the U.S. views ICOC membership as a viable alternative to MTCR membership for those countries that cannot meet U.S. entrance criteria or for those countries who meet the criteria but might use MTCR membership as a means of obtaining equipment and technology for ballistic missile development.

The U.S. will likely be an active participant in future ICOC deliberations if only to protect national security interests. The Department of Defense (DOD) takes an active role in supporting the U.S. State Department on ICOC and MTCR issues. Proposed ICOC CBMs and transparency measures could have implications for U.S. military missile programs and ultimately national security. These proposals are reviewed by DOD for security and policy implications and recommendations are then made to the State Department on how to address these concerns.[25] The Intelligence Community views the ICOC and MTCR as both a means to learn more about a country's missile and SLV programs and a vehicle by which signatory states can gain similar insights to U.S. missile and SLV programs.[26]

Adequacy of the MTCR and ICOC

Given the developments in many regional and national missile programs, some critics have suggested that the MTCR has done little to stop missile proliferation since its inception in 1987. The ICOC has been characterized by some observers as weak and ineffective, offering little in terms of membership incentives for proliferating countries such as China, Iran, India, Pakistan, and North Korea. One of the central questions posed is the degree to which these arrangements have controlled missile proliferation in the past and their potential to do so in the future.

Slowing Proliferation. Many analysts credit the MTCR with dramatically slowing missile proliferation by making missile development both an economically and politically costly venture for many developing countries bent on acquiring missiles and their associated production technology. While some analysts claim this is a generalization that is not supported by comparative cost data, there appears to be a degree of validity to this position. In an unregulated market unhindered by

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[24] *Introduction to the Missile Technology Control Regime*, unclassified briefing given by the U.S. State Department Bureau of Nonproliferation at the Central Intelligence Agency's Missile Technology and Proliferation Issues Course, February 3, 2003.

[25] Discussions with officials during the CIA's Missile Technology and Proliferation Issues Course, February 3 - 7, 2003.

[26] Ibid.

export controls and sanctions, competition from missile technology suppliers could possibly lead to not only lower costs but also multiple vendors for the same or similar system or component. This could enable proliferators to get "more for their money" which could lead to shorter development to deployment timelines and larger missile inventories. Mark Smith from the Mountbatten Centre for International Studies suggests that the MTCR is responsible for keeping, at least for the time being, ICBMs in the hands of the Permanent 5 (P5) nuclear weapons states (U.S., U.K, France, Russia, and China) and forcing most other countries to rely on "Second World War V-2 technology" - the basis of the SCUD missile- for their missile programs.[27] Aaron Karp in his *New Politics of Missile Proliferation*, suggests that only the countries of Brazil, Israel, and India were able "to progress beyond the SCUD barrier" because their missile programs pre-dated the MTCR and also benefitted from extensive Western assistance for a number of years before assistance was terminated.[28]

In a more general sense, some analysts believe that the MTCR provides both form and structure to missile nonproliferation by:[29]

- Assisting states in identifying issues of common concern;
- Facilitating information sharing;
- Drawing up lists of key components and technologies to be placed under control;
- Coordinating national policies;
- Delaying certain proliferation projects and making illicit acquisition projects more expensive; and
- Buying time for more effective strategies to be formulated.

The MTCR is also credited by some experts with curbing missile proliferation in specific instances such as:[30]

- Argentina -- It abandoned the Condor II Project in 1990 to a large degree because of the embargo placed on technology transfers by the MTCR member states supported with diplomatic pressure from the U.S.;
- Brazil -- The MTCR embargo on Brazil's missile and space launch vehicle program severely restricted that country's access to critical technologies needed to complete their space launch vehicle and further develop their MB/EE and SS-series of short range ballistic missiles;
- Israel -- The suspension of Israeli assistance to South Africa's missile program; and

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[27] *Efficiency and Inefficiency of the MTCR in Preventing Ballistic Missile Proliferation,* Mark Smith, Mountbatten Centre for International Studies, 2001.

[28] The New Politics of Missile Proliferation, Aaron Karp, *Arms Control Today*, 26, October 1996, p. 11.

[29] Jing-dong Yuan, p. 8.

[30] Bowen, p. 30.

- The cessation of the export of complete ballistic missile systems by both Russia and China even though both countries have reportedly provided missile technology and assistance to a number of countries.

Some analysts credit the MTCR's export denials with slowing progress in a number of other missile programs. Because of the MTCR's role in terminating the Argentinian missile program, Egypt was denied the acquisition of 200 Condor II missiles promised them by the Argentinian government.[31] The MTCR was also credited in delaying India's program by several years and also in delaying Chinese sales of M-9 and M-11 missiles to Pakistan.[32]

Missile Apartheid. Another criticism of the MTCR is that it is discriminatory in nature. Some critics have gone so far as to label the MTCR as "missile apartheid."[33] Many countries view the MTCR as a cartel formed by developed nations designed to monopolize lucrative missile and space launch technology.[34] This view is further articulated in Pakistan's 1997 paper to the UN where they state:

> " The MTCR is not a negotiated multilateral treaty. It is a cartel formed by some industrialized countries for the purpose of placing controls on the transfer of technology which could contribute to the manufacture of ballistic missiles with nuclear weapons delivery systems. There is no commitment on the part of the originators of the MTCR to engage in good faith efforts to eliminate ballistic missiles globally. It is, therefore, essentially an arrangement for promoting their own security interests only."[35]

This inequity between missile "haves" and "have nots" has long been a contentious issue amongst current MTCR members and prospective members according to a senior U.S. State Department official. Unlike the Chemical Weapons Convention (CWC), for example, where all states parties "undertake never under any circumstances to develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly chemical weapons to anyone" selected MTCR members with missiles that exceed the regime's guidelines are permitted to keep them while most other countries are required to abandon them to gain entry to the MTCR. Another example of this inequity was South Korea's admission to the MTCR. With U.S. support, South Korea was permitted to continue development of missiles and space launch vehicles with ranges greater than 300 km and with payloads in excess of 500 kg due to their unique security requirements regarding North Korea. This special dispensation could easily serve as a precedent for other

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[31] Ibid, p. 25.

[32] A Chronology of the Missile Technology Control Regime, Deborah Ozga, *The Nonproliferation Review*, Winter 1994, p. 69.

