

SANDIA REPORT

SAND95-0919 • UC-700

Unlimited Release

Printed May 1995

Crisis Prevention Centers as Confidence Building Measures Suggestions for the Middle East

Arian L. Pregoner

Prepared by
Sandia National Laboratories
Albuquerque, New Mexico 87185 and Livermore, California 94550
for the United States Department of Energy
under Contract DE-AC04-94AL85000

Approved for public release; distribution is unlimited.

Issued by Sandia National Laboratories, operated for the United States Department of Energy by Sandia Corporation.

NOTICE: This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors, or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government, any agency thereof or any of their contractors or subcontractors. The views and opinions expressed herein do not necessarily state or reflect those of the United States Government, any agency thereof or any of their contractors.

Printed in the United States of America. This report has been reproduced directly from the best available copy.

Available to DOE and DOE contractors from
Office of Scientific and Technical Information
PO Box 62
Oak Ridge, TN 37831

Prices available from (615) 576-8401, FTS 626-8401

Available to the public from
National Technical Information Service
US Department of Commerce
5285 Port Royal Rd
Springfield, VA 22161

NTIS price codes
Printed copy: A03
Microfiche copy: A01

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

Crisis Prevention Centers as Confidence Building Measures Suggestions for the Middle East

Arian L. Pregoner
Nonproliferation and Arms Control Analysis
Sandia National Laboratories
Albuquerque, NM 87185-0567

Abstract

Relationships between countries generally exist somewhere in the grey area between war and peace. Crisis prevention activities are particularly important in this area, and should have two goals: stabilizing tense situations that could push countries toward war, and supporting or reinforcing efforts to move countries toward peace. A Crisis Prevention Center (CPC) should facilitate efforts to achieve these goals. Its functions can be grouped into three broad, inter-related categories: establishing and facilitating communication among participating countries; supporting negotiations and consensus-building on regional security issues; and supporting implementation of agreed confidence and security building measures.

Technology will play a critical role in a CPC. First, technology is required for establishing communication systems to ensure the timely flow of information between countries and to provide the means for organizing and analyzing this information. Second, technically-based cooperative monitoring can provide an objective source of information on mutually agreed issues, thereby supporting the implementation of confidence building measures and treaties. In addition, technology can be a neutral subject of interaction and collaboration between technical communities from different countries, thereby providing an important channel for improving relationships.

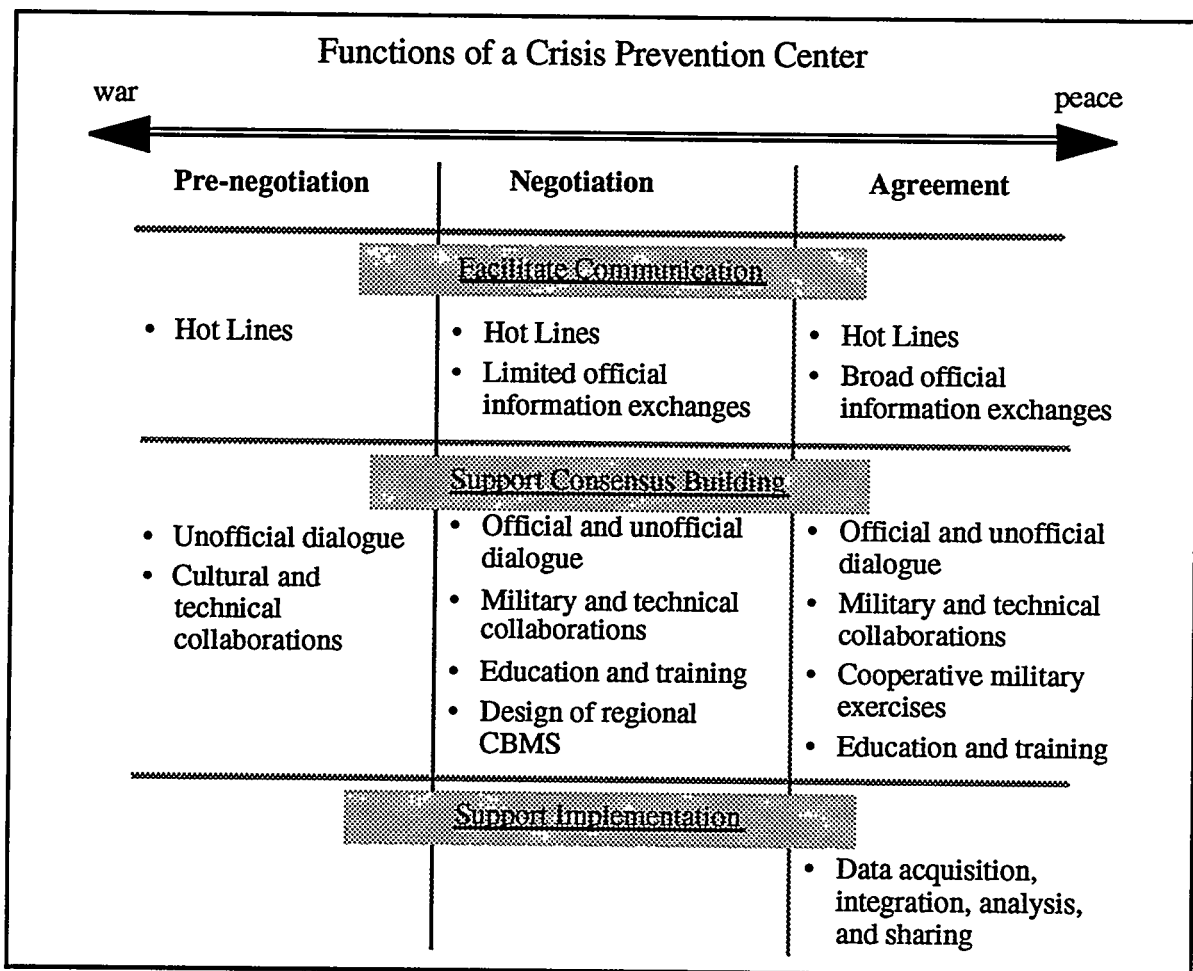
Potential first steps for a CPC in the Middle East could include establishing communication channels and a dedicated communications center in each country, together with an agreement to use the system as a "Hot Line" in bilateral and multilateral-lateral emergency situations. Bilateral cooperative monitoring centers could be established to assist with implementation of bilateral agreements. A centrally located CPC could serve as a regional communications hub, coordinating a number of functions aimed at stabilizing regional tensions and supporting confidence building activities. Specific recommendations for confidence building activities are discussed.

