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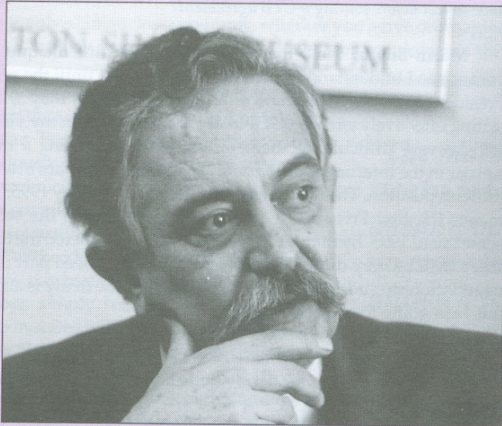
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Miguel Marin-Bosch: Achieving a Comprehensive Test Ban



Jack Mendelsohn

After years of delay, serious negotiations on a comprehensive test ban (CTB) treaty began in Geneva in January, and there are indications that rapid progress could come during the next few months, with important implications for other arms control treaties.

Ambassador Miguel Marin-Bosch is a career diplomat in the Mexican foreign service who has followed arms control issues in Geneva and New York since 1969. He is currently Mexico's permanent representative to the United Nations Conference on Disarmament (CD) in Geneva and Chairman of the Ad Hoc Committee on a CTB. His April 26 interview with *Arms Control Today* took place in Washington between formal sessions of the CD, where, as chairman, he is expected to soon present a draft CTB treaty as a focal point for further negotiations and discussions.

Arms Control Today: How would you characterize the general atmosphere at the CD? Have the delegations worked together constructively?

Miguel Marin-Bosch: The atmosphere at the CD is excellent. Without exception the 37 members plus the observers, of which there are more than 30, are enthusiastic and are looking for solutions to major questions regarding a comprehensive test ban.

ACT: How would you characterize the U.S. role right now?

Marin-Bosch: As with any other nuclear-weapon state, the United States needed the time between the decision of the conference last August 10 and the beginning of this year to think things through and get into a negotiating mode. The problem is that countries like the United States and the other nuclear-weapon states have been in a different mode for 50 years, and people in these governments have been thinking in terms of an arms build-up. I know there have been negotiations on the subject in the past. I think, however, that it has been difficult to turn this thinking around, but U.S. officials have finally gotten around to it, and I am very optimistic that they will continue to make very positive contributions. I am sure when we reconvene they will come up with some specific proposals, for example on verification.

ACT: When do you plan to offer a chairman's draft treaty text at the CD?

Marin-Bosch: I had hoped to have a "rolling text" when we started in February. That is something that my delegation had pushed for in November and December of last year, but we realized that it was impossible for Ambassador Yoshitomo Tanaka of Japan to get the approval of the committee to come up with a rolling text.

That would have helped a lot, but it was not possible and maybe there was good reason for that.

People have suggested that we take the Swedish text as the basis. We would have had no problem with that; nor would we have had a problem taking the Australian proposal, but there was some resistance to that approach. Now I am going over this text, which will come out by mid or late June. It will basically be drawn from what is already on the table; there will be things drawn from the Swedish text and from the Australian text, and most important, there will be elements drawn from areas where we seem to have general agreement on issues that we worked out in the past few months in the working groups.

ACT: Would you define a rolling text?

Marin-Bosch: A rolling text is basically treaty language on the main—if not all—provisions. It has brackets, which provide alternatives in some cases, but it is a text that eventually evolves into the treaty. It is a text people are willing to focus on as the only text around, so it is very important.

ACT: Do you think a CTB can be completed before the nuclear Non-Proliferation Treaty (NPT) extension conference begins in April 1995?

Marin-Bosch: I think there is a general desire, not a unanimous one necessarily, to get this thing finished sometime near the beginning of next year. Whether we can do it or not depends on many things, but my intentions are, once I put forward the text, to take a break of about two weeks at the beginning of July. That will give delegations a chance to read it, reflect on it, and come back with specific changes to certain provisions that they want to accept (or reject if that is the case) of certain provisions.