[33] *A Multilateral Approach to Ballistic Missiles?*, David Grahame, British American Security Information Council, April 2, 2002, p. 2.

[34] Ibid.

[35] *Missile Technology Control Regime - Its Destabilizing Impact on South Asia*, presented by the Permanent Representative of Pakistan to the U.N. at the U.N. Conference on a "New Agenda for Disarmament and Regional Security", July 23, 1997.

countries with their own unique security requirements should they apply for MTCR membership. Given these normative inequities amongst members, it follows that factions within the MTCR membership could develop between states aspiring to a missile or a space launch program and those states with well established and financed programs. Because the MTCR is consensus-based, such factions could conceivably undermine the Regime's effectiveness.

An Unverifiable Regime. Another criticism of the MTCR is that it is inherently unverifiable due to the dual use nature of much of its regulated technology. In terms of the MTCR, some critics have pointed out that " it is almost impossible to develop a space launch vehicle program that does not have latent convertibility to a ballistic missile program, so purportedly peaceful SLV programs can be swiftly weaponized."[36] This criticism is also applicable to cruise missiles and UAVs - - both covered under MTCR guidelines. Turbo jet and turbo fan engines, guidance and navigation systems, and composite materials which are key components for cruise missiles and UAVs are the mainstays of civilian aircraft technology. While small, fuel-efficient turbojet and turbofan engines that could be used in cruise missiles are Category II items under the MTCR, they may be "exported as part of a manned aircraft or in quantities appropriate for replacement parts for a manned aircraft."[37] Under these circumstances turbojet or turbofan engines for cruise missiles could be purchased under the guise of purchasing a manned aircraft or replacement parts. Compounding the dual use dilemma is the lack of a means of verification other than a nation's application of their export control laws.

Countries Outside the Regime. The MTCR is also criticized because many proliferating countries remain outside of the Regime and because some members of the Regime continue to violate its guidelines. For countries outside of the Regime such as China and North Korea, the MTCR offers little in terms of membership incentives. For members such as Russia, which has been repeatedly challenged on a variety of missile technology transfers not permitted under the MTCR, serious questions have been raised on how best to deal with these violations. These circumstances are not exclusive to the MTCR - - both the Chemical Weapons Convention (CWC) and Biological Weapons Convention (BWC) are criticized in a similar fashion and some States Parties maintain clandestine CW or BW programs in clear violation of their respective treaties.

The Code's Role in Nonproliferation. The Code of Conduct is too new to credit achievements. There are, however, a number of potential areas where the ICOC may have a positive influence on nonproliferation activities. The Code seeks to reduce mistrust among subscribing states by promoting transparency through the use of confidence building measures (CBMs).[38] Current CBMs require subscribing

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[36] *Verifiable Control of Ballistic Missile Proliferation*, Mark Smith, VERTIC Trust and Verify, January-February 2001.

[37] See Note to Paragraph 3.A.1of Category II, Item 3 - Propulsion Components and Equipment of the MTCR Annex.

[38] *Low Key Launch of Hague Code of Conduct Against Ballistic Missile Proliferation*, Ian Davis, British American Security Information Council, December 3, 2002, p. 2.

states to make annual declarations of their ballistic missile policies and launches as well as SLV policy, inventories, and launches. States may also voluntarily host international observers at SLV launches and seek bilateral or regional transparency measures. While these CBMs in and of themselves will probably not eliminate the schism between missile haves, have nots, and aspirants, they have the potential to remove a layer of secrecy from programs, particularly those of major missile powers, and perceptually level the playing field, perhaps fostering greater cooperation amongst subscribing states. Another proposed CBM is that of universal launch notifications similar in nature to the Pre-Launch Notification System currently being negotiated on a bilateral basis by the United States and Russia. One proposed "incentive" for joining the Code - providing space technology assistance to countries that give up their ballistic missiles has received mixed reviews. Because of the dual-use nature of space launch technology, countries with older, SCUD-based programs for example, could "trade up" and gain access to more advanced technology by forfeiting their ballistic missile programs. This proposal could be modified so that countries that eliminate their ballistic missile programs could receive preferential treatment in the launching of peaceful payloads such as communication satellites or research experiments. All of these proposed initiatives, designed to target the demand for ballistic missiles and their associated technology, could serve as the basis for future efforts by the subscribing states to further develop the Code.

Criticisms of the Code. While there are no criticisms to date on how well the Code has performed, there are a number of criticisms of the draft code itself. A number of analysts characterize the Code as "weak" or "cautious." Noticeably absent in this regard is the MTCR criticism that the Code "is not a treaty." This is perhaps a realization that the Code is only in its infancy or possibly that a treaty to halt ballistic missile proliferation is an unrealistic aspiration. In an attempt to avoid the membership conflicts the in MTCR, some analysts suggest that the Code appears to be written so as not to offend states with substantial missile inventories.[39]

Another criticism is that the Code does not set specific norms to address the demand aspect of missile proliferation. The Code simply implores subscribers to "exercise maximum possible restraint" in all ballistic missile matters. This may attest to the inherent difficulty in devising mutually acceptable demand-side norms or this could be a deliberate tactic to get the maximum number of states to subscribe to the Code before undertaking the contentious work of devising real, workable norms. Even in its relatively benign form, the Code was not signed by countries of concern such as China, North Korea, Iran, Iraq, Syria, India, and Pakistan. Israel also opted not to subscribe to the Code, possibly out of concern for the sanctity of their missile programs.

The Code is also widely criticized because it lacks of tangible incentives. The Code vaguely addresses "co-operative measures," outreach programs and bilateral initiatives as means to get countries such as China and North Korea to join and this

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[39] On Thin Ice: First Steps for the Ballistic Missile Code of Conduct, Mark Smith, *Arms Control Today*, July/August 2002, p. 4.

lack of substance may be more of a negative incentive than a positive one.[40] Acceding to what is perceived by many as a thinly worded agreement could be considered signing a "blank check" where a country may have to abide by future provisions that turn out to be contrary to their national security interests or be compelled to withdraw from the arrangement due to their national security needs and run the risk of being branded a "rogue nation." In this regard, many countries may be taking a "wait and see" attitude about subscribing to the Code.

