

# **“Meeting between UN Biological Inspectors and Iraqi Officials Including Dr. Rihab Taha”**



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**Key: UM = Unidentified Male Speaker**

**Transcriptionist comments, clarifications, and additions are italicized in brackets**

[Time Stamp: 00:11]

**UM1:** [*Inaudible*] doing business with you. Now, I'm impressed with what I see when it comes to flexibility, how swiftly things could be carried out; how you can reach the orders to various people, various agencies. I'm really impressed with it.

In Vienna, I asked you, General Sa'di please, could you lecture me or us somewhat on what informal decision-making processes there may be in Iraq; And I know this could be a political issue, or it could be an ethical issue, or whatever; And I took the previous, I said in Sweden there are several informal decision-making processes; you have the Swedish church if you belong to them, you see the people there, and you exert power that way, or you have the Social Democratic Party, or you have the rotary or alliance or whatever, and of course we know that you have the Ba'ath Party in Iraq and there may be other organizations that you could belong to or that you don't belong to. And I know that at that time you felt that you could not dwell on that, and you said, I think your response was there were not such informal decision-making processes.

But I think [*you*] exemplified [*this*], you said that Hindawi could exert power that were by means outside the normal decision-making, so to say; by that, I understand you exemplify that there is this sort of kind of informal -- [*Interrupted*]

**'Amir Al-Sa'di:** [*Inaudible*].

**UM1:** Yes, could you comment, or is it possible for you to comment? Because frequently I find myself in a position where I find I don't know what's happening when it comes to decision-making, when it comes to decisions that you have to take. But when you talk to us, it seems that you don't want it, its illogical, you don't want this decision to have been made, but yet, you have to live with it. And there are several occasions in March after [*inaudible*], several occasions when this has come up. Is it possible for you to give some enlightenment on this issue?

**'Amir Al-Sa'di:** I don't perceive a specific question here but nevertheless I will try to tell you something. I think I explained that [*inaudible*] was unique particularly when it scored very very high profile success; so it enjoyed influence and power; it was the most powerful ministry in the country, so things could be done fast. [*Inaudible*] indecision, and yesterday I gave you an example of a decision to build the *Haider farm*. Millions and millions of dollars of investment; it was not on the plan; it was not, no funds were allocated in the year, that year when we started, and it was not foreseen that we do that; and we do it locally or [*as an*] indigenous effort. It was done. It was accepted and done, and accelerated.

**UM1:** And if I were to look for the paperwork for this, for the decision-making, there would be?

**'Amir Al-Sa'di:** There was none.

**UM1:** There would be none? Okay.

**‘Amir Al-Sa’di:** There is none. You would only find reference at better state with the attachment saying: ‘order of minister, on the night of so and so’ in which he ordered that this *Haider farm* should be built and copies to be given to people from whom he wants assistance and coordination, plus a case attachment to provide all the blueprints for verifying, to a special group, ad hoc group, that was named to oversee the organization, files [inaudible] for construction, coupled by telephone calls to staff. There was no plan. Nobody even drew up a chart. It was that while the work, preferably side work, was being made. This was an example of how things were carried out.

[Time Stamp: 05:10]

**UM1:** Because the right person has got it, is that it?

**‘Amir Al-Sa’di:** Yes, the right person. And it was also in the overall concept that it was needed; there was a requirement for [inaudible]. But this could be done in the normal way. Plans submitted, go to the Minister of Planning, it is submitted to higher authorities, and things would be discussed because it would be investment decisions that require maybe a hundred million dollars or so. That was—still it was a time it was really in its heyday in 1987, in 1988. And that was when most of these things started and decisions were taken in an accelerated way. Now [inaudible] exactly how the administrator would work.

**UM1:** And for Professor Hindawi, as an outsider then, for an outsider to -- [Interrupted]

**‘Amir Al-Sa’di:** If he has a case, he would win. If he has a case. Anybody, not [just] a citizen, he could write criticizing something or attracting attention to a point. And if it is seen as correct by preliminary investigation, it will be taken. So in [inaudible] it is easy to say we had a good project that was successful and showed results and we are anxious of the [inaudible] made some trials and yet the chemists at *Haider* kicked us out or tried to do this or that to our project; so nobody could really, you cannot defend that. You cannot defend that. If I had seen one sentence out of their reports at the time, we might have been able to kill that project.