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Then, from the end of July to the beginning of September we will go non-stop, in very intensive negotiations. At that point, we will have to decide whether we are going to break when the CD breaks normally, which is the beginning of September, or to go on non-stop or for certain periods between September and December. My feeling is that intersessional negotiations will probably take place after September, something which does not occur now. I doubt that delegations will be ready to move ahead in July. Maybe they will be. My feeling is that by September, delegations will not only be willing, but insisting that we go on because we will have begun a very fruitful negotiating process.

ACT: *In the post-September negotiations, are you talking about just the ad hoc committee on a nuclear test ban or the full CD?*

Marin-Bosch: I do not know how this will play out. The CD will not be in session, but the ad hoc committees certainly will be. We already have precedents for certain ad hoc committees working through the intersessions.

ACT: *How important is it to have a CTB in hand for the NPT extension conference? Is there a relationship between the two processes?*

Marin-Bosch: My government, and I personally, have a very special view of the linkage between the CTB and the extension of the NPT. Leaving my own view aside, I think there is general agreement that there is a relationship between the conclusion of a CTB treaty and the atmosphere for the extension of the NPT. Whether you call this a formal or an informal link, or just a coincidence in time and space, everybody agrees. And if you read the statements of many countries, including some of the nuclear-weapon states, you will realize that they do not make formal links, but they certainly say it would be helpful to have a CTB treaty in hand, either signed or almost complete, before the NPT meeting. It would be much better if we had it in hand because if you try to imagine the NPT extension conference without the CTB, people will say, "Well, what happened? Why is it not ready? What are the problems?" NPT members will be asked to extend the treaty indefinitely without having some kind of assurance that this treaty is going to be in place.

ACT: *One or two states have suggested a kind of "reverse linkage" between the CTB and NPT negotiations, making the CTB treaty dependent upon the extension of the NPT. What is your view of this approach?*

Marin-Bosch: I think this kind of proposal reveals the concern people have when entering a treaty that will effectively ban their possibility of testing. There are many ways of putting it. One is, "I want the international community as a whole to tell me they will not test before I say that I will test no more." Perhaps this is not the most elegant way to put it, but it does reveal a concern often put forward when we discuss the question of the entry into force. And that is something that we will have to come to grips with. There are countries whose legitimate national interests are affected by a CTB. You may not agree with their perception, but they feel it, and that in itself is an issue we have to resolve in a way that is acceptable to everyone. This does not mean a single country is given a veto, but for the CTB to go into force you have to find a formula that provides some degree of comfort to those who feel their interests are affected by this treaty.

ACT: *There is a very strong likelihood that China will test during these negotiations. Will this have an impact on the negotiations?*

Marin-Bosch: I think it will have an impact. I do not think it will derail negotiations, but it will certainly have an impact. It is one thing for China to test in October 1993 *before* we began negotiating, it is another thing for it to test *while* we are negotiating. At least some countries will interpret this as not a very constructive attitude to take toward the negotiations.

ACT: *What about the position of the French government, where there seems to be a majority opinion, which is not yet policy, that it will have to test before joining a CTB agreement?*

Marin-Bosch: Well, that is another very difficult question because as I understand it, the French cannot test until the end of President Francois Mitterrand's term, which means they will be testing effectively *after* the CTB treaty is completed. In my view, it will be very difficult for them to test without causing a major uproar in the international community, so I think they are in a very difficult position. The new president takes office in May 1995. That means the first French test could take place during the second semester of 1995. By then, I think we will have completed the treaty and it will be very difficult for a country that has been part of the negotiations to suddenly say, "Oh, by the way, the treaty is alright, but I am going to go on testing."

ACT: *This idea that international pressure is going to make it very difficult for France to resume testing actually sounds rather hopeful.*

Marin-Bosch: I think they have decided they want to go on testing. But between now and a year from now is a long time and there is a lot of rethinking that has to go on.

ACT: *You said a Chinese test during the negotiations could have a negative impact. Did the U.S. decision to extend its nuclear testing moratorium through September 1995 have a positive impact?*

Marin-Bosch: Absolutely. It was an unequivocal sign of good faith, at least through 1995, which means basically through the whole negotiating process the United States would abstain.