Both the MTCR and ICOC have the potential to make a positive contribution to the cause of missile nonproliferation. Despite criticisms, both arrangements provide a variety of means ranging from confidence building measures (CBMs) to export denials to address missile proliferation in both a flexible and relatively non-confrontational manner. The MTCR and ICOC also provide countries with an important forum to discuss missile proliferation issues and approaches to deal with countries who choose to proliferate controlled missile and UAV technologies. Such a forum could offer benefits and, as such, Congress may review how the U.S. can best work with like-minded countries on both a unilateral and multilateral basis to further develop and strengthen both arrangements.

Benefits and Liabilities of Two Missile Nonproliferation Arrangements

Congress may wish to consider the overall benefits of supporting both the MTCR and ICOC as well as the possible liabilities. Proponents claim that the MTCR and ICOC will complement one another and critics view the ICOC as only reinforcing past failures in missile nonproliferation.

Synergies. The most widely cited synergy between the MTCR and the ICOC is that of the supply and demand relationship. Canadian Deputy Defense Minister Margret Bloodworth suggested that "the code of conduct would work in tandem with the MTCR - - while the regime is a supply-side arrangement, the code works to address the demand side of missile proliferation."[41] From a theoretical perspective, the addition of a demand side component to the missile nonproliferation equation should have a positive influence on curbing missile proliferation. In order to achieve this synergy, countries must subscribe and abide by both agreements. While some countries will undoubtedly choose this path, other countries will likely remain outside of both arrangements.

Increased Participation. The fact that there are now two multilateral missile proliferation arrangements may also serve to heighten international participation as more countries become members of one or both arrangements. In this regard, as the number of countries who subscribe to the arrangements potentially grows over time, countries on the outside may begin to feel political and perhaps economic pressure to join. Another aspect of this synergy is that increased membership might also lead

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[40] Ibid., p. 5.

[41] Nartker, p. 1.

to regional or bilateral missile nonproliferation agreements which could also further the cause of nonproliferation.

Regime and Code Interactions. There are also potential conflicts associated with both arrangements. Some analysts believe that the ICOC "drains resources and dilutes the purpose of the Regime [MTCR]." [42] Richard Speier, a former Pentagon official involved in establishing the MTCR cautions that:

> "With a range of agreements or measures to offer, states might be tempted to go "venue shopping" to see which arrangement best kept open the possibility of developing ballistic missiles while assuming a veneer of multilateral respectability."[43]

With the ICOC still in its formative phase, it follows that a country wishing to be viewed as a "nonproliferator" could sign the ICOC and then make a case that they are not pursuing ballistic missiles but instead a SLV program for peaceful commercial purposes. By participating in CBMs and by virtue of the fact that such a country is associating with other countries with missile and SLV programs, a country could conceivably acquire information and technology to be used in a missile program. This tactic may possibly explain why Libya, a country of concern with both active missile and WMD programs, acceded to the ICOC in November 2002. In order to achieve synergy between these two arrangements that have no standing governing bodies, the international community may consider establishing some form of organization or place the agreements under the auspices of an existing organization. Under current conditions, it is unlikely that these arrangements will independently generate the intended synergy or complementary effect without some higher entity to mediate conflicts or provide direction when necessary. To date, there has been little discussion about the establishment of such an organization which, in and of itself, would likely take a number of years to bring into being.

Cruise Missiles and UAVs

With over 70 countries currently in possession of cruise missiles[44] and the demonstrated role of UAVs in the global war on terror and the current war with Iraq, many analysts feel that the proliferation of cruise missiles and UAVs poses a greater threat than ballistic missile proliferation. If cruise missile and UAV proliferation indeed are the greater threat that some analysts suggest, what are the MTCR and ICOC cruise missile and UAV- related issues that Congress may consider when assessing the effectiveness and future role of the arrangements?

UAVs and the Regime. Some analysts foresee major difficulties with the MTCR as it relates to UAVs. In 1987 when the Regime was drafted, long-range,

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[42] Progress Reported Towards Ballistic Missile Code of Conduct, *Disarmament Diplomacy*, March-April 2002, p. 2.

[43] Ibid.

[44] *Cruise Missiles: Potential Delivery Systems for Weapons of Mass Destruction*, U.S. Government Publication, April 2000, p.4.

multi-role UAVs were not available.[45] In addition to their military role, UAVs have the potential for a wide range of commercial applications including large cargo carriers, pipeline surveillance, domestic law enforcement and border surveillance, and civilian communications, to name a few.[46] With the expanding military and commercial utility of UAVs and their potential positive economic impact for the international and domestic aerospace industry, pressure may begin to grow for relaxing MTCR restrictions.[47] With advances in UAV technology which could make them virtually indistinguishable from manned aircraft (aside from their lack of an onboard pilot) Congress may wish to examine the option of completely removing UAVs from the MTCR and treating them as ordinary aircraft. While this could be viewed as contentious and self-serving, it might have the effect of simplifying and streamlining the MTCR which would then regulate only ballistic and cruise missiles — systems which have no commercial applicability. While critics may accuse supporters of this proposal as promoting proliferation it should be noted that there are no agreements or treaties restricting the development of manned military aircraft. The aerospace industry may also benefit from such a proposal which would likely be well received by both U.S and international firms, given their current economic situations.

New Technologies. Advances in cruise missile technology such as stealth, hypersonic propulsion, re-programing and loitering technologies, and improved warheads and guidance present the question whether they should be included in the MTCR's Annex. Including these technologies in the Regime's Annex could regulate their export but could also hinder any efforts by the United States and its allies to jointly develop future generations of these weapons systems.

UAVs and Cruise Missiles Absent from the Code. Noticeably absent from the Code are any provisions for cruise missiles and UAVs. This absence has a number of possible ramifications. Without provisions for cruise missiles and UAVs, the ICOC may well be viewed as the weaker of the two arrangements and thus attract countries with less than honorable intentions.[48] The lack of both cruise missile and UAV provisions in the ICOC will invariably place the burden of regulating cruise missiles and UAVs exclusively on the MTCR. Some analysts feel that the ICOC in its current form will offer very little "value added" to international efforts to control and regulate missile proliferation without including cruise missiles and UAVs, and could have a decidedly non-synergistic effect on overall international nonproliferation efforts.[49]

The exclusion of cruise missiles and UAVs from the ICOC may be a deliberate attempt by technologically advanced nations to keep their cruise missiles and UAVs, which have become the workhorses of some modern militaries, unencumbered by the

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[45] State May Allow Global Hawk, Predator Exports to Allies Under Existing MTCR, Vargo Muradian, *Defense Daily*, January 14, 2002, p. 1,

[46] How Effective is the MTCR?, *Proliferation Brief*, Volume 4, Number 7, Carnegie Endowment for International Peace, April 12, 2001, p. 2.

