

ARMS CONTROL ASSOCIATION

**SOLVING THE IRANIAN NUCLEAR PUZZLE BRIEFING SERIES:
TOWARD A NEGOTIATED SOLUTION**

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DARYL G. KIMBALL: Good morning, everyone. I'm Daryl Kimball. I'm executive director of the Arms Control Association. I want to welcome you to the second in our series of briefings on "Solving the Iranian Nuclear Puzzle."

As you all know, tomorrow multilateral P5+1 talks with Iran over its nuclear program are scheduled to resume in Turkey. And efforts to reach a negotiated solution to the Iranian nuclear challenge are likely to require more than just one more round of meetings. It's going to require prolonged, multilateral negotiations.

But this meeting, we believe – and this is why we are meeting here today – presents a very important restarting point for the diplomatic process, which is clearly the most effective and practical way forward.

As we'll discuss this morning with our three expert speakers, the challenge now is going to be how to overcome the distrust that's built up between the different parties, how to find pragmatic ways to build confidence and move towards a framework agreement that, among other things, provides stronger assurances and safeguards that Iran's ongoing nuclear program and activities are not used for weapons purposes.

As our three panelists are going to explain in much more detail, diplomacy remains the best option. And it's now imperative, we believe, for the United States to leverage this opportunity and to make progress while there is time to make progress. Sanctions have bought time and can increase negotiating leverage, but they are, at best, a means to an end. And the end goal can only be achieved through persistent engagement and diplomacy, as difficult as that has been and will continue to be.

And as the experts at the first briefing in this series made clear back in November, Iran's nuclear program and its failure to answer outstanding IAEA questions about its activities are troubling.

But due to the technical challenges they're facing and perhaps outside interference – I'm referring to Stuxnet, of course – it still remains years away from having enough working centrifuges to produce a sufficient quantity of highly enriched uranium for a viable nuclear arsenal, let alone perfect a warhead design that can be effectively delivered. And now, as was seen in recent days and weeks, U.S. and Israeli officials are publicly making similar assessments about the status of Iran's nuclear program.

So to put the latest round of talks into perspective, a broader perspective, we're pleased to have with us Barry Blechman, colleague for many years and cofounder of the Henry L. Stimson Center. He is also the chair of the recently completed Stimson Center-U.S. Institute for Peace joint study group titled "Engagement, Coercion and Iran's Nuclear Challenge," which just came out in early December, right?

He's going to be outlining some of the key findings and recommendations for the United States and the other P5+1 countries concerning the role and impact of sanctions, the risks and dangers of military options, and the longer-term diplomatic objectives vis-à-vis Iran.

And I would just add that – I want to underscore that as Barry and his colleagues noted in that report – and I agree – turning Iran away from the nuclear weapons path requires recalibrating what Washington and our partners are seeking to achieve through the current pressure and engagement approach.

For example, we have to consider that it's been five years since the last serious round of talks with Iran. And since then, it's built up its centrifuge capacity at Natanz and begun work on another facility at Qom. And while a temporary suspension of enrichment and other fuel-cycle activities as the U.N. Security Council has demanded would certainly help restore confidence, it would appear unrealistic to expect that Iran would agree permanently to terminate enrichment activities at those two known facilities.

So even while – even though there are risks involved with any working, spinning centrifuges in Iran, given its history, we need to remember that the greatest risk for an Iranian nuclear weapons program probably comes from its possible undetected activities – unsafeguarded enrichment, weapons and development facilities – and not so much from the known knowns, the safeguarded facilities that are at Natanz.

That's why as Charles Ferguson is going to discuss, it's important that we focus on how we can improve IAEA monitoring and verification over the long term so that we can have sufficient confidence that Iran's nuclear fuel-cycle activities are not used for weapons purpose. So he's going to describe a bit what such a system might look like, how much confidence would it provide. Charles Ferguson is the president, of course, of the Federation of American Scientists. He's worked for many years on this problem.

And then finally, how can this particular round of talks and follow-on discussions contribute to the longer-term process of achieving a negotiated agreement? What are some of the initial confidence-building steps that can be achieved that might be discussed at this round? What steps could the United States and the other parties and Iran undertake that would enhance the prospects for a lasting diplomatic solution?

To address those questions, we have with us Arms Control Association's own senior fellow and former INR analyst Greg Thielmann. And he will close out the panelists' presentations. And after each of them is done, we will take your questions and have a discussion about these and many other issues that are on the table with the Iranian nuclear program.

So with that, I'd like to invite Barry up to the podium to start us off. Thanks for being with us, Barry. And before we get rolling, if you could all just remember to put your cell phones on vibrate. Thank you.

BARRY BLECHMAN: Good idea. I had a friend who was speaking to a group of fire chiefs, actually. And he made that announcement. And two minutes later, his phone went off and three guys in the back of the room – (chuckles) – just broke down in laughter.