**Rihab Taha:** I mention His Excellency [inaudible] -- [Interrupted]

**‘Amir Al-Sa’di:** If I had seen that the anthrax could be treated with penicillin prior to or after infection, I would have said ‘this is nonsense, this is no weapon. They are not really—they should be [creating] something that is resistant to common or existing antibodies at least.’ And that would be the end of that. They may go back to research and try to find something more convincing, but I hadn’t seen it. I saw it only when we were doing the investigation.

**UM1:** Please, going back to Professor Hindawi as an example. So he had influence, or he could have influence? That doesn’t -- [Interrupted]

**‘Amir Al-Sa’di:** [Yes] as a professor, a specialist in biology, and talking about something genuine, he would. He would have people listen.

**UM1:** So it doesn’t infer that his family or his clan, or his friend -- [Interrupted]

**‘Amir Al-Sa’di:** No.

**UM1:** Or that his [inaudible] party member. It doesn’t infer that?

**‘Amir Al-Sa’di:** No, not at all. Not at all. Even when people write to the Ba’ath Party, the Ba’ath Party is not an institution that has specialties and so on. It would be given to the proper channels.

**UM1:** And you mean the society at that time was so open that -- [Interrupted]

**‘Amir Al-Sa’di:** It is open now. You can do anything, like you have a letter and you give it to the reception of the palace— you hand it over and you would hear back. You put your telephone number and they would contact you [inaudible].

**UM1:** Okay.

**UM2:** Is that going to happen for us? [Laughing] Mr. [Inaudible], do you have any general questions as opposed to specific questions?

**UM3:** I want to know how many people were working in the [inaudible] and the [inaudible] and the [inaudible].

[Time Stamp: 10:05]

**Rihab Taha:** The three [inaudible]? About ten.

**UM3:** About ten. And the foundation?

**Rihab Taha:** About four or five, as I remember.

**UM3:** Four or five. And the [inaudible]?

**Rihab Taha:** Just that there has only one. But we started very late in the middle of 1990.

**UM3:** Alright. [Inaudible] can you describe the results of anthrax?

**Rihab Taha:** Well there is experiment in propagation, [inaudible] and experimental effect of spores and toxin on [inaudible] packaging and seeking; and the other can we evaluate as a representation of what we can achieve. You can get a good deal of toxin, and we can get also a good deal percent of the [inaudible].

**UM3:** Only eighty percent was used and [inaudible] toxin or anthrax?

**Rihab Taha:** Both. Toxin and anthrax.

**UM3:** Both. And then you said, you not to take any effect for [inaudible] toxin and anthrax, you said that. And I think, for toxin, that the exposure may not take effect. But for anthrax, because they are lab metro organism—so what is the thinking on that?

*[In Arabic, ‘Amir Al-Sa’di discusses with Rihab Taha the differences between toxin, anthrax, and live organisms in an attempt to clarify the question]*

**Rihab Taha:** Well, even toxin is a protein material. And he [inaudible] is a protein. We didn’t use of course anthrax in [inaudible].

**UM2:** Anthrax was never tried?

**‘Amir Al-Sa’di:** Yes, anthrax was never. Yes. Yes.

**Rihab Taha:** And we get the result of the exposure. Of course some of them were far affected. But as far as the whole percent, we are still at eleven of [inaudible] the cases.

**UM3:** [Inaudible.] At the beginning, after you came back from the UK, you were [inaudible]?

**Rihab Taha:** No, I was teaching at the University of Baghdad, College of Science about moss and anthrax.

**UM3:** [Inaudible].

*[Inaudible; Rihab Taha talking in Arabic to ‘Amir Al-Sa’di]*

**Rihab Taha:** As I asked, as I transcribed to send General Nazari to give me an idea, [inaudible] then you will join. I was director of this [inaudible].

**UM3:** In which year did you get your PhD?

**Rihab Taha:** Eighty-four.

**UM3:** Eighty-four. And what—you were in university for three years?

**Rihab Taha:** No, just for four or five months; and then in February 1985 I was at al-Hakam.

**UM3:** And how long were you at al-Hakam?

**Rihab Taha:** For two years.

**UM3:** For two years. And how long did you stay?

**Rihab Taha:** From 87 to 90.

*[Time Stamp: 15:00]*

UM1: Dr. *[Inaudible]*?

UM4: General Hindawi gave you some sort of guidelines for your work? What were the guidelines regarding the work?