ACT: *What issues do you think are going to be the most difficult to deal with during the negotiations? Taking them one at a time, what about the definition of a nuclear test?*

Marin-Bosch: The main difficulty has already been overcome, which is to sit down and begin negotiations. That was the major obstacle, and we have overcome that. As to the so-called major, outstanding issues, people have tried various ways to define exactly what we will be banning, and that has whetted a lot of appetites, with people in various quarters trying to put as much as possible into the "scope" provisions of the treaty.

Some delegations went so far as putting this on paper, trying to come up with something that was water-tight, air-tight, everything-tight. But the more they tried, the more they realized the complications were enormous in trying for a very ambitious definition. That has led people to try to keep it as simple as possible, as it is in the 1963 Partial Test Ban Treaty, which basically says nuclear explosions are banned, period. What is a nuclear explosion? If you go into that definition, you might be negotiating the treaty for the next 10 to 15 years. My own sentiment is that if you do not keep it simple, negotiations will be unduly complicated.

ACT: *In the "scope" provisions of the treaty, one or two states have talked about the possibility of exceptions or special tests during the*

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duration of the treaty, implying that perhaps they may require a provision allowing peaceful nuclear explosions (PNEs). Do you think such provisions will have a place in the final CTB?

Marin-Bosch: Anyone who has been used to doing something for a long time and is suddenly told that as of tomorrow they will not be able to do it, will look for ways to continue an activity they are accustomed to. It is part of human nature.

In some places it is also part of very legitimate "social concerns"—what to do with a whole community of people who have been involved in nuclear programs, whether you agree or disagree with what they were doing, but they have been employed in this work.

In some countries the impact is much greater than in others. A good example is the Russian Federation, where there is a tremendously large community of scientists and technicians. I have been told there are even complete cities that depend on these kinds of activities.

But the idea of having exceptions to the rule is the best way to derail the whole process, simply because the non-nuclear-weapon states will not accept an exception. Nor will they accept the so-called reliability or safety tests, or this idea that "in 10 or 15 years we might take a look at this and maybe we can have a couple of tests here or there with your blessing."

The main point of this treaty is to send an unequivocal signal that no more tests will be allowed for any reason. The minute we deviate from that we are vulnerable to exceptions. Suppose, for example, in the future some country that is not a "recognized" nuclear-weapon state develops a very crude nuclear device and invokes this "reliability and safety test" provision. That country would have a legitimate right to test its device under the treaty, saying, "We want to test the safety and reliability of this thing we have created." That would be contrary to many objectives of this treaty.

ACT: *One of the drafts circulating earlier banned preparations for nuclear testing. What will happen with this idea?*

Marin-Bosch: That is part of this exercise we are currently undertaking—to try and see exactly what kind of activities we are banning. And there is a legitimate concern with the question of proliferation. There is, of course, the "reduction to the absurd" argument on this issue, along the lines that teaching physics in high school actually prepares people to conduct an eventual nuclear test. But there is a point where making a big hole in the ground somewhere, or the obvious movement of material and scientists to a special place, would set off an alarm.

But this has to be weighed against the idea that there are certain things you just cannot verify and that you would go crazy trying to verify.

I have a feeling we will end up with a text that does not specifically ban preparations, but somehow leaves the opportunity or the possibility open for a country that has legitimate concerns about somebody else's activities to be able to alert the international community. What the mechanism will be I do not know, but it will be very difficult to ban preparations because that is very difficult to verify.

ACT: *On the issue of the entry into force of the treaty there is some discussion about how many states—and how many nuclear-weapon states—must first sign. Where does that stand and where is it going?*

Marin-Bosch: There are any number of formulas. Most countries—not necessarily the nuclear-weapon states, but most countries—would favor a simple formula for entry into force. That is to say, "X" number of ratifications and the treaty goes into force—no specifically named states, just straight numbers.