MASTER

Executive Summary

Functions of a Crisis Prevention Center

Relationships between countries generally exist somewhere in the grey area between war and peace. Crisis prevention activities are particularly important in this area, and should have two goals: stabilizing tense situations that could push countries toward war, and supporting or reinforcing efforts to move countries toward peace. A Crisis Prevention Center (CPC) should facilitate efforts to achieve these goals. Its functions can be grouped into three broad, inter-related categories: establishing and facilitating communication among participating countries; supporting negotiations and consensus-building on regional security issues; and supporting implementation of agreed confidence and security building measures. Appropriate activities in each of these categories will depend on the relations among participating countries. Between hostile states, a CPC may have the very restricted role of preventing unintentional war, much like the "Hot Line" communication system between the United States and the former Soviet Union. For states struggling to stabilize relations, a CPC could facilitate resolution of a range of contentious issues. As states enter into cooperative arrangements, a much broader role could be expected, including the implementation of systems for acquiring, analyzing, and sharing information obtained under the terms of confidence building agreements or treaties.



The Role of Technology

Technology will play a critical role in a CPC. First, technology is required for establishing communication systems to ensure the timely flow of information between countries and to provide the means for organizing and analyzing this information. Second, technically-based cooperative monitoring can provide an objective source of information on mutually agreed issues, thereby supporting the implementation of confidence building measures and treaties. In addition, technology can be a neutral subject of interaction and collaboration between technical communities from different countries, thereby providing an important channel for improving relationships.

Crisis Prevention in the Middle East

Recent progress with the Middle East peace process has given momentum to the idea of establishing a regional CPC. Options for single regional centers and inter-connected local centers both have been suggested. Potential first steps for a CPC in the Middle East could include establishing communication channels and a dedicated communications center in each country, together with an agreement to use the system as a "Hot Line" in bilateral and multilateral emergency situations. Bilateral cooperative monitoring centers could be established to assist with implementation of bilateral agreements. A centrally located CPC could serve as a regional communications hub, coordinating a number of functions aimed at stabilizing regional tensions and supporting confidence building activities. Specific recommendations are summarized below.

Potential First Steps for a Middle East CPC		
<u>Information Exchange</u>	<u>Security Discussions</u>	<u>Implementation/Collaborations</u>
<ul style="list-style-type: none"> • "Hot Lines" • Text of Bilateral Agreements • Troop movements in unstable regions • Large military exercises • Regional disasters 	<ul style="list-style-type: none"> • Unofficial dialogue • Bilateral and Multilateral discussions • Conference on cooperative monitoring of regional agreements • Conferences and symposia on regional issues (politico-military, technical, environmental) • Planning implementation of CBMS 	<ul style="list-style-type: none"> • Cooperative monitoring of bilateral agreements • Regional cooperative monitoring training center • Implementation of common treaties • Cooperative environmental monitoring • Joint military training for peace-keeping or emergency response

As the Middle East moves in the direction of regional cooperation, the number of activities supported by a CPC could increase. Planning for such activities, and establishing an architecture for their ultimate implementation would be critical.

Crisis Prevention Centers as Confidence Building Measures

Suggestions for the Middle East

Arian L. Pregenzer

I. Introduction

Since the end of the Cold War, regional security has been a primary concern of most major powers. Much effort has been expended in the last few years on achieving peace in the Middle East, promoting communication in South Asia, and reducing tension on the Korean peninsula. An underlying assumption of these efforts is that increased openness and transparency are necessary ingredients in reducing the likelihood of regional conflict. The consequences of war in these regions are viewed as having global implications because of the possible use of weapons of mass destruction.

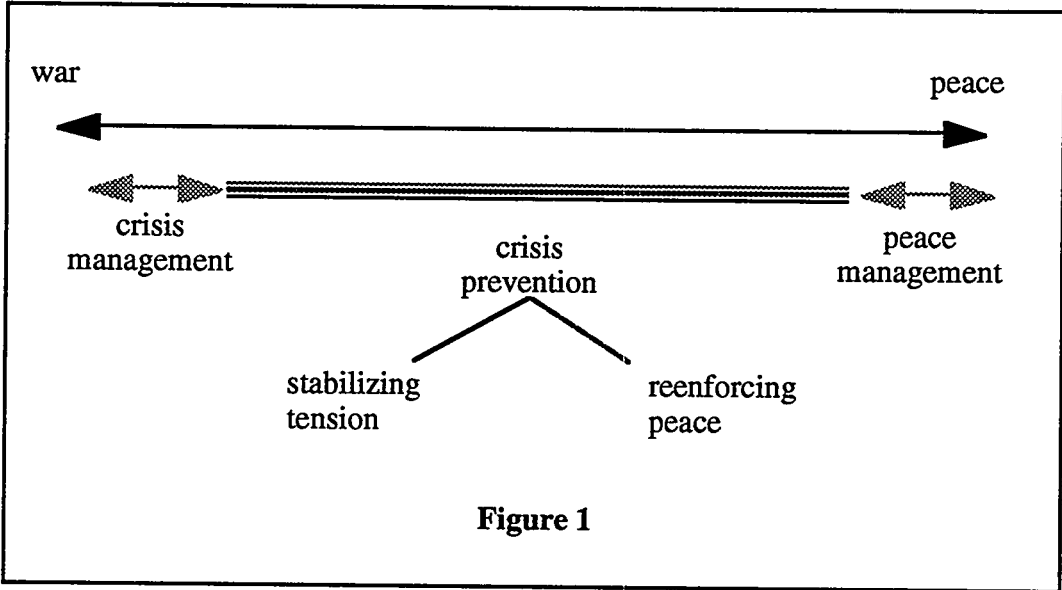
Lack of understanding of "the other," regarding military capabilities, threat perceptions, intentions, and values, has been a major contributor to decisions leading to unplanned war or escalation of war in this century¹. This is not to say that better understanding will eliminate war, but that it is a necessary condition of rational decision-making. Better understanding is important for government officials, who are directly responsible for critical decisions that can lead to war or peace, and for citizens, whose opinions often influence the behavior of decision-makers. Communication is an important means of improving understanding and providing information, and can range from a very limited and formal information exchange about jointly perceived major threats, to extensive contact between countries.

Relationships between countries are typically somewhere in the grey area between war and peace. Crisis prevention activities are particularly important in this grey area, and should have two goals: (1) stabilizing tense situations that could push countries toward war, and (2) supporting or reinforcing efforts to move countries toward peace. Tensions

¹For example, see John G. Stoessinger, *Why Nations Go To War*, St. Martin's Press, New York, 1974.

can be reduced between potential adversaries when they have adequate information about each other and understand each other well enough to accurately interpret the information they obtain. This is true regardless of the degree of hostility between countries, although the type and amount of needed information will vary with the relationship.

Two concepts closely related to crisis prevention are "crisis management" and "peace management." Crisis management will be required when tensions escalate uncontrollably, and war seems imminent. Although stabilizing tensions will remain a primary goal of crisis management, activities will occur on a more rapid time scale and a different set of tools will be employed, possibly including military threat or coercion. On the other end of the spectrum, peace management will focus on enforcing and supporting the state of peace, with the goal of making peace irreversible. Figure 1 shows the relationship of crisis management, crisis prevention and peace management.