**Rihab Taha:** Well, they gave me a general idea about the work; really, I can't remember what was discussed at the meeting; but as I remember, it was just the general idea; he gave me this book about chemicals of mass destruction and I read about that and I started.

UM4: There was no kind of plan? So that means you, yourself, set your aims. What were your aims?

**Rihab Taha:** Well really, I was thinking to start with something easier for me to handle in my specialty which was toxins, bacteria toxins, and since *[inaudible]* toxins is very well known as a BW agent why not choose this agent, why not start with this agent. I also started with Anthrax because I learned, I read, this was a good candidate for BW. So I chose these two at the beginning. And also *[inaudible]* any microorganism with a spore formation which can resist adverse conditions.

UM4: Ok, here actually you define one of those *[criteria]*: 'resists environmental conditions exposing forces.' You already had biological warfare in mind right? You started with these agents, but also, what was the outcome of those findings?

**Rihab Taha:** You know nothing had been planned well, we plan as things develop, but fortunately, I started with the right agent to start with; I mean, I'm not like a toxin *[possibly brew]*, they chose an agent which I believe it is not a BW agent. So I don't know, I mean, God helped me and led me to choose these two agents.

UM4: *[Inaudible.]* I am just trying to understand how you— what kind of approach you took at that time. What was your understanding of biological warfare? You must have had some recognition, because it's not enough to start with selecting agents, because you must have thought about producing them at some stage; and also, what would you do when you produce the agent, then? It seems like it's sure to have crossed your mind.

**Rihab Taha:** It's difficult now to discuss this matter, because now it's about 13 years after the beginning of this matter, and now I have information—much, much more than in 1985. So it's difficult to think like I was in 1985. It's difficult. I can't say.

UM4: *[Inaudible.]* You were at some sense at the crossroads of production: you needed to produce some to go to the next stage. Who made this estimate? Where did this come from; why was this, now, all of a sudden, an issue?

*[Time Stamp: 19:28]*

*[In Arabic, 'Amir Al-Sa'di clarifies the question for Rihab Taha]*

**Rihab Taha:** [*Inaudible.*] Well, no one identified this marker. We as a [*inaudible*] people, we knew that after [*inaudible*] you have to go to a scheduled production state. But as I mentioned, at that time, I would now suggest it was the fermenter [*al-Taji Fermenter*], because he wanted to show people that he was doing something, and you know that this fermenter is out to please, so you give a proposal, or present a proposal. Why not make use of this fermenter, make use of this good product? We can use this, probably, in future work. And that -- [*Interrupted*]

**‘Amir Al-Sa’di:** That was the signal—Shah’eem—that this program now means business. [*Laughing*] It’s much harder to do that anymore.

**Rihab Taha:** But no one said we are edging now for production; no one subjected us or authorized us to go to this stage.

**UM4:** [*Inaudible*] but at some stage, someone decided that none of this is really going to the next stage, and then a couple of months later, I think it was 1987, [*inaudible*] killed. How did that happen? What was going on in your world that actually pushed you to the next stage?

**Rihab Taha:** It was the middle of 1988, not 87. At the end of 1987, we finished our lab experiment. And Dr. Moghtadda asked us what we are going to do after that. We have to choose to do some [*kind of*] field experiment. So we started to do the third field experiment, the first field experiment at al- Muthanna and [*inaudible*] at that time. And then Dr, Moghtadda asked us what we were going to do later. We have then a discussion. And then, probably, he transferred it to his superior. And later on, he asked us to prepare our staff to start production. So the decision was taken from our superior. And we start to prepare [*inaudible*] and contact media and prepare for experiment [*inaudible*].

**UM4:** [*Inaudible*] we also worked in the laboratories in Milan, and I imagine there’s not such a difference. Certainly, the rules of nature are not that different between what happens in the laboratories. And if I am being transferred, if I have to move my laboratory, even within my institute to a different floor, it would slow my work down for at least a half year, I would say. And it seems that—there was no plan, there was no guidance, there was no one really pushing you, pushing you to this stage, and still you were able to transfer from one site to the next site, work continuously, continue to produce good results, and already move into the next stage of the program. It’s just—I’m trying understand how this all happened. This is the only reason why I ask this question. Some of my colleagues and I don’t understand.

**Rihab Taha:** Well this is what happened. I’m telling you this is how it happened. And I tell you from the beginning, that probably you’re not going to accept it, but this is the system in Iraq.