At some point we will have to take into account the legitimate, perceived or real concerns of some of the countries that are being affected. And these countries have a right to ask, "If I sign this treaty, will this also bind countries X, Y and Z?" How we would put that into words, and how that formulation could affect entry into force is something we must come to grips with, because it would vary, with a lot of conditions and the possibility that one, or a few countries could hold up entry into force for everyone. I think that would be tantamount to disaster, so we have to find the right formula.

I feel we should keep it simple and not require all nuclear-weapon states to join at the same time, nor all threshold states. The example of the NPT is rather good.

If you look at any arms control and disarmament agreement of the past 30 years related to nuclear testing, you will find that the Partial Test Ban Treaty was signed by three of what were then four nuclear-weapon states and the NPT was signed by three of what were then five nuclear-weapon states, and nothing terrible has happened. The other two states said they would abide by the NPT, and eventually, after criticizing it for 20 years, they acceded to it. I do not think we have to wait 20 years with the CTB.

The important thing is to get a critical mass of countries, including countries with significant nuclear activity and countries with much less nuclear activity, and that itself has a tremendous moral leverage on the others. There is also the fact that these countries will have actually negotiated the treaty, unlike the NPT where the two states that refused to join for so long had not been in on the negotiations.

ACT: *It seems to be your view that the CTB could enter into force before all five declared nuclear-weapon states have ratified it.*

Marin-Bosch: That is my own personal view. I know there are many different views. I called it a "critical mass" and a critical mass is not 100 percent.

ACT: *What is your sense of the position that will be taken on the treaty by non-declared or threshold nuclear states like Pakistan, Israel and India? Will they join the treaty?*

Marin-Bosch: If what they are doing in Geneva is any indication of their attitude to the treaty, I think all three are likely to sign.

ACT: *How would you characterize the discussions on "no-first-use" and the relationship of such a declaration by the nuclear-weapon states to progress on the CTB? Is it possible this issue could hamper progress in achieving a treaty?*

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Marin-Bosch: I think no-first-use is part of the long shopping list of issues that many countries wanted to link to the CTB. And there is a case to be made for an agreed no-first-use declaration by the five nuclear-weapon states. Obviously this is premature. Obviously also the nuclear-weapon states are rethinking their old relationships to nuclear weapons: what role they play and what utility they have in their defense postures.

No-first-use declarations are important, but they are not something that is going to happen in the next six months. It will take longer because of the reviews I mentioned, and because we have not seen the end of the "movie" yet in Europe. We are only in the middle of it and nobody has written the end yet. That causes a lot of concern, especially in think tanks, and among people who make strategy.

ACT: *If no-first-use is not in the offing, what about negative security assurances?*

Marin-Bosch: That is far easier to come around to. The experience of the last four or five years has shown that countries such as the United States and others could make a commitment not to use or threaten to use nuclear weapons against a non-nuclear-weapon state, or state parties to the NPT, whichever way you want to formulate it. But nuclear-weapon states have made this commitment to countries in the Latin American region, and their experience in certain conflicts in recent years shows that they really do not have to think in terms of the possibility of using nuclear weapons to resolve military conflicts.

ACT: *Do you think the negative security assurance should be codified in a protocol to the NPT or in some formal international treaty?*

Marin-Bosch: Obviously unilateral declarations are important and Security Council declarations would be important. But a full-fledged treaty would assuage the concerns of a lot of countries, especially in regions that do not already have negative security assurances like those enjoyed by the states of Latin America.

ACT: *What is your view on whether the International Atomic Energy Agency (IAEA) should be responsible for CTB verification?*

Marin-Bosch: The whole problem with verification of a CTB has to be seen in the context of what we have done with chemical weapons. In the Chemical Weapons Convention (CWC), which eliminates a whole series of weapons of mass destruction, we created a very elaborate verification system, but we also created a rather ambitious organization to run this verification, to oversee the implementation of the treaty. That experience, which is still on-going because it will be finished next year, has led some countries to be a little more modest about what to do in the next international organization. The Swedes were the first to suggest that we use existing organizations such as the IAEA. Countries have different perceptions of the IAEA, which has done a lot for some countries, at least that is the way they see it, and has done very little for some others.