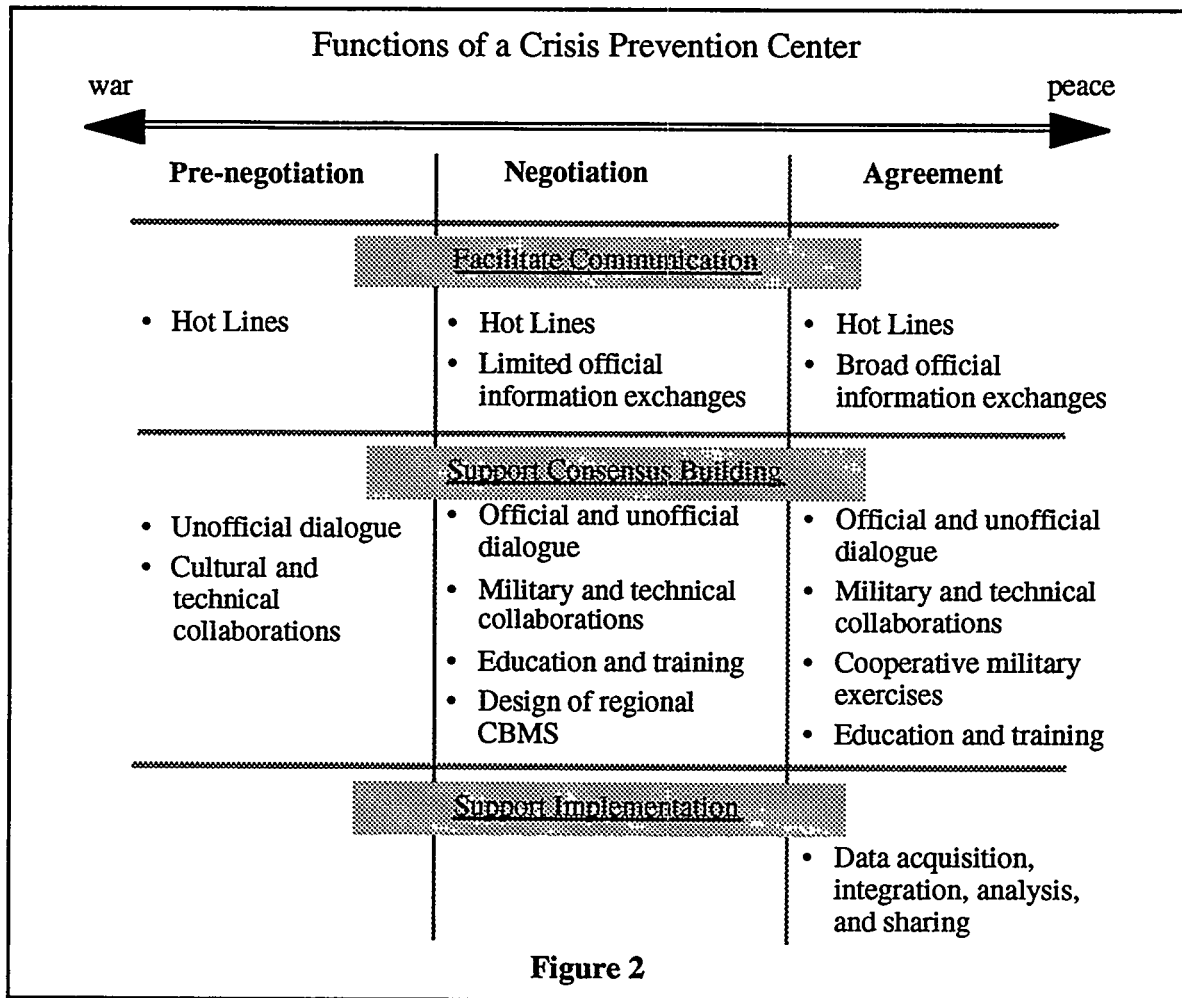


II. Functions of a Crisis Prevention Center

In this paper, a concept for a Crisis Prevention Center (CPC) that can support activities across the spectrum of relations among countries will be developed. Clearly, for a particular time, in a particular region, only a subset of these activities would be appropriate. Under the broad definition of crisis prevention proposed here, the purpose of a CPC would be to facilitate *all* relevant efforts to stabilize tension and reinforce peace. Since the emphasis will be on *preventing* crises from arising, many of these activities will be of a routine or non-emergency nature, to be undertaken in the absence of imminent threat.

Functions for a CPC can be grouped into three broad, inter-related categories: (1) establishing and facilitating communication among countries, (2) supporting negotiations and consensus-building on regional security issues, and (3) supporting implementation of agreed confidence and security building measures. Relations among participating countries will influence the choice of activities. Among hostile states a CPC may have the very restricted role of preventing unintentional war, much like the "Hot Line" communication system between the United States and the Soviet Union² that was implemented during the height of the Cold War. For states struggling to achieve more stable relations, the CPC could facilitate resolution of a range of contentious issues. As states enter into cooperative arrangements, a much broader role could be expected, including the implementation of systems for acquiring, analyzing, and sharing information obtained under the terms of confidence building agreements or treaties. Figure 2 shows the association of these functions and their derivative activities with different stages of a regional security process.

²See "Hot Line" Agreements in Appendix A.



Establishing a CPC requires only that states have a mutual desire to prevent the unintentional escalation of events to the stage of conflict and that they accept the tenet that better communication, even if it entails sharing only a limited set of information, can enhance security. It does not require that states enter into a cooperative security arrangement, nor does it preclude war. Ample evidence of the value of crisis prevention activities between inimical states is provided by agreements aimed at preventing accidental war between the United States and the Soviet Union during the 1960s and 1970s³. These agreements established direct communications between capitals of the two countries, established commitments to improve security and control of nuclear arsenals, and established procedures to prevent provocation. Implementation was extremely formal, and

³Appendix A summarizes several of these agreements.

involved little human contact. These agreements represent one end of the spectrum of crisis prevention: establishment of communication channels and the exchange of a limited set of information.

Although the existence of a cooperative security arrangement is not a prerequisite for a CPC, crisis prevention and cooperative security have overlapping goals⁴. One goal of a cooperative security regime is to prevent threats from arising by preventing the accumulation of the means for serious, deliberate, organized aggression. By providing the infrastructure for exchanging information on potentially threatening activities, and thereby preventing accidental escalation of tense situations, a CPC could be seen as a first step toward meeting the conditions for a cooperative security regime⁵. The cooperative security regime in Europe, known as the Conference on Security and Cooperation in Europe (CSCE), and its associated Conflict Prevention Center, are summarized in Appendix B as an illustrative example.