[47] Ibid.

[48] Kerr, p. 2.

[49] Ibid.

provisions of the Code. These systems provide an asymmetric advantage to those nations who possess them and a code which could potentially restrict their usage might not be well received by many governments. Given the national security implications of both cruise missiles and UAVs, Congress may weigh the effect of having provisions governing these systems incorporated into the Code.

Missile Nonproliferation Treaty

There have been a number of formal and informal calls to create a universal, legally binding treaty since the MTCR's creation in 1987. Suggestions have run the gamut from a "zero ballistic missile treaty that would ban all ballistic missiles to expanding the bilateral U.S.-Soviet Intermediate- range Nuclear Forces Treaty (INF) into a global pact.[50] There have been renewed calls for a missile treaty, most recently at the ICOC signing ceremony in November 2002, and Congress at some point may be called on to examine the feasibility of the creation of a missile nonproliferation treaty perhaps based solely on the MTCR and ICOC or based on other nonproliferation initiatives.

Calls for a Treaty. At the ICOC's signing ceremony, a number of countries including Russia and Canada "called for the code to be a first step in creation of a legally binding treaty on ballistic missiles."[51] Jing-dong Yuan, writing for Canada's Department of Foreign Affairs and Trade suggests that "the ultimate goal in restricting missile proliferation would be a full-fledged legally binding international treaty."[52] One of the most frequent criticisms of the MTCR is that "it is not a treaty." As such, the Regime has no international or domestic legal status and many critics cite this as the fundamental reason why the MTCR is ineffective in the prevention of missile proliferation. Critics, such as Mark Smith from the Mountbatten Centre cite the Regime's "lack of a legal mechanism, formal status, and enforcement and compliance mechanisms"- fundamental components of multilateral treaties - as reasons why the MTCR is "inefficient."[53] While a Missile Technology Control Treaty may promote greater efficiency through various norms and legal mechanisms, some treaty opponents argue that no empirical evidence exists that suggests that a treaty would be any more effective than the current regime has been in limiting missile proliferation.

Basis of a Treaty. Should international consensus for a treaty coalesce, the MTCR and the ICOC could form the basis of a draft treaty. The established relationships amongst MTCR and ICOC member and subscribing countries could greatly facilitate treaty negotiations. Much of the preliminary provisions of a

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[50] Response to questions from Senator Daniel Akaka by Mr. Dennis Gormley, Senior Fellow, International Institute for Strategic Studies from the February 12, 2002 International Security, Proliferation and Federal Services Subcommittee of the U.S. Senate Committee on Governmental Affairs.

[51] Kerr, p. 3.

[52] Jing-dong Yuan, p. 24.

[53] *Efficiency and Inefficiency of the MTCR in Preventing Ballistic Missile Proliferation,* Mark Smith, Mountbatten Centre for International Studies, 2001.

nonproliferation treaty would likely be embodied in the current arrangements and contentious aspects of the treaty, such as a verification regime or subsidizing space launch programs, would have already had a degree of discussion. This synergy could potentially expedite the development of a draft treaty.

Transform the INF. One option that has been discussed is to transform the INF treaty, which banned Soviet and U.S. land- based ballistic and cruise missiles with a ranges between 500 and 5,500 kms, into a global regime. While many analysts cite the treaty's simplicity and clarity of purpose as a formula for success, other analysts disagree.[54] Opponents argue that the INF's lower limit of 500 km is too high to capture many types of WMD-capable cruise missiles and short-range ballistic missiles.[55] Another criticism of the INF approach is that it would not cover sea-launched ballistic missiles and UAVs and would turn the MTCR into a supplemental tool to combat missile proliferation.[56]

Treaty's Impact on the MTCR and ICOC. Efforts to develop a missile nonproliferation treaty could also incite a degree of conflict between the MTCR and ICOC. In 1995, MTCR member states reportedly reached consensus that they would not entertain proposals to establish a global treaty to ban ballistic missiles with specific ranges.[57] Many analysts believe that this decision was due to a lack of support from the declared nuclear powers whose support would be essential for the treaty to have any hope of success.[58] Even with the advent of the ICOC and renewed calls for a treaty from a number of countries, this lack of support from the declared nuclear powers probably still exists. In this regard, efforts to draft a treaty would likely be contentious at best and could possibly impact on the day-to day efficacy of the MTCR and ICOC. Missile nonproliferation and export control officials and diplomats from countries involved in the MTCR and ICOC would likely be asked to play a role in developing and negotiating a treaty due to their expertise and familiarity with missile nonproliferation issues. Given these possible circumstances, officials involved in drafting the treaty may not be able to devote as much attention to MTCR and ICOC issues which could have a detrimental impact on these two arrangements, particularly the ICOC which still is in the early phases of development.

Would a Treaty be More Effective? Perhaps a very critical consideration is whether a treaty would be any more effective than the MTCR and ICOC in curbing missile proliferation. In order to have an appreciable and lasting impact on missile proliferation, countries such as China, North Korea, Iran, Iraq, Syria, India, and Pakistan would need to subscribe to a treaty, agreement, or arrangement and then abide in good faith with its provisions. It is somewhat unlikely that this will ever occur because, like the U.S., Russia, France, and the United Kingdom, missiles are seen as a crucial part of their country's national security. If this situation is 'as good

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[54] Gromley, p.2.

[55] Ibid.

[56] Ibid.

[57] Canada Calls for a Ballistic Missile Ban, *International Defense Review*, June 1995, p. 5.

[58] Bowen, p. 32.

as it will ever get" as some analysts suggest, it might be better to continue to strengthen and develop the MTCR and ICOC, attempting to find some common ground with these countries which will facilitate their accession to either or both arrangements. Once they become members, it may possible to help them redefine their national security needs as well as their economic policy for exporting missile technology in order to bring them more in line with the norms promoted by the MTCR and ICOC. Some analysts believe that the pursuit of a global treaty could take decades and consume resources better applied to the MTCR and ICOC and, in the end, be no more or perhaps less effective than the MTCR and ICOC in preventing missile proliferation.