**UM4:** My other concern is that during the last three sessions, the role of the protector of the BW program switched from Husayn Kamil to General Sa’di himself, and as we heard yesterday evening, to Professor Rihab. This evasion, these stories and accounts you’re giving, just don’t allow me to have confidence.

[*Time Stamp: 24:59*]

**Rihab Taha:** [*Inaudible*] you just compared [*inaudible*] -- [*Interrupted*]

**UM4:** [*Inaudible*].

**‘Amir Al-Sa’di:** He would reach out. He was good at reaching, at complaining [*inaudible*].

**Rihab Taha:** Yes.

**UM4:** [*Inaudible*]?

**‘Amir Al-Sa’di:** No, he had a good case -- [*Interrupted*]

**UM4:** It’s difficult -- [*Interrupted*]

**‘Amir Al-Sa’di:** He had a good case. And, I think they had a good case that killing the program would have been interpreted as bias and probably fear of competition.

[*Officials whispering in English*]

**UM5:** [*Inaudible*] but also for soldiers and civilians [*inaudible*] do any vaccination for biological weapons? Did you do any at that time?

**Rihab Taha:** Not really, the matter of use had not been brought up yet. We did not discuss it. No vaccination was done to the people who made it or the soldiers. No vaccination.

**UM5:** [*Inaudible*] testing a biological weapon is very dangerous to your soldiers and civilians.

**‘Amir Al-Sa’di:** Can I respond to this? Your question is quite frankly valid. But there was absolutely no intention of weaponization or using until very late in 1990. The weaponization took place in December of 1990 after the military crises, and even then there was absolutely no intention of using these. We know that foreign intelligence had known about the program and they mentioned that Iraq is working on anthrax, that Iraq is working on botulinum toxin etcetera and that was creating the required effect—the deterrent effect. Nobody would use weapons of mass destruction against us because then we would retaliate. That’s the whole idea. But it was never the intention of using it. And if you read the FFCD in chapter one you will find all these answers. There was no forces trained to use it, no countermeasures in case of using it; no training or planning for using it. It was prepared and kept as a deterrent. But we know, because we are responsible for the weapon evaluation, that it had no real strategic value. No real strategic value.

[*Time Stamp: 29:48*]

**UM6:** [*Inaudible*] If I may. So, is my understanding correct that a biological weapon at that time was viewed as a weapon of last resort, maybe?

**‘Amir Al-Sa’di:** What is the last resort? This is again a cryptic sense. We are not solely responsible. We were being subjected to a vicious war. Bombs were dropped on our houses and

homes and nothing like that was used. It was to prevent a war from starting, rather than—when it starts, that's a different question. It's a different decision.

[*Officials whispering in English*]

**UM7:** I have actually two short questions. To follow up on the question asked by Dr. [*Inaudible*] that you then trying to rescue the program. Did you discuss that matter for Professor Hindawi? Because I think it wasn't your concern that the program would survive. If you could simply answer yes or no.

**Rihab Taha:** [*Inaudible*]

**UM7:** Or at a certain moment of time action was needed, contact should be made elsewhere, to make clear that you were doing a good job and it would be bad to kill the program. And so, I mean, it must have been plain in your mind, you saw things happening, Professor Hindawi was [*inaudible*], Professor Hindawi was happy to be one that was contacted, but I can imagine that you discussed -- [*Interrupted*]

**Rihab Taha:** No, no, I didn't discuss. Because it has its own way to behave with [*inaudible*] and he didn't mention that he wanted to contact a higher person on these things. They do it secretly and -- [*Interrupted*]

**UM7:** The other question is actually on that the very first contact you had with General Nazar [*Dr. Nazar Al-Attar*]. From yesterday, my understanding is that actually at that time the IMGD was more on the defensive side of the training. You were provided the blueprints, which was based on defensive BW. So I must assume, during that first contact conversation, it was pointed out to you at that moment that the meeting was to develop an offensive program. Is that correct?

**Rihab Taha:** Not really. He discussed the matter in general idea. Not to go in defensive or offensive.

**UM7:** So was it your choice then? Because, as my Russian colleague points out, especially when you get that information, that was probably the first information you got on biological warfare.

**Rihab Taha:** Yes but even if you got it defensive, you have to get the microorganism, you have to know how to create them, how to cultivate them, how to produce them. So at the beginning, they start the same—or both offensive and defensive. And probably, at that time, even General Attar had not enough confidence about that work and what is the outcome of the work. So he made it general.