It was my privilege to co-chair, I should say, this study group. Dan Brumberg was the other co-chair. We had about 40 people working on it – two-thirds, Iranian experts, and about a third of us, people that work on U.S. political-military policies. And the work was done mainly over the summer and fall. But so far, at least it looks like our analysis and conclusions are holding up, and in fact, being reinforced.

The group concluded generally that there was an opportunity for diplomacy to work to stop the Iranian program short of a weapons capability. We noted first that there had been – and this was obvious even over the summer – a slowdown in their progress, in their nuclear program. And this has been confirmed just the last few weeks both by the Israelis, which is a big shock – I guess they were so proud of their cyberwarfare that they felt like bragging about it – and also by Secretary Clinton.

And the Israeli forecast now is that Iran won't have a weapons capability until at least 2015. So that gives us several years to see if the diplomatic engagement can work. The slowdown is due, of course, both to industrial sabotage and the cyberattacks, as well as to the sanctions. The sanctions have made it difficult for Iran to acquire some of the specialized materials and equipment needed for their program. So they seemed to have had a very positive effect in a direct way.

In addition, the sanctions are having strong impact on the Iranian economy. And I would say it's been a real triumph of U.S. diplomacy to build a coalition willing to enforce not only the U.N. sanctions but the additional sanctions that we and the EU and the Japanese and a handful of other countries have – important countries have been willing to put on Iran.

All the Western oil companies have withdrawn from Iran. Lukoil, the Russian company, has withdrawn as well. Development has stopped – or plans for development that they had to grow their natural-gas production particularly, but also oil production, have ceased. The Chinese have signed some contracts, but work doesn't seem to be moving on that. And the Chinese may be cooperating more than they like to let on publicly.

Production in the old Iranian fields is declining because they don't have access to the technologies they need to improve their efficiency. So in that sense, the sanctions have been a great success.

The other success has come from the financial sanctions, the additional ones that the U.S. and the EU and these other countries have put on, which have made companies reluctant to do business with Iran for fear of losing access to much larger markets in the U.S. and other advanced countries.

And so Iran is having a great deal of difficulty getting insurance for their oil shipments, for example, or to conduct other transactions. Their currency is devalued. They – you know, suffering substantial inflation.

Countries on the Gulf in the past year have started cooperating much more in terms of shutting down the front companies that Iran had used to circumvent sanctions in the past. Dubai particularly has been cooperative. The Saudis have been selling oil to China at a lower price – lower than market price – in order to supplant some of the Iranian sales.

So generally there is a lot of economic pressure being placed on Iran, so much so that you begin to see comments from Iranians about the danger that this situation could lead to political unrest within the country, and not just from the Westernized, secularized students that we saw in the streets following the fraudulent election, but from the so-called real Iranians – the working-class and poor Iranians who are the backbone of support for the Ahmadinejad regime.

And so the economic pressures are feeding what's been a persistent political conflict among the Iranian elites. Essentially, Ahmadinejad has brought in a new generation of leaders. That's kind of reminiscent of when Andrew Jackson was elected U.S. president and brought all these kind of rural westerners in, and the Washington establishment was just up in arms at these rubes that were trying to take over the government.

He's brought in a lot of veterans of the Iran-Iraq War, and people not from the Westernized Tehran elites but from other parts of the country. And he's been trying to take over, or exert greater influence over the traditional bastions of power within Iran, and has come into conflict with the foreign ministry, with the Majlis, with the courts and even within some of the ruling religious bodies.

The supreme leader generally has tended to favor Ahmadinejad to back him in these conflicts, but not always. And sometimes, he's been forced to back down when the supreme leader followed the more traditional and perhaps more pragmatic elites.

So our recommendation – the recommendation of the study group – was to try to take advantage of this conflict and to shift, to the degree that we can have influence, the balance among the elites to those who might want nuclear weapons but see the price of gaining them to be excessive and believe that the course of better wisdom would be to reach a compromise with the West.

And the way we suggest doing this is, one, to continue the pressure both through sanctions and through covert operations. Secondly, we believe it's important to accelerate, if possible or as possible, security cooperation with the Arab nations on the Gulf, including intelligence sharing, joint planning, military exercises, training and military sales. We believe there could be a much greater emphasis on missile defenses.

And it would be nice if the Gulf countries would – you know, they claim – or in the leaked cables, we see that they're very concerned about the Iranian program. Yet their concern doesn't go so far as to overcome some of their internal conflicts among themselves. They find it

difficult to cooperate. Certainly, establishing an effective missile defense system would go much better – a regional system – if the Gulf Cooperative Council (sic) countries were able, in fact, to cooperate and resolve their conflicts.

The benefits of this is both to show Iran that its actions, its unwillingness to reach a compromise is only isolating it further within its region, and also drawing the U.S. in militarily through cooperation with these countries, resulting in just what it doesn't want to see – a greater U.S. military presence in the region.