U.S. Administration of the Missile Technology Control Regime and International Code of Conduct Against Ballistic Missile Proliferation

A number of U.S. government organizations are involved in the administration of both arrangements primarily through the interagency process. The U.S. State Department's Bureau of Nonproliferation has the primary responsibility for leadership of the interagency process for both the MTCR and ICOC. The Bureau is also responsible for related negotiations and discussions as well as developing and conducting diplomatic efforts designed to discourage countries from pursuing missile development and to develop and strengthen missile-related export controls. The Department of Defense (DOD) also plays a prominent role in the interagency administration of the arrangements. The Office of the Assistant Secretary of Defense for International Security Policy, in addition to representing DOD in MTCR and ICOC-related interagency meetings, "develops and coordinates DOD policy and positions for international negotiations on arms control implementation compliance issues."[59] The CIA's Center for Weapons Intelligence, Nonproliferation, and Arms Control (WINPAC) also plays an active role in the interagency, primarily by providing information gained through their monitoring of the various arms agreements and country-specific programs. The Department of Commerce's (DOC) Bureau of Industry and Security in the Office of Nonproliferation Controls and Treaty Compliance, in addition to being a key member of the MTCR interagency group, is responsible for:

- Regulating the export of sensitive goods and technologies in an effective and efficient manner;
- Enforcing export control laws;
- Cooperating with and assisting other countries on export control issues; and
- Assisting U.S. industry to comply with international arms control agreements.[60]

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[59] DOD Directive 5111.1.

[60] *Dual-Use Missile Technology Export Licensing Review*, unclassified briefing given by the U.S. Commerce Department at the Central Intelligence Agency's Missile Technology (continued...)

MTCR and the Interagency Process

The two primary MTCR-related interagency groups are the Missile Trade Analysis Group (MTAG) and the Missile Technology Export Control Working Group (MTEC). The MTAG is chaired by the State Department and has a large intelligence community presence and also includes representatives from the U.S. Customs Service, DOC, FBI, NASA, Joint Chiefs of Staff (JCS), and the Office of the Secretary of Defense (OSD). This group is charged with reviewing relevant intelligence and diplomatic reporting to monitor missile proliferation activities worldwide. The MTAG is also responsible for recommending and initiating responses designed to impede or interdict missile-related shipments.[61] The MTEC is also chaired by the State Department and consists of members from DOD, DOC, NASA, and the intelligence community. The MTEC reviews both munitions and dual use license applications for missile technology. The MTEC bases their reviews on Department of State controlled items covered under the International Traffic in Arms Regulations (ITAR), U.S. Munitions List (USML) and DOC controlled items covered under the Export Administration Regulations (EAR), Commerce Control List (CCL). The MTEC also reviews technology exports and imports associated with the DOD Foreign Military Sales Program and the U.S. Department of the Treasury's Alcohol and Tobacco and Firearms (ATF) Import License program. In 2001, the MTEC reviewed 1036 export license applications from U.S. firms valued at $2.2 billion. Of these, 83% were approved, 5 % denied, and 12% were returned to the originator without action. The top five technologies reviewed were instrumentation and navigation equipment, propellants and constituent chemicals, accelerometers, telemetry equipment, and graphite and ceramic materials.[62]

U.S. MTCR and ICOC - Related Laws

There are presently no laws governing the ICOC. As the Code matures, congressional action may occur in relation to declarations, CBMs, and transparency measures. There are four key pieces of legislation that provide the U.S. with the means to enforce the MTCR: the 1976 Arms Export Control Act as amended, the Export Administration Act of 1979 as amended (EAA), the fiscal year 1991 National Defense Authorization Act, and the Iran Nonproliferation Act of 2000.[63]

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[60] (...continued)
and Proliferation Issues Course, February 7, 2003.

[61] *Missile Trade Analysis Group,* unclassified briefing given by the U.S. Department of State Bureau of Nonproliferation at the Central Intelligence Agency's Missile Technology and Proliferation Issues Course, February 7, 2003.

[62] *Export Controls*, unclassified briefing given by the U.S. Department of State Bureau of Nonproliferation at the Central Intelligence Agency's Missile Technology and Proliferation Issues Course, February 7, 2003.

[63] *U.S. Missile Sanctions*, Arms Control Association, March 2002, p. 1.

The 1976 Arms Export Control Act (22 U.S.C. 2751 et seq.) [64]

Section 72 of the act, as amended, stipulates "that if the President determines a foreign entity is "conspir[ing] to or attempt[ing] to engage in" the transfer of MTCR-controlled items to countries that are not members of the Regime, U.S. sanctions must be imposed on the offending party. For Category I items, the act bars the foreign entity cited from all contracts with the U.S. government for at least two years and denies sales of any items on the USML for at least two years. For Category II items the act bars the foreign entity from all U.S. missile-related technologies and equipment contracts for at least two years and also forbids the transfer of missile-related technologies and equipment from U.S. firms for at least two years.

The Export Administration Act (EAA) of 1979 (Sections 6(1) and 11B, 50 U.S.C. app. 2405 and app. 2410b)[65]

The EAA governs U.S. export of dual-use items and civilian technologies and items that have a potential for military application, banning the export of these items to foreign entities involved in missile proliferation. If an entity is charged with proliferating Category I items, exports of all dual- use items controlled by the EAA to the entity are banned for up to two years. If Category II items are proliferated, only dual-use items covered by the MTCR are banned for up to two years. Category I violations are deemed more severe in nature because the EAA's list of dual-use items is far more extensive than the MTCR's.

The Fiscal Year 1991 National Defense Authorization Act (P.L. 101-510)[66]

This act defines many key terms contained in U.S. missile sanction laws and provides guidelines on the applicability of laws as they pertain to the sanctions process and when a presidential waiver of sanctions is authorized. This act also contains provisions from the Helms Amendment which strengthens missile sanctions for countries with "non-market" economies such as China and North Korea. Former Warsaw Pact members who may still have non-market economies would not be subject to these strengthened sanctions. If a foreign entity from one of the countries subject to the Helms Amendment engaged in missile proliferation, then the country of that entity would also be subject to sanctions on all MTCR-related technologies as well as any aircraft, electronic, or space system technologies. The amendment prohibits U.S. government contracts and exports to those country's proliferating agencies and also bans imports from those agencies for at least two years.

