

Appendix G

THE MISSILE TECHNOLOGY CONTROL REGIME

The Missile Technology Control Regime (MTCR) was announced in April 1987 by the group of seven industrialized countries (G-7)—Canada, France, the Federal Republic of Germany, Italy, Japan, the United Kingdom, and the United States. The MTCR consists of an export control policy and the institutional measures to implement it.

The impetus for the MTCR came from U.S. National Security Decision Directive 70, signed by President Ronald Reagan in November 1982. That directive made it U.S. policy to “hinder” the proliferation of nuclear-capable missiles and to seek the cooperation of other supplier nations in doing so. More than four years of negotiations were required to reach agreement on the regime.

Originally, the purpose of the MTCR was to reduce the risk of nuclear proliferation by limiting the spread of ballistic and cruise missiles capable of delivering nuclear weapons. The original export controls focused on rocket and unmanned air vehicle systems capable of delivering a 500-kg payload (considered to be the mass of a relatively unsophisticated nuclear warhead) to a range of 300 km (considered to be a strategic distance in the most compact theaters where nuclear weapons might be used).¹

In January 1993, the G-7 and 15 additional governments that by then had joined the MTCR announced an expansion of the regime’s scope to cover missiles capable of delivering not only nuclear weapons but also chemical and biological agents. New export controls applied to unmanned systems capable of delivering any payload to a range of 300 km and to unmanned systems of any payload or range that were intended for the delivery of nuclear, biological, or chemical (NBC) weapons.

The text of the MTCR appears in a short policy document, the Guidelines, and a longer control list, the Annex.²

Functions. The MTCR applies different export control policies to the most sensitive items (Category I) than to other items (Category II), which will generally be approved for export unless they contribute to Category I items. This division of items into two categories enables the regime to target its most stringent restrictions on a limited number of the most dangerous items while still controlling a large number of components with due account taken of their multi-use nature.

Category I consists of complete rocket and unmanned air vehicle systems capable of exceeding the 500-kg/300-km parameters (including ballistic missiles, space launch vehicles, sounding rockets, cruise missiles, reconnaissance drones, and target drones), their major subsystems, and their production facilities and technology. The 500-kg/300-km parameters apply to the inherent capability of a system; that is, they take into account the ability to trade off payload and range.

So Scuds, with the advertised ability to deliver a 1,000-kg payload to a range of 299 km, are included in Category I. As of January 1993, rockets and air vehicles intended for the unmanned delivery of NBC weapons are treated functionally as Category I.

Category II includes lower-level items of hardware and technology, e.g., gyroscopes, which can be used for a variety of purposes. In January 1993, complete unmanned systems capable of delivering any payload to a range of 300 km were added to Category II.

To guide the export decisions on these items, the MTCR prescribes three levels of export control: prohibitions, presumptions of denial, and case-by-case reviews.

Prohibitions apply to the transfer of complete production facilities, or complete production technology for Category I items. It would undermine the purpose of the regime to export production capabilities and create new suppliers of the most sensitive items targeted for non-proliferation.

A “*strong presumption to deny*” transfers applies to all Category I items regardless of purpose. The presumption also applies to unmanned delivery systems of any payload and range, and to Category II items, if the supplier government is persuaded that they are intended for NBC weapons delivery. Transfers of Category I items are to be “rare” and can only be made if the supplier government—not just the recipient—takes responsibility for the end use. The “strong presumption to deny” forms the core of the regime and is the key innovation in the policy laid down by the MTCR.

A *case-by-case review* must be undertaken before any item of equipment or technology on the MTCR Annex can be approved for export. In the case of Category II items, if the item is likely to contribute to a Category I system, its export will probably be denied. If the item could contribute to an NBC delivery system, it can only be exported on the receipt of credible assurances from the recipient’s government. In most cases, the Category II item will be approved for export.

The members of the regime cannot veto each other’s export decisions. They can, however, support their common objectives by means of information exchanges. A key element of information exchange is intelligence, particularly lists of “projects of concern,” i.e., Category I systems targeted by the regime. Another element of information exchange is the diplomatic *demarche*, i.e., the transmission of questions or concerns, usually in regard to a potential or actual export.