The problem is that the IAEA is going through a period of reassessment because of its experience in Iraq, because of what has happened in North Korea, and because of the schizophrenia with which it was born, just like the NPT. That is to say, on the one hand there were the so-called nuclear development programs, and on the other hand the safeguards agreement for non-weapon states. Those two activities have caused tremendous stress for the organization, which plays out sometimes in the business of a budget—

how much is spent for this, how much for that. But basically what has happened is that some people, some countries, have doubts as to the effectiveness of the IAEA and would not be willing to add to its already overburdened activities the burden of verifying a CTB treaty.

Add to that the fact that what we are interested in for a CTB treaty is not necessarily counting how much fissile material a country may have. We are basically discussing something else, which is verified in a way that is beyond the present means of the agency, such as seismology and the presence of radionuclides—although the IAEA has had some experience with those in Iraq, and another area, hydroacoustics, which is unknown to the IAEA. Actually with radionuclides you have some other agencies such as the World Health Organization that have modest experience. So you are really asking the IAEA to be innovative in an area that some countries would prefer to keep to themselves in a different agency. I think the overall feeling in Geneva now is that perhaps we will not rely on the IAEA.

If the IAEA could have come to Geneva and said, "What you are saying you want to do in this area, we could do for less," they would have won much support. But they could not do this because they have no idea how much it is going to cost. If you are going to develop a cadre of people who are going to be experts in seismology, I think people would rather begin from scratch rather than to retrain IAEA inspectors.

ACT: *Is the existing global seismic network sufficient? Do we need monitoring systems in addition to seismic systems?*

Marin-Bosch: The verification of the CTB treaty has to be kept simple. The Partial Test Ban Treaty of 1963 had no section on verification. Obviously these were atmospheric tests, which are much easier to verify than underground tests, but we should not exaggerate the importance of verification. I know verification has played role in advancing or stopping a trend toward a CTB treaty, and although it is far from perfect at present, the seismic network that is being developed gives sufficient confidence to member states. Basically, what countries want is to be able to count on reliable information from an independent source that they have created, not to rely on somebody else's sensors or satellites, and we should encourage more countries, especially in certain regions, to participate. You have to give everyone a clear idea that you are going to have an *ad hoc*, internationally run, multilateral verification regime, and seismology offers the best possible route now. Here the Australians are absolutely correct, saying it would be an "add on" process and one that is evolutionary, where as technologies become better, perhaps cheaper or more confidence-inspiring, they will be added to the verification regime. But there is nothing to preclude the parties from deciding that every five or 10 years they should sit down and take a good look at seismic and the other technologies such as hydroacoustics to be incorporated. This is certainly going to be one of the specific things discussed at our next session in May.

ACT: *What about states with specific national technical means that are not internationally available, like the U.S. reconnaissance satellites? Can they play a role?*

Marin-Bosch: I believe there will be countries that will not want this to happen, just for the "aesthetics" of it, and they would shy away from it because they would feel that in the final analysis they would be relying on this or that country. So it is very unlikely that states with national technical means will be required to con-

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tribute data from those means to the agency or organization that becomes responsible for verifying a CTB treaty.

ACT: Who should pay for the verification regime?

Marin-Bosch: Everybody should pay, but obviously we cannot ask everyone to pay the same amount. We should use the same method used in the United Nations, so that it would be an attack on the dignity of any country if it was asked not to pay. "How much" is a different question, but it should be an equitable distribution like we have in the UN.

ACT: Is there is a consensus on the duration of the treaty?

Marin-Bosch: There is a consensus among the non-nuclear-weapon states that duration should be indefinite. For them it does not make much sense to have a treaty of a finite nature; I think it would be contrary to the spirit of the whole exercise.

ACT: What is the attitude of the nuclear-weapon states on duration?

Marin-Bosch: I do not think they have decided yet among themselves, or perhaps even individually exactly, what they want. This is part of the natural reaction to a CTB that I spoke of. They will have to come around to the idea that if they insist on a finite treaty or a treaty with renewal segments, they will find the enthusiasm in a lot of countries that they would be interested in seeing as parties to it will lag and they will not get universality, which is one of the aims of the whole exercise.