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[64] Ibid.

[65] Ibid.

[66] Ibid., p. 2.

The Iran Nonproliferation Act of 2000 (P.L. 106-178)[67]

This act requires that sanctions be "imposed on countries whose companies provide assistance to Iran in its efforts to acquire weapons of mass destruction and missile delivery systems." The sanctions:

- Ban the U.S. government from providing assistance to the offending entity for at least two years;
- Prohibits the U.S. government acquisition of goods and services from the offending entity for at least two years;
- Forbids the sale of any USML or dual-use controlled item to the entity;
- Terminates any pre-existing sales of military items between both U.S. entities and the U.S. government and the offending entity; and
- Blocks procurement of new export licenses for the offending entity.

Presidential Waivers

The president has the authority to waive sanctions if he feels that it is "essential to the national security of the United States" except in the case of the Iran Nonproliferation Act which has a much more extensive presidential waiver criteria.[68] Presidential waivers have been used by recent administrations on a number of occasions. President Clinton authorized the lifting of sanctions against Chinese missile entities in November 1992 in exchange for China's promise that it would abide by MTCR guidelines. China failed to live up to their promise and sanctions were re-imposed on Chinese entities in 1993 for their sale of M-11 missile technology to Pakistan.[69] On November 21, 2001, China promised not to export missiles capable of delivering nuclear weapons and further pledged to develop and implement an export control system to complement MTCR guidelines. In response, the U.S. lifted sanctions against Chinese entities that were involved in proliferating missile technologies to both Pakistan and Iran.[70] The Bush Administration partially waived missile sanctions against Pakistani entities, particularly the Ministry of Defense, for receiving Chinese missile technology, in order to gain support for the U.S. global war on terrorism.[71]

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[67] Ibid.

[68] Ibid.

[69] Ibid., p. 5.

[70] Ibid.

[71] Ibid.

For Further Reading

CRS Report RL30033, *Arms Control and Nonproliferation Activities: A Catalog of Recent Events*.

CRS Report 31502, *Nuclear, Biological, Chemical, and Missile Proliferation Sanctions: Selected Current Law.*

CRS Report 31559, *Proliferation Control Regimes: Background and Status*.