The most frequent elements of information exchange are the minutiae of export cases and technical questions that enable export control organizations to avoid unintentionally undercutting each other. The regime includes a “no undercut rule,” which obliges members generally to reinforce each other’s export

denials. This rule is an MTCR innovation that has been copied by some other non-proliferation export control regimes. Because the regime has avoided creating an international institution to administer itself—other than the “point of contact”, i.e., clearinghouse service by the Government of France—the information exchange is the glue that holds the regime together.

A function of the regime has always been to encourage all governments of the world to adopt the regime’s export control policies—whether or not those governments were “members” of the regime, i.e., admitted by consensus into the regime’s information exchanges and decision-making. Recently, this “outreach” function has become more structured, with members jointly approaching non-members. As the objectives of the regime have gained near universal acceptance (with only North Korea among major missile exporters officially remaining aloof), the “outreach” function has gained international weight.

Membership. Between 1989 and 1993, full participation in the regime was awarded to 16 nations that were entitled by treaty arrangements or exceedingly close economic cooperation to many of the items controlled by the regime. These additional 16 members were Australia, Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, and Switzerland. It was urgent to bring these nations into the regime not only because many of them were missile exporters, but also in order to prevent reexport of items the sharing of which might be required under such treaty arrangements as NATO, the European Union, and the European Space Agency. Under international law, treaties supersede policies such as the MTCR.

Between 1993 and 1995, membership went to five additional nations: Argentina, Brazil, Hungary, Russia, and South Africa. All of these nations had indigenous or export programs targeted by the regime. The conditions for membership therefore included restrictions on these targeted activities. In 1997, Turkey joined the regime, resulting in all NATO members being MTCR members as well. The MTCR now has twenty-nine members.

In 1997 the regime made public the following criteria for membership decisions: Whether a prospective new member would:

- (1) Strengthen international non-proliferation efforts,
- (2) Demonstrate a sustained and sustainable commitment to non-proliferation,
- (3) Have a legally based, effective export control system that puts into effect the MTCR guidelines and procedures, and
- (1) Administer and enforce such controls effectively.³

In September 1993, the United States formulated a more restrictive public policy toward new members. Because membership must be approved by consensus, this policy has effectively served as a supplement to the criteria just listed. Under this U.S. policy, new members, with the exception of nuclear-weapon states, must

renounce “offensive” Category I programs, e.g., the programs of Argentina and South Africa, to develop long-range ballistic missiles. Once accepted into the regime, however, a new member could be considered for Category II assistance that contributed to Category I programs not deemed “offensive,” e.g., space launch vehicle development.⁴ Brazil was the first nation to benefit from this new policy. However, because the hardware, technology, and facilities for space launch vehicles are interchangeable with those for ballistic missiles, the wisdom of this U.S. policy has been a matter of controversy.

Meanwhile, there is a dispersion of national practices among members with respect to transfers. The United Kingdom, for example, announced in 1989 an Open General Export License that waives the requirement for case-by-case review of dual-use Category II exports to other MTCR members.

The net result of these disparate policies toward trade among partners has been the claim by some governments that membership actually increases their entitlement to missile technology. The regime’s partners have explicitly reaffirmed that membership does not involve such an entitlement; nor does it involve any obligation on the part of members to supply missile technology. But the “entitlement” view persists. It increases the desirability of membership in the reckoning of some governments, but it raises questions as to whether the regime is advancing its non-proliferation objectives. Although membership in the MTCR has never guaranteed access to missile technology, questions remain as to the extent to which membership will facilitate such access.

A growing number of non-member governments adhere to the export guidelines of the regime. Israel and Ukraine have officially put MTCR export controls into operation; they are recognized by the U.S. government as “adherents,” gaining them advantages under U.S. sanctions laws. Other governments, such as China, Romania, and reportedly the Czech Republic, have made unilateral claims of adherence. China’s unusual formulation of adherence—to the “guidelines and parameters” of the regime—has raised questions as to whether China applies MTCR controls only to complete missile systems or also to components and technology, as required by the regime. China’s October 1994 agreement to “not export ground-to-ground missiles featuring the primary parameters of the MTCR” left open these questions as well as the question of how China’s policy applied to other Category I systems, such as ship-to-ground missiles and space launch vehicles.⁵

Meetings. Policy-making meetings (“plenaries”) of all the regime members are held roughly every year. The most recent meetings were in Bonn in October 1995, where Russia and South Africa attended for the first time and Brazil was admitted; in Edinburgh in October 1996; and in Tokyo in November 1997. The next plenary will be held in Budapest in Autumn 1998. These sessions operate by consensus. In conjunction with these policy meetings, there are technical experts’

discussions and meetings featuring the sharing of intelligence information.