A Crisis Prevention Center could have a larger set of users than official representatives of the governments of participating countries. Incorporating both official and unofficial, or "track two", activities under the auspices of a single Crisis Prevention Center would have several advantages. Prior to initiating an official security dialogue, or during times when the official dialogue is stalled, "track two" efforts can provide an important forum for continuing discussion. Unofficial discussions can provide a source of new ideas to the official dialogue and the proximity of the two "tracks" could facilitate the exchange of ideas and reduce the possibility of interference of "track two" efforts with the official process. An unofficial forum also can provide an opportunity for government officials, acting in an unofficial capacity, to experiment with new approaches. Finally,

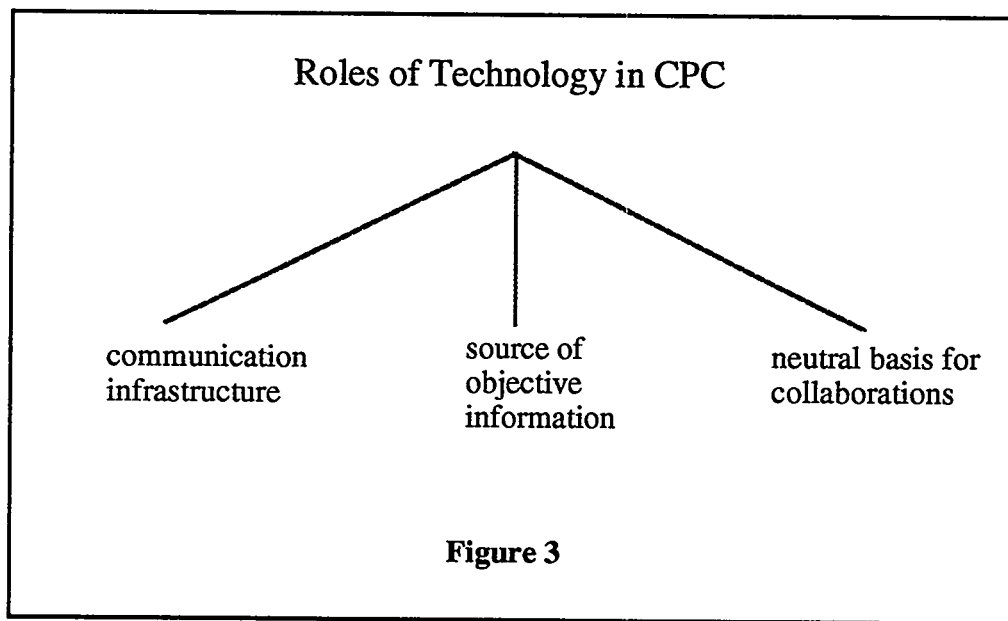
⁴See, for example, Ashton B. Carter, William J. Perry, and John D. Steinbruner, *A New Concept of Cooperative Security*, The Brookings Institution, 1992; or Andrew Mack, "Security Cooperation in Northeast Asia: Problems and Prospects", *Journal of Northeast Asian Studies*, Summer 1992, p. 21 - 34.

⁵Robert Jervis, "Security Regimes," in *International Regimes*, ed. Krasner, p. 177. According to Jervis, a cooperative security regime has a good chance of forming if three conditions are satisfied: all states accept the status quo and modifications to it that can be achieved by peaceful means; states believe that other parties to the regime value mutual security and cooperation; and bilateral or unilateral pursuit of security is seen as prohibitively expensive.

including a second "track" could enhance the ability for building confidence among citizens of participating countries, as well as among the governments, which is an important element of the security process.

III. Elements of a CPC and the Role of Technology

Technology will play a critical role in a CPC, as shown in Figure 3. In the first place, technology is required for establishing communication systems to ensure the timely flow of information between countries and to provide the means for organizing and analyzing this information. Second, technically-based cooperative monitoring can provide an objective source of information on mutually agreed issues, thereby supporting the implementation of confidence building measures and treaties. Third, technology can be a neutral subject of interaction and collaboration between technical communities from different countries, thereby providing an important channel for improving understanding. The following paragraphs provide a discussion of activities, and their associated technical requirements, that support one or more of the functions of a CPC.



Communication Network A communication network is a central element of a CPC. Although a central communications hub is not required, one could be established to act as a point through which all communications were routed and to provide a central location for regional crisis prevention activities. A first step might be to establish local communication centers in each participating country, each with agreed communications equipment and interconnected by satellite or wire communication links. Each country would require identical equipment and capabilities to assure equal access to all participants.

Relatively little equipment is required to support the exchange of routine, formalized information. For example, equipment at the Nuclear Risk Reduction Centers in the United States and Russia consists of computer monitors, word processors, facsimile machines, phone lines and printers; communication links are provided by satellite. Data transmission rates are relatively slow: approximately one page of text in thirty seconds. More sophisticated capabilities would be required to collect and transmit data from remote monitoring systems associated with confidence building measures or other agreements.

The number of communication channels at a CPC would depend on the number of different categories of exchanged information. Separate channels would be needed to support bilateral and multilateral communications, official and unofficial communications, and emergency and routine communications. To prevent unauthorized access and ensure privacy, computer security systems would be needed that allow for "layered access" to exchanged information. Among other things, this would allow two countries to carry out a bilateral exchange of information on the system and keep that information private from other countries using the same system.

To support unofficial dialogue, the network could also be used by the academic and research communities of the participating countries, both for communication and as a research tool. This communication could increase productivity and invite new ideas about areas for cooperation.

Countries should not conclude that use of the communication network is a sign of weakness or imminent threat. Establishing procedures for routine use of the system will help prevent this from occurring⁶. Weekly routine communication, rotating among the participating countries, would encourage the habit of consultation and communication. Continuous test communication patterns would provide confidence about the state of health of the system.

The establishment of a communication network implies that the participants have agreed to some limited form of communication, perhaps only for emergency situations. Deciding a larger set of issues on which to exchange information could be the next step. A centrally located CPC could be the forum for these discussions, or they could occur on an *ad hoc* basis at a series of meetings in individual countries, as did initial discussions of confidence building measures in Europe. Information exchange on a wide-ranging set of issues would encourage developing a "basket approach" to regional security. Such exchanges would both increase understanding and serve a confidence-building function, even in the absence of formal agreements. If formal agreements are attained, the CPC would be involved in transmitting any agreed information, such as notifications and declarations.

Information Management and Analysis An organized system for providing access to exchanged information is highly recommended. Data bases with text search and retrieval capabilities would facilitate the organization of basic information, such as points of contact in participating countries, the text of mutual agreements, and reports on inspections or fact finding missions. If countries are in the process of implementing confidence building

⁶This lesson was learned during the tense period between India and Pakistan in 1990, according to knowledgeable observers. A "hotline" between the Indian and Pakistani military leaders had been in existence for several years but was not used because it was perceived as a sign of weakness. Under new procedures, the "hotline" will be exercised routinely between the two militaries. For a detailed discussion of this crisis, see Michael Krepon and Mishi Faruqee, Editors, "Conflict Prevention and Confidence-Building Measures in South Asia: The 1990 Crisis"; Occasional Paper No. 17; The Henry L. Stimson Center, April 1994.

measures that make use of technical monitoring, the CPC could also serve as a regional cooperative monitoring center. In this case, the CPC would need equipment and procedures for data acquisition, integration, and analysis, which would entail more sophisticated communication and software capabilities. Depending on the nature of the confidence building measures and the regional monitoring network, the CPC could receive data directly from the sensors deployed for cooperative monitoring applications, or such data could be transmitted to the CPC after being initially processed at local data acquisition centers. The communication network, already established as a first step for the CPC, could provide the basis for data transmission and communication of analytic results to local data centers in each country.