ACT: Does this idea of CTB duration also relate to the idea of NPT extension discussions?

Marin-Bosch: No. Even if we did not have an NPT, people would go into a CTB only if they knew it was forever. Imagine the psychological message you are sending to your own bureaucracies involved in testing by saying, "Well in 10 years we might be able to go back to this."

ACT: If the nuclear-weapon states pressed for a limited duration on the CTB, is it likely the non-nuclear-weapon states would call for limited duration on the extension of the NPT?

Marin-Bosch: No, I do not think that would occur. There are very active countries in the CTB that would push very hard for the unlimited extension of the NPT regardless of anything else. And those same countries would not accept anything less than an unlimited CTB treaty regardless of what happens to the NPT. So, I do not see that there is a link.

ACT: Do you think the CTB treaty will include a provision to impose sanctions against states that violate the provisions of the pact?

Marin-Bosch: I would hope—although I am not sure that is how this will eventually come out—that there would be some provision in the treaty where, if it was proven that someone had violated a treaty, certain sanctions would apply automatically. The minute the treaty had been violated, certain things would happen automatically without having to go through any other international forum. The parties themselves should be the ones to determine that, and the best way to ensure these things happen—and quickly—is for them to be automatic. When, instead, there is agreement that there has been a violation, but then you must decide

what to do about it—what steps should be taken—that minute you begin a popularity contest.

ACT: Could you envision a scenario in which the CTB treaty is completed before April 1995, but China and France announce that they plan to continue testing?

Marin-Bosch: If we go to the NPT review and extension conference and some of the nuclear-weapon state parties to the NPT continue to test, I think there will be tremendous doubts as to their good faith in implementing Article VI of the NPT. There is no question that will become a major issue. In the past, and Mexico has been one of the countries most guilty of this, we have concentrated on the nuclear stockpiles of the two principal nuclear-weapon states. This kind of behavior after the CTB is completed and the NPT is up for renewal will obviously shift the international community's focus of concern about the lack of implementation of Article VI to precisely those countries that have said in the past, rightly perhaps, that their country's arsenals are so modest that they ought to be allowed to somehow catch up. This will crystallize that debate and I believe the reaction of the non-nuclear-weapon state parties to the NPT will surprise a lot of people because of the enthusiasm with which they will pursue this line.

ACT: Speaking of Article VI, what other steps can the nuclear-weapon states take, besides a CTB, to help fulfill their obligations?

Marin-Bosch: In terms of the United States and Russia, START I and II are very important. But there are at least a trio of things that countries, especially non-aligned countries, have been putting forward as important. One is the CTB treaty. Another is the negative security assurances. And then there is what former Canadian Prime Minister Pierre Trudeau used to call the suffocating of the arms race, which is the cutoff of fissile materials. These are very important. Whether you get very far on the fissile material cutoff agreement between now and next year is difficult to predict, because it is going to be much more complicated than some of us had thought originally. Given the fact that the United States has unilaterally stopped the production of fissile material for military purposes, I think the interest of the non-nuclear-weapon states, especially in the developing world, is far greater on negative security assurances. This is something that Nigeria, Egypt and others have been struggling to have as an offering to their own publics in exchange for their position regarding treaties that are often criticized in their own countries. In terms of priorities, I would say the nuclear-weapon states can send the right signals with a CTB, deep reductions in nuclear weapons, a fissile material cutoff, negative security assurances—these are the key steps. And perhaps I would add the outlines of START III.

ACT: You have been a long-time supporter of a test ban. What do you see as the major benefits of a CTB treaty?

Marin-Bosch: It will send an unequivocal signal to the world at large that no one is going to test again. Whether that effectively reverses the nuclear arms race is yet to be seen. I believe it will have a definite impact on the qualitative nuclear arms race. It is a change in psychology, getting people in the proper nuclear build-down mindset. Since 1945 we have had well over 2,000 nuclear tests—that is a lot of tests—about one test a week. And just the thought of stopping tests changes the whole approach to nuclear weapons within the nuclear-weapon states and I hope in any country concentrating on acquisition.^{ACT}