Figure 1. Schematic View of MTCR Annex Items in Ballistic Missiles

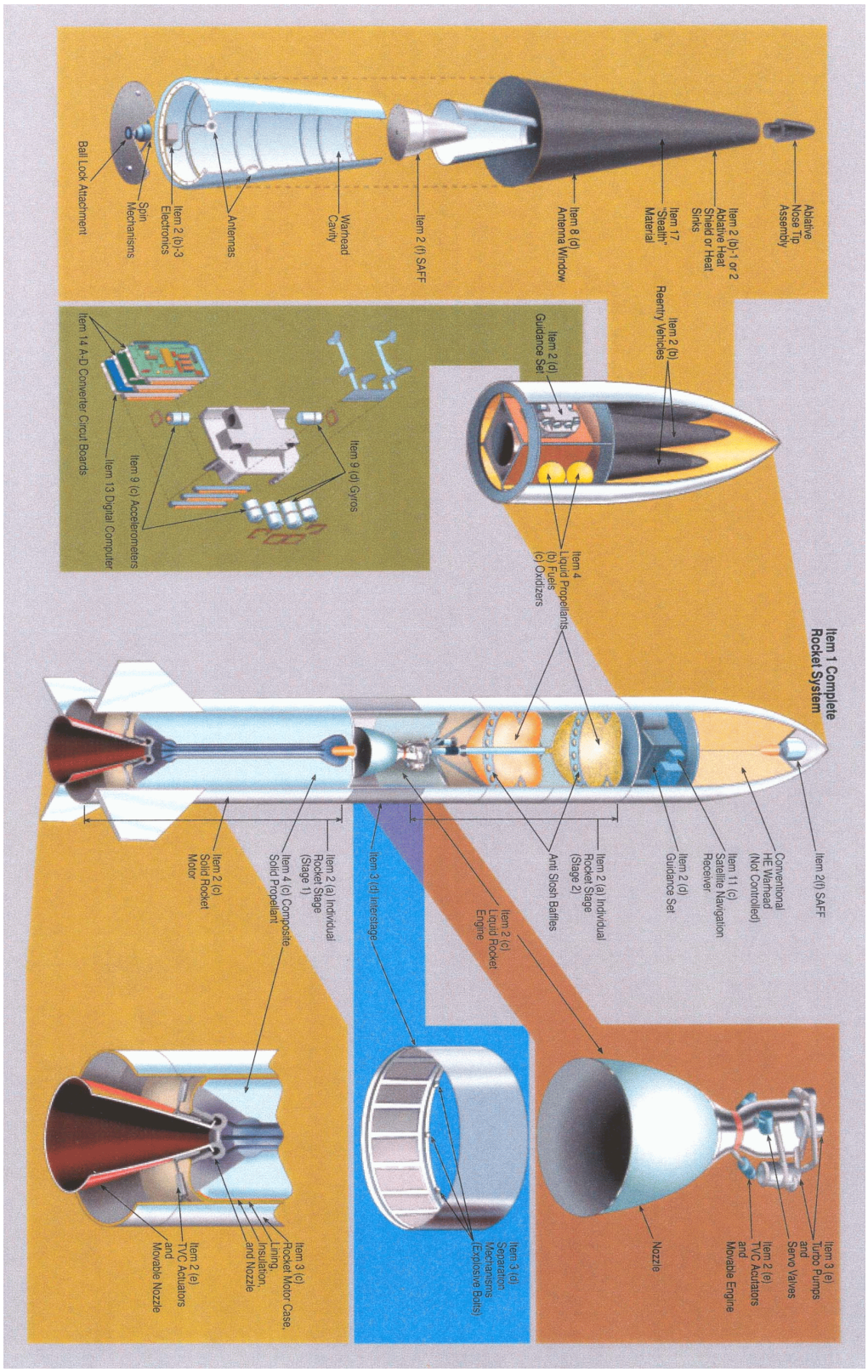

Figure 2. Schematic View of MTCR Annex Items in Cruise Missiles

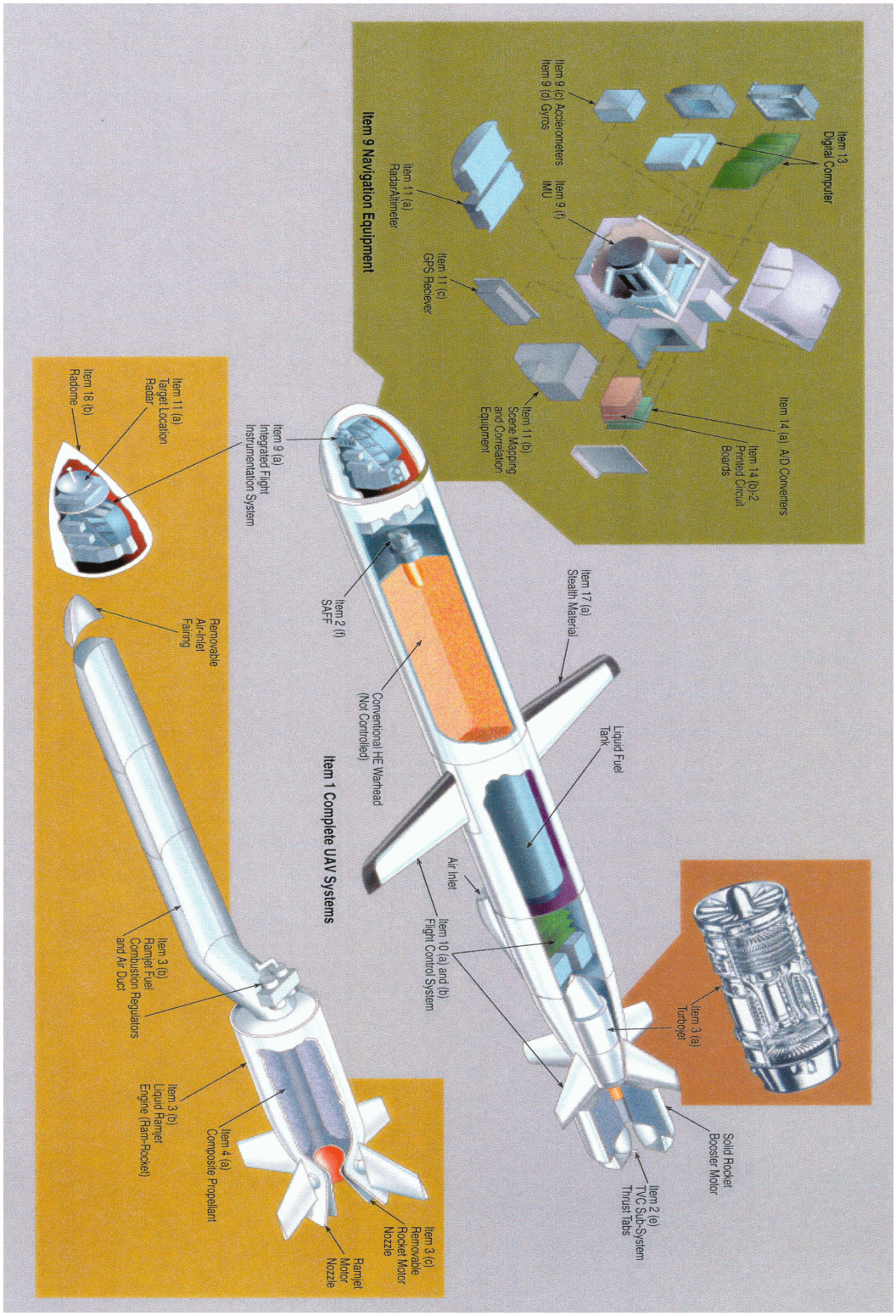

Table 1. MTCR Members (Year of Entry)

1. Argentina (1993)
2. Australia (1990)
3. Austria (1991)
4. Belgium (1990)
5. Brazil (1995)
6. Canada (1987)
7. Czech Republic (1998)
8. Denmark (1990)
9. Finland (1991)
10. France (1987)
11. Germany (1987)
12. Greece (1992)
13. Hungary (1993)
14. Iceland (1993)
15. Ireland (1992)
16. Italy (1987)
17. Japan (1987)
18. Luxembourg (1990)
19. Netherlands (1990)
20. New Zealand (1991)
21. Norway (1990)
22. Poland (1998)
23. Portugal (1992)
24. Republic of Korea (2001)
25. Russian Federation (1995)
26. South Africa (1995)
27. Spain (1990)
28. Sweden (1991)
29. Switzerland (1992)
30. Turkey (1997)
31. Ukraine (1998)
32. United Kingdom (1987)
33. United States of America (1987)

Table 2. ICOC Members with MTCR Members Annotated

(At inauguration of the Code, 25-26 November 2002)

***** Denotes MTCR member

1. Afghanistan	2. Albania	3. Argentina*****
4. Australia*****	5. Austria*****	6. Azerbaijan
7. Belarus	8. Belgium*****	9. Benin
10. Bosnia and Herzegovina	11. Bulgaria	12. Burkina Faso
13. Cameroon	14. Canada*****	15. Chile
16. Colombia	17. Comores	18. Cook Islands
19. Costa Rica	20. Croatia	21. Cyprus
22. Czech Republic	23. Denmark *****	24. El Salvador
25. Estonia	26. Finland*****	27. France*****
28. Gabon	29. Georgia	30. Germany*****
31. Ghana	32. Greece*****	33. Holy See
34. Hungary*****	35. Iceland*****	36. Ireland*****
37. Italy*****	38. Japan*	39. Jordan
40. Kenya	41. Kiribati	42. Latvia
43. Libyan Arab Jamahiriya	44. Lithuania	45. Luxembourg*****
46. Madagascar	47. Malta	48. Marshall Islands
49. Mauritania	50. Monaco	51. Morocco
52. Netherlands*****	53. New Zealand*****	54. Nicaragua
55. Nigeria	56. Norway*****	57. Palau
58. Papua New Guinea	59. Paraguay	60. Peru
61. Philippines	62. Poland	63. Portugal*****
64. Republic of Korea*****	65. Republic of Moldova	66. Romania
67. Russian Federation *****	68. Rwanda	69. Senegal