Education and Training Negotiators and decision-makers need adequate knowledge about procedures and technologies that facilitate implementation of confidence building measures or treaties. A CPC could provide a forum for experienced countries and organizations to share their expertise, including practical experience with basic monitoring hardware and software systems. The CPC could also arrange trips to other countries to facilitate the transfer of this experience base. Where possible, education should include hands-on experience with monitoring hardware and data, computer modeling and simulations, and information management and analysis techniques.

As further support, the CPC could organize trial confidence building measures or exercises to increase regional familiarity with procedures and technologies that might be used during a transition to peaceful relations. Such exercises could be conducted outside the region to alleviate political concerns, perhaps in conjunction with exercises taking place in other regions or countries. Another option would be to simulate such exercises at the CPC, using either scripted procedures or computer simulations.

Collaborative Efforts Collaborations among technical, military and cultural communities emphasize complementary expertise within these communities and encourage cooperation. Any neutral subject, such as sports, the arts, or science and technology, can be the basis of confidence-building collaboration.

Because technology plays an important role in crisis prevention, it can be a particularly fruitful area for collaboration. Not only do technical collaborations provide neutral ground for interaction among scientific communities, they may also produce results that will aid in the implementation of future agreements. The work of the Group of Scientific Experts (GSE) at the Conference on Disarmament (CD) in Geneva illustrates this point. Long before there was a negotiating mandate for a nuclear test ban at the CD, scientists from all participating countries collaborated on the technical issues associated with sharing seismic data internationally. Now that a comprehensive test ban is being negotiated, the work of the GSE will provide valuable information about the structure of the verification system of this treaty. Collegial relationships that developed among participating scientists during previous collaborations will ease implementation of any agreed system.

Laboratory and office space will be required at the CPC to support technical collaborations. Laboratory equipment will depend on the specific application, whether it be the development of new sensor hardware, the development of more efficient algorithms for analyzing data, or the development of better data display capabilities. Computer and electronics laboratories would almost certainly be required.

Conferences and Symposia An important function of the CPC would be to sponsor conferences and symposia to increase understanding of a broad range of issues that could affect present and future regional security, and to provide an intellectually stimulating environment for their serious consideration. The issues for discussion should not be restricted to the politico-military arena. Some analysts believe that tensions over

environmental and resource issues may be at the top of the security agenda in the coming decades⁷. Terrorism, uncontrolled immigration, and human rights abuses would be appropriate candidates for discussion at a CPC.

Conference activities should also seek to promote communication between the political and technical communities. Such communication is important for at least two reasons: first, awareness of the capabilities and limitations of monitoring technology can influence the attitude of decision-makers toward particular agreements; second, knowledge about the specific issues under discussion helps steer technology down relevant paths.

A natural outcome of collaborative efforts and joint conferences will be suggestions for regional confidence building measures. Where appropriate, the suggestions could also include technical details for effective implementation of such agreements. The right mix of governmental, academic and technical expertise in the discussions would be essential for obtaining a viable set of recommendations. Suggestions arising from an unofficial track could lay the groundwork for subsequent official discussions.

Staffing the CPC Staffing requirements become more complex with an increasing number of functions at a CPC. Computer hardware and software experts, data processing and analysis experts, and communications specialists would probably be required. Staff with political and technical expertise about multilateral negotiations across a spectrum of issues would also be useful, and could have either permanent or rotating assignments at the CPC. Technical experts in monitoring technologies for arms control, environmental, and other applications would be needed to support technical collaborations, as well as education and training. Technical expertise could be supplied by permanent residents of the center,

⁷For a discussion of the relationship between environmental and security issues, see Thomas F. Homer-Dixon, "Environmental Scarcities and Violent Conflict", *International Security*, Vol. 19, No. 1, pp. 5 - 40, Summer 1994 and "On the Threshold: Environmental Changes as Causes of Acute Conflict", *International Security*, Vol. 16, No. 2, pp. 76 - 116, Fall 1991.

sabbatical programs, or through association with local laboratories. Representation of all participating countries would be expected.

Anticipating Future Needs A shift to peace could bring a new set of regional problems, or draw attention to existing problems whose solution requires cooperation. For example, when relations in a region improve, increased economic activity could stress the already fragile environment. Similarly, when people are no longer preoccupied with defending their borders against military attack they may open their eyes to other potential crises, such as illegal migration and environmental degradation. Anticipating such problems and outlining a regional framework for preventing them from attaining crisis proportions could be an important forward-looking function of a CPC. Managing the peace could be its ultimate role. To do this effectively, the infrastructure should be planned carefully to allow for communication and storage of relevant quantities and types of data, as well as its integration, analysis, and presentation to participants in a form that assists them in making rational decisions.

IV. Crisis Prevention Centers for the Middle East

Discussion of crisis prevention centers in a Middle Eastern context has occurred recently both within the formal multilateral Middle East peace talks and in "track-two" arms control working groups. Ideas for CPCs with a wide range of activities have been put forward from within the region, most notably by Abdullah Toukan of Jordan, and by observer countries, such as Australia. Toukan has suggested a broad set of activities as appropriate for a CPC, including providing support for regional security discussions, establishing "hot lines", and participation in implementation of future regional confidence building measures. He also has weighed the merits of a centrally established CPC in contrast to a series of interconnected local centers.

At the Plenary meeting of the Arms Control and Regional Security (ACRS) working group held in Doha, Qatar in Spring 1994, it was agreed to explore further the concept of a conflict prevention or regional security center. To this end, Australia prepared a paper which was presented to the ACRS working group in Paris in October 1994 outlining three models for establishing a CPC in the region⁸. These were: developing conflict prevention activities without the formal establishment or institutionalization of a center as such; establishing a single regional center; and establishing multiple, relatively integrated CPCs with different responsibilities and mandates. The Australians did not recommend that a CPC become involved in the current peace process; rather, they envisioned its primary role as providing a means of maintaining the peace achieved by this process. They suggested a range of center-sponsored activities, such as providing ideas for confidence and security building measures, promoting regular dialogue within the region, offering assistance in resolving disputes, and organizing training sessions in dispute resolution and peace building.

In the following paragraphs we augment suggestions made by previous authors by proposing a technical component for crisis prevention centers. From a technical point of view, a CPC could play an important role in implementing peace agreements and other confidence building measures, both now and in the future.