As the information channeled through the French “point of contact” has grown, the methods for disseminating it have become more structured. Every month or so, the Government of France sponsors a “point of contact meeting” at which Paris embassy representatives of member governments report on any matters they wish to call to the attention of other members. In the last two years, these meetings have been supplemented by occasional “reinforced point of contact” meetings attended by home government representatives and allowing extended discussion of specific issues.

Ad hoc meetings are held intersessionally. The most recent included technical experts’ meetings to discuss Annex items, “reinforced contact group” meetings in Paris—with one in June 1996 to discuss the missile programs of four nations—and trans-shipment seminars to discuss means by which proliferators attempt to circumvent export controls. Trans-shipment seminars have been held in Washington in 1996 and in London and Einsiedeln, Switzerland, in 1997. An outreach innovation at the trans-shipment seminars has been the attendance of non-members. The first such seminar included Cyprus, Hong Kong, Jordan, Malta, the Republic of Korea, Singapore, and the United Arab Emirates—all nations that might be exploited by proliferators seeking to launder transfers of controlled items. In addition, the regime sponsored an Asian export control seminar in Tokyo in 1997.

Unilateral U.S. Controls. The United States goes beyond the guidelines of the MTCR in two respects. It has laws requiring the imposition of sanctions for certain transfers contributing to missile proliferation, and it has a “catch-all” regulation which, in specific cases, extends export controls far beyond the items on the MTCR Annex.

The United States is unique in its legal requirement to impose sanctions.⁶ U.S. missile sanctions were signed into law in 1990 and have been amended several times since.⁷ The legislation punishes U.S. and foreign entities trading (buying, selling, or conspiring to buy or sell) in MTCR-controlled items that contribute to the acquisition, design, development, or production of Category I systems in non-MTCR nations. In the case of companies in MTCR member states (or non-member states recognized in a bilateral agreement with the United States to apply MTCR controls), the sanctions are only applied if the trade was conducted illegally and enforcement action was not taken by the member/adherent government. To date, sanctions have been imposed on entities only in non-member nations, including China, India, Iran, North Korea, Pakistan, Russia (before it became a member), and Syria.

The penalties imposed by the sanctions legislation depend on whether the transfer was a Category I or a Category II item. For Category I transfers, the sanctioned entities (both buyer and seller) are banned for a minimum of two years from export license approv-

als for any U.S. munitions or dual-use item that requires an export license, and they are banned for the same term from competing for any U.S. government contracts. For Category II transfers, the sanctioned entities are banned for the same minimum term from export license approvals for any U.S. item on the MTCR Annex and are banned from competing for U.S. government contracts for MTCR Annex items. If the United States deems that the penalized transfer has “substantially” contributed to a Category I program, an additional minimum two-year ban may be imposed on all U.S. imports of products from the entities involved. All of these sanctions may be waived on national security grounds, and the import bans may be waived on items needed for U.S. defense purposes.

Two amendments to U.S. sanctions laws are worth noting. The Helms Amendment applies to sanctions against entities in non-market economies (principally China and North Korea). It broadens the sanctions beyond the entities directly involved—to apply to all government electronic, space, and military aircraft activities. A 1994 amendment creates a “rebuttable presumption” that any trade in MTCR items is for use in a Category I system, and therefore subject to sanctions, if the trade is conducted with a nation designated by the secretary of state as a supporter of international terrorism. The effects of these amendments are to raise the penalties for sanctions against China and to expand the number of Chinese exports that are potential triggers of sanctions when made to such nations as Iran and Syria. However, missile non-proliferation sanctions have not been imposed on China since 1993.