**UM7:** I don't [*know*] whether I specifically agree with you that, that yes you should define the agent, yes you should grow them, but then again we had a discussion on survival under rough conditions and that is particularly not something that is associated with a defense program but more with an offensive program. But I think we will go into more details of these kinds of things after the break.

**UM2:** I'd like to suggest we take a break for maybe fifteen minutes. And there are still some general issues that need to be resolved. I understand that General Attar may be here then. Maybe what we'll do is take a break to do a review, but I don't think that should take too long. Thank you.

*[Inaudible talking in the background]*

*[Time Stamp: 34:34]*

**UM2:** I'd just like to continue with a few of the general questions because I think you can feel on our side we still have an unease about what the motivation was for the program and what inspired the program to move forward very, very rapidly.

The background to the entire biological warfare program, once it started in 1985, was of course the Iraq-Iran war. We recognize that Iraq was trying to gain ascendancy in that war and it was quite natural that for all weapons -- *[Interrupted]*

**'Amir Al-Sa'di:** Background for what? Background for what?

**UM2:** The background to the acquisition of a more potent weapons system, so you can gain ascendancy in that war. And one aspect of that is to acquire a biological weapon.

**'Amir Al-Sa'di:** I don't think that's right.

**UM2:** You don't?

**'Amir Al-Sa'di:** We're talking about biological weapons?

**UM2:** Yes.

**'Amir Al-Sa'di:** It's not background, no. Because it started earlier than the Iraq-Iran war. It started in the 1980s.

**UM2:** Yes, I understand that. But the rejuvenation in 1985 came in the middle of Iraq -- *[Interrupted]*

**'Amir Al-Sa'di:** Yes, so the background is the necessity to have some capability in that area: chemical, biological, nuclear, and electronic. It was fully explained.

**UM2:** Yes, yes I understand.

**'Amir Al-Sa'di:** Reactivation was -- *[Interrupted]*

**UM2:** Yes, okay. I believe I've expressed myself clearly enough. I did. The reactivation was with the Iraq-Iran war in ongoing *[inaudible]* capability of biological weapons. And from the discussion we had, there is no indication that that actually influenced your thinking in any way.

You presented it very much in the way an academic researcher would a program, [*not a*] biological war program.

**‘Amir Al-Sa’di:** May I just finish answering this first point which you raised? Even with the war going on between Iraq and Iran, it was not foreseen that the war would take so long. It was like lifting sanctions. Every year, we’d think it’s coming this year. So every year, from even the moment it started, the Iraq-Iran war was going to finish this year, this year, and so on. So the BW program was a long-term project. Even the man who injected it in the MSE charter, as you say, in ‘83. In ‘85 he said this is a long-term objective. It will take five years. So do you think he thought the war would last another five years when he wrote that report? So I would say this line of thinking is not valid at all. It has no validity.

**UM2:** It is difficult for us to assess of course, what this has brought Iraq in the middle ages as how it could conclude such a thing. Presumably there’s thinking both in terms of the optimistic, that it would finish very quickly, within a year as you say, but presumably one had to have planning as far as the pessimistic, of the war being prolonged.

**‘Amir Al-Sa’di:** [*Inaudible*] BW wasn’t part of it.

**UM2:** Well, perhaps in that case I can ask another question. About the tragedy that happened in 1990/1991, BW wasn’t part of that either? BW was part of a long-term program.

**‘Amir Al-Sa’di:** We didn’t have a program until the nuclear was ready. It wasn’t at all a program. I’m speaking from a position of responsibility.

**UM2:** That is the first time I’ve heard it expressed in that way.

**‘Amir Al-Sa’di:** I think I have said it many times, but not in that way. I have said it many times.

**UM2:** I recognize you said there was some time before nuclear program would actually become a mature program. But I hadn’t seen the biology program as being a [*inaudible, sounds like “spot tab”*] for that. Although I recognize that you’ve always said that biological weapons would be strategic weapons.

However, there had to be thinking about biological weapons eventually becoming a mature weapon system. And that is another area that, really, we have no sight on—either in thinking in the 80s in terms of a long-term strategy or the strategy and the thinking as the program had become more mature. We have, as you described, a step by step process— research, production, weapons—but no thinking down the line, beyond the research, to the end weapons program. This must have been part of someone’s thinking. This must be part of someone’s thinking, as how to get to the army, to the weapons. How did that support process come to you? I mean, you had [*inaudible*] in 1985/84. So in 1985 when you first started it, or somewhere along the line, someone must have started thinking more strategically on how a biological weapons program would be developed.