Bilateral Crisis Prevention or Cooperative Monitoring Centers Establishing bilateral communication networks could facilitate implementation of existing and potential bilateral peace agreements. Initial topics for information exchange could include text and implementation protocols of the agreements among Israel and its neighbors. This information could also be made available to other countries, if desired, by establishing a

⁸"Conflict Prevention/Regional Security Centre" presented by the Australian Delegation at the Middle East Arms Control and Regional Security Paris Meeting - Conceptual Basket; 9 - 12 October 1994.

regional communication network. Any information considered confidential would be given special status and treated with the requisite security.

If cooperative monitoring is eventually included in the implementation of bilateral peace agreements, data from the sensors used in the monitoring regime could be transmitted to the center for integration and analysis. In this respect, a bilateral CPC could serve as a cooperative *monitoring* center. The center would become a central point for integrating and analyzing data obtained from remote sensors used to monitor agreements. It could also serve as a meeting place for bilateral discussions.

One possible location for a such cooperative monitoring (or crisis prevention) center would be in the Jordan Valley along the border between Israel and Jordan to monitor water and other environmental agreements. The center could be staffed by Jordanians and Israelis, with third party presence if deemed appropriate. Including representatives from other Middle Eastern countries with similar problems would be a way of training them in the necessary technology and procedures for monitoring cooperative agreements with their neighbors. In this sense, the center would have a wider confidence-building role than simply collecting and analyzing information.

Another application of a bilateral monitoring center would be in the implementation of a possible future agreement between Israel and Syria concerning the Golan Heights. Although both countries currently monitor the border region, an agreement for Israeli withdrawal might require an additional cooperative approach. Monitoring such an agreement could be carried out by a third party, such as during the Israeli withdrawal from the Sinai in the late 1970s, but staffing a center with members of both sides of the agreement should be considered as a possible confidence building opportunity. The center could receive, integrate, and analyze data obtained from sensors or inspections under the terms of the agreement. The cooperative system would not replace independent monitoring of the agreement by the countries themselves, rather the cooperative system would supplement existing national means.

Regional Information Exchanges Through a Communication Network A regional information network could provide a mechanism for sharing information about tension-producing activities such as large regional military exercises and movements of troops and military equipment in potentially unstable regions. Other candidates for information exchange include: notification of regional disasters, information about water management technologies, and information about terrorist activities. Not every country would necessarily be required to participate in such information sharing. However, to promote regional openness, attempts should be made to provide all countries with access to the data wherever possible. Communication security could allow for both private bilateral and multilateral information exchanges over the same network.

Exploring Areas of Common Ground A regional CPC could support implementation of existing or future multilateral treaties and agreements to which more than one of the Middle Eastern countries are party. The Transparency in Armaments Agreement, the Chemical Weapons Convention (CWC), a Comprehensive Test Ban and a Global Fissile Material Cut-Off Treaty fall into this category. In addition to encouraging regional cooperation, centralizing such activities could reduce costs and improve efficiency for all members by taking advantage of economies of scale.

In some cases, countries could engage in joint planning for the implementation of a treaty. For example, most parties to the CWC will have legitimate concerns about protecting proprietary information during inspections under its terms. These countries could engage in joint trial inspections at a chemical plant in preparation for official inspections and explore the efficacy of procedures for protecting privacy. The CPC could provide logistical support to such trial inspections, capitalizing on experience of other CWC signatories from outside the region.

Communication among military communities is particularly recommended as a means of increasing trust between potential adversaries. Joint planning or training for extra-regional peacekeeping activities, and joint training for emergency response activities that could involve the military, such as the clean up of oil spills, are possible first steps.

Scientific, Military, and Cultural Collaborations Considering the significant progress being made in the peace process, collaborations on arms control and other cooperative monitoring technologies could be particularly fruitful in the short term. Because of the perceived technical asymmetry between Israel and the Arab states, establishing a regional monitoring technology center equipped with monitoring hardware, software, and data processing and integration systems in an Arab country could be of great interest. The center would encourage regional collaborative efforts on both arms control and environmental monitoring. It could evolve into a regional cooperative monitoring center, complete with communication system and data gathering and analysis capabilities as previously described.

Collaborations on technical monitoring systems could focus on areas outside the politico-military regime as well. There already exist several regional initiatives for cooperation on environmental issues⁹. Egypt has proposed setting up a regional center for coordinating marine disaster and emergency preparedness in the Gulf of Aqaba. Jordan has proposed establishing a regional center for environmental education. Efforts are also underway to encourage regional collaborations on water quality, sewage and waste management, as well as on prevention of further desertification. A CPC could provide technical and logistical support for recommended activities and could coordinate education about and development of common monitoring methodologies and techniques.

⁹Joel Peters, *Building Bridges: The Arab-Israeli Multilateral Talks*; Royal Institute of International Affairs, Great Britain, 1994.

Future Steps for a Middle East CPC

As the Middle East moves in the direction of regional cooperation and peace, the emphasis of the security regime will shift from deterrence to reassurance. To provide such reassurance, there will be a push for military transparency and openness, for confidence and security building measures to reduce the risk of dangerous misunderstandings, for arms control, and possibly for a reconfiguration of armed forces to emphasize defense rather than offense. Nuclear arms control may be an important future component of the regional arrangement. Ground forces might be relocated to reduce the chances for border misunderstandings. Limitations could be imposed on ballistic missile production, acquisition and testing. Greater military-to-military contacts and planning dialogues could be expected, possibly including common warning and intelligence functions. All these activities could be supported by a CPC. Planning for these activities and establishing an architecture for their ultimate implementation will be critical.

Appendix A

Crisis Prevention Agreements Between the United States and the Soviet Union During the Cold War

The "Hot Line" Agreement

The Cuban Missile Crisis in October 1962 underscored the importance of prompt, direct communication between heads of state of the United States and the Soviet Union in times of crisis to reduce the risk that accident or miscalculation might trigger a nuclear war. In June 1963, the two countries signed a memorandum of understanding, known as the "Hot Line" Agreement, agreeing to establish a direct communications link between Moscow and Washington to be used in times of emergency¹⁰. Because its use is restricted to emergencies, the "Hot Line" is regarded as being a tool for managing crises, rather than preventing them.

The original agreement established a full-time duplex wire telegraph circuit (Washington-London-Copenhagen-Stockholm-Helsinki-Moscow) and a full-time duplex radiotelegraph circuit (Washington-Tangier-Moscow) between the two capitals. The agreement was modernized in 1971, by establishing provisions for satellite communication links to replace the radio circuit. Such modernization was intended to increase the reliability and reduce the vulnerability of the communication system. In 1984, the system was upgraded to include facsimile equipment at the terminals, in addition to the teletype equipment stipulated in the original agreement. This increased the speed of communications and allowed for the transmission of graphic material such as maps and drawings.

¹⁰*Arms Control and Disarmament Agreements*; United States Arms Control and Disarmament Agency; 1990; p. 31 - 36, 122 - 128, and 314 - 318.

In the United States, the Hot Line is located in the Pentagon, whereas in the former Soviet Union it is located in the Russian Ministry of Foreign Affairs. Its use is restricted to the heads of state of the two governments. Although details are kept highly confidential, the "Hot Line" has been used on several occasions. For example, during the 1967 and 1973 Arab-Israeli wars it was used to prevent misunderstandings about United States fleet movements in the Mediterranean.