The “catch-all” regulation was promulgated in 1991 as the U.S. Enhanced Proliferation Control Initiative (EPCI). The EPCI requires U.S. exporters to seek an export license for any item or service, whether or not on the published export control lists, if the exporter has reason to know or is informed by the U.S. government that the item or service is for a missile project in a non-MTCR member nation that appears on a published list of nations with Category I projects. In contrast to the sanctions laws, the United States is not alone in administering “catch-all” controls. An increasing number of MTCR partners have adopted such controls, and in July 1995 the European Union included “catch-all” controls in its export regulations.⁸

Effectiveness. Because missile proliferation is obviously occurring, it is easy to conclude that the MTCR, and U.S. sanctions to enforce it, are ineffective. However, some missile proliferation has not occurred. The unraveling of the Argentine-Egyptian-Iraqi Condor II program—intended to produce a clone of the U.S. Pershing II ballistic missile—and the termination of South Africa’s ballistic missile/space launch vehicle program are noteworthy examples of MTCR and sanctions successes. Other programs have suffered multi-year schedule slippages as a result of MTCR export controls; Brazilian and Indian officials have publicly blamed the MTCR for such problems in their large rocket programs.

Two more sophisticated criticisms of the MTCR are often made. One quotes the second sentence of the Guidelines—"The Guidelines are not designed to impede national space programs or international cooperation in such programs . . ."—to demonstrate that the regime has a huge loophole permitting the proliferation of space launch vehicles, which are interchangeable with ballistic missiles. Although this criticism has been repeated frequently, it fails to take account of the rest of the quoted sentence: ". . . as long as such programs could not contribute to delivery systems for weapons of mass destruction." The criticism also fails to take account of the fact that the MTCR Category I list subjects space launch vehicles to the same "strong presumption to deny" exports as ballistic missiles.

In fact, the quoted sentence from the MTCR Guidelines encourages the sale of space launch services and satellites as opposed to the rockets themselves. This permits all nations to obtain the benefits of space activities without access to potential ballistic missiles.

The other sophisticated criticism, far more frequently made, is that the MTCR can only buy time and cannot prevent missile proliferation altogether. How-

ever, the MTCR's export controls not only increase the time required for a missile program but also the cost and unreliability of the program and the international opposition to it. With a missile such as the Pershing II requiring some 250,000 parts, it is not necessary to deny access to all 250,000 in order to damage a missile program substantially.

Even if the MTCR only bought time, that would be a valuable accomplishment. Time allows the preparation of defenses against missiles, and time allows the regime in the proliferator nation to change. A change of regime can be a decisive factor in non-proliferation. The termination of the Condor II program, the South African program, the Category I programs in some Eastern European nations, and the Russian exports that triggered U.S. sanctions all occurred after changes of regimes—after time had been "bought."

Two factors are likely to determine the future effectiveness of the MTCR. One is the willingness of member nations to enforce missile non-proliferation and to persuade non-members to do likewise. The other is the extent to which missile-related trade is restrained within—and not only outside—the growing group of MTCR member nations.

NOTES

¹For a description of the original regime, see Richard H. Speier, "The Missile Technology Control Regime," in *Chemical Weapons & Missile Proliferation: With Implications for the Asia/Pacific Region*, Trevor Findlay, ed., (Boulder: Lynne Rienner Publishers, 1991), pp. 115-21.

²The text of the revised MTCR Guidelines is set out in "The Missile Technology Control Regime," ACDA Fact Sheet, May 17, 1993. The Annex has been revised on average every two years.

³Press statement adopted at the Tokyo MTCR Plenary (with appendices), November 6, 1997.

⁴"Fact Sheet: Nonproliferation and Export Control Policy," The White House, Office of the Press Secretary, September 27, 1993.

⁵"Fact Sheet: Joint United States–People's Republic of China Statement on Missile Proliferation," U.S. Department of State, Office of the Spokesman, October 4, 1994.

⁶Japan, however, has a policy of taking proliferation concerns into account in decisions on foreign aid.

⁷See the Arms Export Control Act, Chapter 7, and the Export Administration Act, Section 11B.

⁸"Export Administration 1996 Report on Foreign Policy Export Controls," U.S. Department of Commerce, Bureau of Export Administration, January 1996, section 10.