[*Time Stamp: 40:06*]

**Rihab Taha:** General Hindawi was responsible of this program. He kept saying: “Let us do this and let’s see how it does, let’s see what the outcome of that is.” So there was no long-term program. Later on when he transferred from the embassy to the KRC it became the end of the supervision of al-Muthanna responsibilities. But I think that he was the man who controlled this problem. But you know, I have no discussion with him, all the strategy all the [inaudible]. But I think he is responsible for that problem.

**UM2:** I fully accept that [inaudible] more control and [inaudible] into the program and who was thinking strategically in terms of a biology weapons program. Someone had to have, even if it was in their mind, a strategy to ensure the program you attribute to [inaudible] was in fact [inaudible] and that meant that you had to have a proper research base to start the program, you had have a appropriate production capability, which eventually you acquired, it happened, and also you need weapons to deliver the agents appropriately, and something we have no sight on at the moment. And that is either because it has not been revealed to us or that it does not exist. But conceptually someone was -- [Interrupted]

**Rihab Taha:** Believe me -- [Interrupted]

**UM2:** The problem we have is that we are not aware of any thinking along of the weapons aspect of a biological warfare. And history shows that once you get into the production aspect of any form of --- there is some thinking about the means to deliver them. And that happened in the US, the UK, Canada, and I assume it happened in Russia.

**Rihab Taha:** Well this did not happen in Iraq. We are telling the truth. We are telling the story as it happened. But you are not convinced about it because the system here is quite different than your system. We have reached to the [inaudible] level with no discussion about the use, about its organization. We just know the man who controlled this program; this project at this time, the order came from this camp. We try to implement the order as much as we can. And that’s it.

**UM2:** Let me give it to you in the abstract. If 1990 had never happened—it just had been obliterated as a year—and Iraq had been developing, did you have any idea, or do you think anyone in Iraq had an idea, about when the weapons program would come to maturity? Without the distraction of events from 1990?

**Rihab Taha:** But 1990 happened. 1991 happened.

**‘Amir Al-Sa’di:** It’s a hypothetical question.

**UM2:** I know it is.

**‘Amir Al-Sa’di:** It’s a hypothetical question. I don’t think she is the person to answer that.

**UM2:** But in 1989, before 1990 was cancelled, you were producing a lot of agent. You were involved in weapons tests. Surely you must have been thinking towards a 1990-esk remarkable tragedy that happened. Nineteen ninety should have been a peaceful year. But nevertheless, Iraq

acquired a weapons system. It must have been at least in the back of your mind, if not at the forefront of your mind?

**Rihab Taha:** Not in my mind no. It's difficult to answer this question.

**UM2:** Can I address the question to you, General Sa'adi? Because again, you, you --  
[*Interrupted*]

**'Amir Al-Sa'di:** The way I was viewing everything, I was hoping and praying that our nuclear weapon would be mature and that we wouldn't have to think about means of, viable means of delivery [*of biological agent*]. And you were working much harder and much more resources were given to the nuclear program than the biological. Although it seems much attention was made, this is not my impression. As a strategic weapon, none of the elements was there. None of the elements was there. And we tried anthrax. The means of delivery was not the size that it would impact 8 times the speed of sound.

[*Time Stamp: 45:44*]

**UM2:** And we agree on that and I don't expect -- [*Interrupted*]

**'Amir Al-Sa'di:** Therefore it was not mature. It was not ready. And that if they had produced something viable to be weaponized as a strategic program, we would have certainly thought very deeply about that. But we were more involved and engaged in the nuclear. First of all, the detonation device was our business, ex-business, and a means of delivery. And they were real work; real challenges to do. We had no time to think about other work. And the time it took was unexpected [*for*] increased production and weaponization. Both, we considered at the time, as just like someone with a computer adding all these things up, they would appear horrific, and produce the required affect, but no war.

But you know how it is in countries. You work on several lines in parallel. Not necessarily all of them you take to the final stage. The one which appears to be more promising, [*that*] achieves better results, would just make the other plans redundant. And this, in our mind, was the case. And there was more interest in the VX, I would say, than the biological.

**UM2:** And I expect on the scale of things, what you are saying reflects Iraq's appreciation that the nuclear system was the number one system.