"Accidents Measures" Agreement

In recognition of the dire consequences of accidents involving nuclear weapon systems, both in terms of accidental detonations and in terms of unauthorized use of weapons, the United States and the Soviet Union reached an agreement aimed at reducing such risks in 1971¹¹. The "Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War" addresses three primary areas: (1) a commitment to improve organizational and technical safeguards against accidental or unauthorized use of nuclear weapons; (2) arrangements for immediate notification if such incidents should occur and pose a risk of nuclear war, if unidentified objects are observed on early warning systems, or in case of any unauthorized or accidental incident involving possible detonation of a nuclear weapon; and (3) agreement to notify in advance any planned missile launches beyond the territory of the launching party and in the direction of the other. Originally, the "Hot Line" was designated as the vehicle for communication, but the Nuclear Risk Reduction Center (NRRC) was given this responsibility upon its establishment in 1988. The only information under this agreement that has been transmitted from the NRRC is the notification of strategic ballistic missile launches.

¹¹*Arms Control and Disarmament Agreements*; United States Arms Control and Disarmament Agency; 1990; p. 118 - 121.

Incidents at Sea Agreement

During the 1960s the US and Soviet navies had several confrontations that raised concerns on both sides about the need for measures to prevent the escalation of such incidents. An agreement on naval confidence building measures, known as the Incidents at Sea Agreement, was reached in May 1972, and provided for measures to enhance mutual knowledge and understanding of military activities; to reduce the possibility of conflict by accident, miscalculation, or the failure of communication; and to increase stability in times of both calm and crisis¹². Among the provisions in the agreement are specific steps to avoid collisions between ships; the requirement that surveillance ships maintain a safe distance from the object under investigation; and prohibitions against simulating attacks at or launching objects toward ships belonging to the other party. The agreement also provides for advance notice of planned activities that might represent a danger to ships or aircraft, and annual meetings to review implementation of the agreement. Since its establishment, notifications have been transmitted through the NRRC.

This accord was promptly credited with improving relations between the Soviets and Americans and greatly reducing the number of naval incidents. Before this agreement, dangerous incidents occurred at the rate of tens per year. By 1990, the annual meetings between the United States and the Soviet Union treated only half as many. Both navies saw the Incidents at Sea Agreement as being in their best interest, which is a major reason for its success.

Nuclear Risk Reduction Centers

After a series of discussions on reducing the risks of nuclear war in the mid-1980s, the United States and the Soviet Union agreed to establish a Nuclear Risk Reduction Center (NRRC) in each capital and to establish special communication links between these

¹²*Arms Control and Disarmament Agreements*; United States Arms Control and Disarmament Agency; 1990; p. 142 - 149.

centers¹³. The equipment and communication lines utilized by the NRRC in both countries are identical to those of the "Hot Lines." In the United States, the NRRC is located in the State Department; in Russia, it is located in the Ministry of Defense.

The centers became operational in 1988 and are intended to supplement existing means of communication (such as the "Hot Line" and diplomatic channels) and to provide direct, reliable, high-speed systems for transmission of notifications and communications required under existing and possible future arms control and confidence-building agreements. At their initiation, there were no arms control agreements between the United States and the Soviet Union and the NRRCs were used only to notify ballistic missile launches required under the Accidents Measures Agreement and the Incidents at Sea Agreement. Now they are used to transmit information required under twelve different bilateral and multilateral arms control treaties, including the Intermediate Range Nuclear Forces (INF) Treaty, the Conventional Forces in Europe (CFE) Treaty, and the nuclear testing treaties. They will also be used to transmit information required under START, the Chemical Weapons Convention, and the Open Skies Treaty. Separate communication channels and work areas within the NRRC are used for bilateral and multilateral agreements. Bilateral communications also require a higher degree of confidentiality. The center employs one watch officer for bilateral communications with the Russians, two watch officers for CSCE-related communications, and a technical support person. The center is staffed twenty four hours a day.

The NRRCs may also be used to transmit "good-will" messages as a confidence building measure. The conditions under which such good-will messages are appropriate are vaguely defined, and neither the United States or the Soviet Union transmitted any such messages for the first couple of years of operation. Such messages have been transmitted on a few occasions in the last few years, however. Although the nature of the actual

¹³*Arms Control and Disarmament Agreements*; United States Arms Control and Disarmament Agency; 1990; p. 336 - 344; and Harold Kowalski, Staff Director of the Nuclear Risk Reduction Center in the United States, private communication.

messages is regarded as confidential, examples of appropriate subjects for good will messages include notification of a large disaster, such as the Chernobyl disaster, that affects the international community, or notification of the sinking of a nuclear submarine near the territory of another party.

The NRRCs have a narrowly defined role and are not intended to replace formal diplomatic channels of communication or the "Hot Line"; nor do they have a crisis management role. There is no provision for voice communication; and all routine written information is transmitted according to exact, negotiated formats. Formalized communications were favored because they lessen the probability of misinterpretation and remove personal bias from the system. Since communications are in multiple languages, exact formatting also makes possible computerized translation of notifications and other information.

In recognition of the importance of fostering understanding the United States and the Soviet Union, original planning for establishing the NRRC included provisions for research and discussion centers, in addition to the technical communication centers. At the time, out of mutual distrust, neither side was prepared to staff a center with a broader mandate and Geneva became the forum for discussions and consultations relating to mutual security. As relations between the two countries improved, the idea of a center for joint research on security issues re-emerged, but because of other existing forums neither side has seen it as a matter of particular importance or urgency.

Appendix B

The Conference on Security and Cooperation in Europe and its Conflict Prevention Center

The Conference on Security and Cooperation in Europe ¹⁴ (CSCE), whose current membership includes 52 Atlantic, European, and Eurasian countries, developed in the 1970s and is an example of a cooperative security regime. The goal of the CSCE is to reduce the risk of armed conflict by promoting dialogue and decreasing tensions between the East and West. It provides a political context for European cooperation in four major areas, or "Baskets:" (1) security issues and confidence building measures; (2) science, technology and economics; (3) humanitarian and other fields; and (4) implementation of current steps and additional negotiations. The Helsinki Final Act, a political commitment to make progress in the first three of these areas, was signed in August 1975. This broad security agenda, which recognizes the value to regional security of cooperation across a wide range of issues, became known as the "Helsinki Process." In recent years, several significant arms control agreements have been negotiated in the context of the CSCE in Vienna, including the Treaty on Conventional Forces in Europe (CFE) and the Open Skies Treaty.