70. Sierra Leone	71. Slovakia	72. Slovenia
73. South Africa*	74. Spain*	75. Sudan
76. Suriname	77. Sweden*	78. Switzerland*
79. Tajikistan	80. The Former Yugoslav Republic of Macedonia	81. Timor-Leste
82. Tunisia	83. Turkey*	84. Tuvalu
85. Uganda	86. Ukraine	87. United Kingdom *
88. United States*	89. Uruguay	90. Uzbekistan
91. Venezuela	92. Yugoslavia	93. Zambia

Table 3. Draft International Code of Conduct Against Ballistic Missile Proliferation

1. The Subscribing States:

Reaffirming their commitment to the United Nations Charter;

Stressing the role and responsibility of the United Nations in the field of international peace and security;

Recalling the widespread concern about the proliferation of weapons of mass destruction and their means of delivery;

Recognizing the increasing regional and global security challenges caused, inter alia, by the ongoing proliferation of Ballistic Missile systems capable of delivering weapons of mass destruction;

Seeking to promote the security of all states by fostering mutual trust through the implementation of political and diplomatic measures;

Having taken into account regional and national security considerations;

Believing that an International Code of Conduct against Ballistic Missile Proliferation will contribute to the process of strengthening existing national and international security arrangements and disarmament and non-proliferation objectives and mechanisms;

Recognizing that subscribing States may wish to consider engaging in co-operative measures among themselves to this end;

1. Adopt this International code of Conduct against Ballistic Missile Proliferation (hereinafter referred to as 'the Code');

2. Resolve to respect the following Principles:

a) Recognition of the need comprehensively to prevent and curb the proliferation of Ballistic Missile systems capable of delivering weapons of mass destruction and the need to continue pursuing appropriate international endeavours, including through the Code;

b) Recognition of the importance of strengthening, and gaining wider adherence to, multilateral disarmament and non-proliferation regimes;

c) Recognition that adherence to, and full compliance with, international arms control, disarmament and non-proliferation norms help build confidence as to the peaceful intentions of states;

d) Recognition that participation in this Code is voluntary and open to all States;

e) Confirmation of their commitment to the United Nations Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States taking into particular Account the Needs

of Developing Countries, adopted by the United Nations General Assembly (Resolution 51/122 of 13 December 1996);

f) Recognition that States should not be excluded from utilizing the benefits of space for peaceful purposes, but that, in reaping such benefits and in conducting related cooperation, they must not contribute to the proliferation of Ballistic Missiles capable of delivering weapons of mass destruction;

g) Recognition that Space Launch Vehicle programs should not be used to conceal Ballistic Missile programs;

h) Recognition of the necessity of appropriate transparency measures on Ballistic Missile programs and Space Launch Vehicle programs in order to increase confidence and to promote non-proliferation of Ballistic Missiles and Ballistic Missile technology;

3. Resolve to implement the following General Measures:

a) To ratify, accede to or otherwise abide by:

- the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies,

- the Convention on International Liability for Damage Caused by Space Objects, and

- the Convention on Registration of Objects Launched into Outer Space;

b) To curb and prevent the proliferation of Ballistic Missiles capable of delivering weapons of mass destruction, both at a global and regional level through multilateral, bilateral and national endeavors;

c) 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, in the interest of global and regional peace and security;

d) To exercise the necessary vigilance in the consideration of assistance to Space Launch Vehicle programs in any other country so as to prevent contributing to delivery systems for weapons of mass destruction, considering that such programs may be used to conceal Ballistic Missile programs;

e) Not to contribute to, support or assist any Ballistic Missile program in countries which might be developing or acquiring weapons of mass destruction in contravention of norms established by, and of those countries obligations under, the disarmament and non-proliferation treaties;

4. Resolve to implement the following:

a) Transparency measures as follows, with an appropriate and sufficient degree of detail to increase confidence and to promote non-proliferation of Ballistic Missiles capable of delivering weapons of mass destruction:

i) With respect to Ballistic Missile programs to:

- make an annual declaration providing an outline of their Ballistic Missile policies. Examples of openness in such declarations might be relevant information on Ballistic Missile systems and land (test-) launch sites;

- provide annual information on the number and generic class of Ballistic Missiles launched during the preceding year, as declared in conformity with the pre-launch notification mechanism referred to hereunder, in (iii).

ii) With respect to expendable Space Launch Vehicle programs, and consistent with commercial and economic confidentiality principles to:

- make an annual declaration providing an outline of their Space Launch Vehicle policies and land (test-) launch sites;

- provide annual information on the number and generic class of Space Launch Vehicles launched during the preceding year, as declared in conformity with the pre-launch notification mechanism referred to hereunder, in (iii);

- consider, on a voluntary basis (including on the degree of access permitted), inviting international observers to their land (test-) launch sites.

iii) With respect to their Ballistic Missile and Space Launch Vehicle programs to:

- exchange pre-launch notifications on their Ballistic Missile and Space Launch Vehicle launches and test flights. These notifications should include such information as the generic class of the Ballistic Missile or Space Launch Vehicle, the planned launch notification window, the launch area and the planned direction.

b) Subscribing states could, as appropriate and on a voluntary basis, develop bilateral or regional transparency measures, in addition to those above.

c) Implementation of the above Confidence Building Measures does not serve as justification for the programs to which these Confidence Building Measures apply.

5. Organizational Aspects

Subscribing States determine to:

a) Hold regular meetings, annually or as otherwise agreed by the Subscribing States;

b) Take all decisions, both substantive and procedural, by a consensus of the Subscribing States present;

c) Use these meetings to define, review and further develop the workings of the Code, including in such ways as:

- establishing procedures regarding the exchange of notifications and other information in the framework of the Code;

- establishing an appropriate mechanism for the voluntary resolution of questions arising from national declarations, and/or questions pertaining to Ballistic Missile and/or Space Launch Vehicle programs;

- naming of a Subscribing State to serve as an immediate central contact for collecting and disseminating Confidence Building Measure submissions, receiving and announcing the subscription of additional States, and other tasks as agreed by Subscribing States; and

- others as may be agreed by the Subscribing States, including possible amendments to the Code.