**'Amir Al-Sa'di:** This is the case from our perspective and I'm responsible for these things.

**UM2:** And I expect, in the scale of things, the biologically program was perhaps minimalistic. But nevertheless -- [*Interrupted*]

**'Amir Al-Sa'di:** Nobody liked it. Not even the military. The military hated it most.

**UM2:** But given all of that, it was a program. It was established. And what you are saying to me, what you are saying to me is without the production of what you considered to be an agent

appropriate of a strategic... that would not trigger an investigation of a weapons system to deliver such an agent. Whereas, the way that I would look at it is, that your nation was to acquire such an agent, and therefore you would have had either in place a weapons development program or at least be thinking about it so it could be critically put in place once you got to the --  
[*Interrupted*]

**‘Amir Al-Sa’di:** No practical steps were taken in that respect. We were fully engaged in a satellite project and in a longer range missile and in the nuclear carrying missile.

**UM2:** And by no practical, that also includes no conceptual, no intellectual thinking about such an active program?

**‘Amir Al-Sa’di:** Now this is hypothetical. You are asking me what were you thinking, ahead, although it’s not on paper. It’s not planned. It’s not gelled. What were you thinking? Now why should I tell you that?

**UM2:** No, no, no, but -- [*Interrupted*]

**‘Amir Al-Sa’di:** It’s unrelated to your task.

**UM2:** No, it’s not unrelated to our task.

**‘Amir Al-Sa’di:** I was thinking about disarmament and ongoing conflict. With disarmament: to disarm Iran. And with ongoing conflict: [*inaudible*].

**UM2:** Certainly it’s within our mandate. If, in fact, you have a department that produces theoretical research papers, that is very much an interest.

[*Time Stamp: 50:10*]

**‘Amir Al-Sa’di:** Whatever setup we had, at the time, it no longer exists. It no longer exists. You can walk in anywhere, and look at their work, what they are engaged in.

**UM2:** But I ask these questions to be reassured.

**‘Amir Al-Sa’di:** And I am giving answers. Candid answers. And I resent some tone of accusations in this case: that we were thinking about using biological weapons tactically. This is very distressing. This is not true. I know you hold this view from the beginning. I heard you say that in 1991. Obviously, whatever we had planned makes no difference to you, you still hold that view.

**UM2:** I have no wish to upset you, please believe me about that. But there are issues that are not resolved. And we have to continue discussing these issues to see that they are truly resolved. If you are sitting on this side of the table, you will see that there are munitions that are appropriate for tactical use [*inaudible*]. But if you would put that into the context of using them as tactical weapons against the human waves that were coming from Iran, they wouldn’t have utility. And

so it is [*inaudible*] of us to put these questions to you and that you answer these questions factually and we have to arrive at some sort of judgment.

Because of the absence of written documents and instructions in this area, then eventually we have to come to a judgment, rather than a finding absolutely and therein lies our problem presently. And so we have to discuss these issues and I understand it's difficult for you. It's difficult for us, on occasions. If we don't ask these questions, other people will ask them of us, and we'll say we are unable to provide an answer to that.

At the end of the day, as I said in my opening statement, I hope that we can come to an understanding between each other that we can jointly present a biological warfare program *ex criticus*. [*Inaudible*] But to get to that process, we have to get through these discussions. We've done so in the past, we can deal with that. We'll emerge four best friends at the end of it, even though we might hate the sight of each other on occasion. [*Laughing*] We'll go through that process. So let's try to find a way. Please, I'm not trying to upset you. I'm not trying to offend in any way. I'm trying to come to a situation where we can come to a completion. We may come to a situation where we say this is what Iraq is presenting; we might not necessarily agree with it, but we cannot dispute it. And therefore it is accepted, reluctantly accepted, and you would do well to accept it.

**'Amir Al-Sa'di:** I cannot believe my ears.

**UM2:** But we have to go through that process.

**'Amir Al-Sa'di:** To think there would be a happy ending to all this [*inaudible*].

**UM2:** Do we understand one another?

**'Amir Al-Sa'di:** Yes, yes.

**UM2:** I think I've come to the end of the questions in that area. Unless there are any more general questions that have to be asked, I think I'd like to go into some more specific, scientific questions. [*Inaudible*].