The Conference on Confidence- and Security-Building Measures and Disarmament in Europe (CDE) is a subgroup of the CSCE devoted to issues in "Basket One." A major achievement of the CDE occurred in September 1986 with agreement on a set of politically binding confidence- and security- building measures (CSBMs), designed to increase openness and predictability about military activities in Europe. The principle measures call

¹⁴*Arms Control and Disarmament Agreements*, United States Arms Control and Disarmament Agency, 1990, p. 319 - 335; Fact Sheet: Conference on Security and Cooperation in Europe (CSCE), U.S. Department of State Dispatch, v3, p. 915(2), Dec. 28, 1992; Michael R. Lucas, *The Bulletin of Atomic Scientists*, p. 32 - 34, November 1990.

for states to: (1) refrain from the threat or use of force; (2) provide prior notification of certain military activities; (3) allow observation of certain military activities; (4) provide annual forecasts of notifiable military activities; and (5) allow on-site inspections from either the air or ground to verify compliance with the agreed measures. The underlying premise is that such openness will reduce the risk of armed conflict by providing reassurance to all parties about the non-offensive character of military activities in the region.

The CSCE Conflict Prevention Center

The CSCE Conflict Prevention Center (CPC) was established in November 1990, and located in Vienna, Austria¹⁵. Initially, it was envisioned as playing a large role in conflict prevention, which included technical activities such as establishing a communications network, and supporting implementation of CSBMs, as well as political activities such as providing a mechanism for consultation and cooperation regarding unusual military activities. In January 1992, the political role of the CPC was enhanced: it was named as the forum where CSCE States would hold regular consultations on security issues with politico-military implications and as the forum for consultation and implementation of decisions on crisis management. The CPC was also given the authority to initiate, execute, and monitor fact-finding missions as instruments of conflict prevention and crisis management.

As with most large bureaucratic organizations, the CSCE has many sub-organizations who compete for responsibilities and power. The broad and independent mandate given to the CPC in 1992 duplicated the efforts of other organizations and interfered with their authority. Some argued that the CPC removed conflict prevention activities from the broader political context and that it prescribed an unrealistic, mechanistic

¹⁵John Borawski and Bruce George, MP, *Arms Control Today*, p. 13 - 16, Oct. 1993; and private communications with William Wood and Jonathon Cohen of the United States Department of State.

process for dealing with conflict. Such considerations led to a marked reduction in the CPC's mandate in December 1993. It now functions as a logistics support unit for other CSCE activities, such as the six preventive diplomacy missions that have been established in regions of conflict: Georgia, the former Yugoslav Republic of Macedonia, Moldova, Estonia, Latvia, and Tajikistan. The CPC is responsible for purchasing, transporting, and maintaining equipment for the support missions.

It is under the auspices of these six CSCE missions that much crisis prevention actually occurs. Each mission resembles a small embassy, with between four and six staff officers, and a few local support personnel. Staff officers promote regional confidence building, with an emphasis on human rights. They travel the country and poll ordinary citizens, using the information to make policy recommendations to governments. For example, recent activities in Latvia have focused on the Latvian government's policy of sending expulsion notices to ethnic Russians. Although Latvia apparently has no intention of acting on these notices, the practice has produced great tension with Russia, where it is regarded as ethnic apartheid. Mission staff officers have gone before the Latvian government and recommended the termination of the practice, warning of the possibility of armed conflict with Russia. Their recommendations are influential, as they represent the views of the 52 CSCE member states.

In addition, the CPC prepares annual statistical surveys about the implementation of agreed CSBMs, takes part in CSBM-related activities such as observation of military activities or visits to airbases, and has established a data bank in which CSBM-related information is stored and easily retrieved. It also keeps up-to-date lists of points of contacts to be used in cases of hazardous military incidents and is connected to the CSCE Communications Network which allows for the quick transmission of all CSBM-related information to CSCE capitals. It circulates this information to participating states not connected to the network.

Crisis Prevention Centers as Confidence Building Measures: Suggestions for the Middle East

Distribution:

1	MS9018	Central Technical Files, 8523-2
5	MS0899	Technical Library, 13414
1	MS0619	Print Media, 12615
2	MS0100	Document Processing, 7613-2 For DOE/OSTI
1	DOE/NN-42	Ed Fei
1	ACDA	Vic Alessi
1	ACDA	Larry Scheinman
1	ACDA	Michael Yaffe
1	ACDA	Caroline Russell
1	ACDA	Amy Sands
1	ACDA	Don Mahley
1	DOS	Joe DeThomas
1	DOS	Fred Axelgard
1	DOS	Robert Einhorn
1	DOD	Mary Margaret Evans
1	LANL	Ken Apt
1	LLNL	Ron Lehman
1	LLNL	Jerry Mullens
1	LLNL	Keith Nakanishi
1	PNL	Jim Fuller
1	PNL	Brian Shaw
1	BNL	Ruth Kempf
1	U. of Ill. ACDIS	Stephen Cohen
1	UCLA	Stephen Spiegel
1	IGCC	Susan Shirk
1	MIT	Marvin Miller
1	GATech	John Endicott
1	Stimpson Center	Michael Krepon
1	Chemical and Biological Arms Control Institute	Michael Moodie
1	Plowshares	Linda Palevsky
1	SAIC	Pete Engstrom
1	SAIC	Lewis Dunn
1	SAIC	Wendy Frieman
1	SAIC	Patricia McFate
1	SAIC	John Sandrock

1	ISRAEL	Gerald Steinberg
1	ISRAEL	Ariel Levite
1	EGYPT	Mourad Al-Dessouki
1	EGYPT	Mostafa-Elwi Saif
1	EGYPT	Moukhtar El Fayoumi
1	EGYPT	Ahmed Abdel Halim
1	EGYPT	Ahmed Fakr
1	OMAN	Munthar Al-Muntheri
1	KUWAIT	Shafeeq Ghabra
1	QATAR	Zamel Sayyaf Al-Shahrani
1	SAUDI ARABIA	Saleh Al-Mani
1	MOROCCO	Omar Hilale
1	GREAT BRITAIN	Terry Taylor
1	MS0425	Richard Preston, 4115
1	MS0469	John Taylor, 5006
1	MS0458	Laura Gilliom, 5603
1	MS0472	Tom Palmieri, 5004
1	MS0471	Bill Knauf, 5008
1	MS0576	Tom Wright, 5908
1	MS0755	Art Verardo, 6612
1	MS9201	Larry Brandt, 8112
1	MS0151	Gerry Yonas, 9000
1	MS0970	Tom Sellers, 9200
1	MS0971	Bill Cook, 9202
1	MS0567	Steve Dupree, 9208
1	MS0567	Arian Pregonzer, 9241
1	MS0567	Kent Biringer, 9241
1	MS0567	Pauline Dobranich, 9241
1	MS0567	Michael Vannoni, 9241
1	MS1373	Kerry Herron, 9241
1	MS1373	James Kinnison, 9241
1	MS1373	John Olsen, 9241
51	MS0567	Colista Murphy, 9241
1	MS0567	Richard Beckman, 9291
1	MS0567	Jim Arzigian, 9291
1	MS0567	Max Sandoval, 9291
1	MS0449	Michael Skroch, 9403
1	MS0129	Nigel Hey, 12620