**UM1:** I [*will*] start the science issue with sort of an overarching question, and that is really referring to [*inaudible*]. And when you read that, you notice that formally some of the headings that indicate research one, research two, research three, research four and so on. I wonder what does that refer? So what you know what I'm talking about [*handles papers*]. For instance, in page 207, you see research two in brackets and now you see research three, research four and so on.

[*In Arabic, 'Amir Al-Sa'di murmurs "the documents" to Rihab Taha.*]

[*Time Stamp: 55:00*]

**Rihab Taha:** We organize ourselves based on research. We had many staff at the height of our research. We had ten staff. So research two refers to our research.

**UM1:** In that document?

**Rihab Taha:** In that document.

**UM1:** Okay.

**Rihab Taha:** And at the end of the chapter [*inaudible murmuring*]*—*we give a list of this research titles -- [*Interrupted*]

**UM1:** And this refers to the FFCD documents, I was -- [*Interrupted*]

[*Inaudible exchange among several attendees*]

**UM1:** I was under the impression that you did not know what was in the hydrocarbon documents. Now what we really are interested in—and I think we will take up that at another time—is to have a timeline connected with the research [*saying*] which part of the research was carried out and when. Really I will present you what I tried to do; and you can help me doing it, hopefully. It's handwritten as well, so I apologize. But this is what I'd like to leave Iraq with. Could you help us with the top issues here? What I'm discussing obviously is research issues. Yes.

[*Inaudible exchange among several attendees*]

**'Amir Al-Sa'di:** Timeframe for research in one table.

**UM1:** I have something back here.

**'Amir Al-Sa'di:** Timeframe, yes. Annex in chapter one, annex two in chapter one -- [*Interrupted*]

**UM1:** I don't have that with me, I'm sorry. Yes, but, but I really would like—what I do here, I take the headings from the FFCD—right—from the research in the FFCD and I try to put the headings in here.

**'Amir Al-Sa'di:** The research comes first and then the timeframe is given.

**UM1:** Could you try as part of the discussion to indicate when the research was carried out? Because it seems that a lot of research was performed already ahead of time. And I thought the research one, research two, research three, and so on actually was connected to timeframes. Is that correct?

**Rihab Taha:** No, no [*inaudible*].

**UM1:** That's incorrect?

**Rihab Taha:** But we did one, two, three, four [*inaudible*] five, six, seven -- [*Interrupted*]

**UM1:** No, no, for every agent you have 'research one.' I think for every agent you have a one, for every agent you have a two and so on.

**Rihab Taha:** Let me check -- [*Interrupted*]

[*Inaudible exchange*]

**UM1:** But there is no reference to anything about five. But in the FFCD chapter about R&D they go from one, two, three and one, two, three, four, five for each agent—nothing about six. I just indicate to you now, what we would like to comprehend, and what we would like to understand. And by that, I give the floor back to you Dr.

[*Time Stamp: 60:30*]

**'Amir Al-Sa'di:** You want me to check that mistake, eh?

**UM1:** I do, but I would like to discuss that in those terms.

**'Amir Al-Sa'di:** Yes.

**UM1:** For you to understand what we're aiming at.

[*Inaudible exchange*]

**'Amir Al-Sa'di:** All my stones are in table two, annex one; all my stones and timeframe and the location where it takes place, but including also production activities, not just research. Everything is there, from A to zed. In annex two.

**UM1:** With that resolution from headings from the -- [*Interrupted*]

**'Amir Al-Sa'di:** Your table could be filled.

**UM1:** From that. With the same headings?

**'Amir Al-Sa'di:** From that. With the same heading.

**UM1:** So for instance, biochemical characterization is there.

**'Amir Al-Sa'di:** Biochemical characterization?

**UM1:** Of anthrax, biochemical composition of biotoxin, is that there?

[*In Arabic, 'Amir Al-Sa'di inaudibly murmuring with Rihab Taha*]

**'Amir Al-Sa'di:** [*Reading from the paper*] A and B selective agents and lab evaluation [*inaudible*] from '86 to May '87 biology group preformed work -- [*Interrupted*]

**UM1:** It's really not the same resolution. It's almost the same resolution; it's not quite the same.

**'Amir Al-Sa'di:** Yes, it is a rougher one. Yes.

**UM1:** But, please we proceed. This is just to indicate what we're trying to aim at.

**Rihab Taha:** But this here [*inaudible*] you mention that period of time and -- [*Interrupted*]

[*Audio/visual is blank from 62:35-70:56*]

**End of Recording**