Thirdly and most importantly, we believe it's important to rebalance U.S. policy to put greater emphasis on the positive inducements to Iran to reach compromise. You know, we've had this two-track policy for many years beginning with Clinton. It's gone back and forth. When Obama came in, he emphasized engagement; he was rebuffed. It was a difficult time politically, internally for Iran, which might help to explain it, possibly.

And we shifted to the diplomacy to strengthen the sanctions and so forth that emphasize the coercive element. At this point, stressing the coercive element in our diplomacy and our public statements reminding them of the military option has negative effects. It only strengthens the hands of the hardliners, those who would not want to compromise – weakens the position of those who might want to reach an agreement.

So we need to make clear, we believe, in our diplomacy that the potential benefits to Iran of reaching an agreement on the nuclear issue and on other issues are commensurate with the very substantial demand we are placing on them, which is to give up their aspirations for a nuclear weapons capability. And I have no doubt that they have such aspirations at this point.

To implement this kind of more positive aspect, most importantly we believe we have to, as Daryl had said, accept Iran's right to enrichment. And I noted in December, Secretary Clinton made a statement suggesting the U.S. position was moving in that direction, which I think would be a positive.

An enrichment conducted under very strict conditions of monitoring and verification, including implementation of the Additional Protocol, could, we believe – and Charles will speak more to this – permit them to continue what they say is a peaceful program while providing a substantial warning to other countries, should they in the future change their mind and go back to seeking a weapons capability.

Secondly, or in additionally, we believe we should establish a separate bilateral track of negotiations with Iran on a variety of security issues in which we have a joint concern, like Afghanistan, like drug trafficking – which is a huge problem in Iran and so forth.

We should stick to the P5-plus-1 for the nuclear issue, but in addition, establish this separate track. The separate track, or progress in that, can't be permitted to substitute for movement on the nuclear issue, but the two can proceed in tandem.

Third – or fourth, whatever it is – I think we – we think we should permit normal interaction between American and Iranian diplomats in third countries and international organizations. This is not gone now, but there's no reason why in a U.N., multilateral organization, for example, when the American ambassador has instructions to do something, he or she shouldn't also carry them out with his or her Iranian counterpart.

And finally, we should hold out the possibility, at least, of down the road, if Iran does reach compromise on the nuclear issue, that the benefits to them would not only include a lifting of the sanctions – so an end to the punishment – but more positive economic benefits of cooperation and helping them to develop their oil and gas industry, which is in a mess, getting them to work with other countries in the region on solution to common problems like water shortages and energy distribution and so forth.

Again, I would repeat, the nuclear talks are the most urgent and we can't allow these other things to go too far without progress on the nuclear issue. But a more complete package of incentives can or might, we believe, lead Iran to reach a compromise on the nuclear issue.

Finally, I'd note that the group, which included people who served in Defense and State in both Democratic and Republican administrations, and some former military were unanimous in stating that attacking Iran, attacking its nuclear infrastructure, would be very counterproductive and is not a good idea. And these deliberations were done at a time when the Israelis were working very hard, saying that Iran's on the threshold and the U.S. needs to take a military action against them.

The U.S. certainly could do grave damage and set back their nuclear program quite substantially. It would not be a kind of pin-prick attack. As I understand, the planning that has been done – we not only would attack the complete nuclear infrastructure, or much of it, but also try to attrite Iran's capability to retaliate militarily.

Anthony Cordesman has done some estimates of the number of airstrikes that would be required for various levels of attack and it's quite substantial. It's a question of hundreds or even thousands of strikes over a period of days or even weeks, depending on how ambitious the plan turned out to be.

This would likely lead to continuing military conflict on the Gulf and on Israel's borders. Iran has means to cause a great deal of havoc in the region. It would certainly break up the coalition we built. China and Russia would leave in a flash. Many European countries would not want to have anything to do with this.

It would have very negative effects among developing countries, particularly Muslim – moderate Muslim countries. If the U.S. attacked a third Muslim country in 10 or 12 years, and we say we're not on a crusade against Islam, it just – it would provide fertile ground for recruitment of terrorists and so forth.

It could have severe economic effects if the military conflict persisted and there were disruptions in oil deliveries. And finally, the effect in Iran would be negative. It would unify the country. It would assure the complete repression of any democratic elements and so forth.

So to conclude, there's no guarantee that this strategy would work. We laughingly refer to it as the least bad option. There are no brilliant, you know, solutions to the problem. But the fortunate thing is there is time to give diplomacy a chance and the strengthening of the positive component, we think, would be helpful.

I have a couple of copies of the report if anyone wants them. And it's on the Stimson website as well. Thank you very much.

MR. KIMBALL: Great, thank you, Barry. Charles Ferguson on the verification and monitoring challenge. Charles?

CHARLES FERGUSON: Well, thank you, Daryl. And thank you, everyone, for being here this morning. And when Daryl and Peter Crail contacted me about this, I said, your timing is impeccable. And of course, they consulted with the Iranian and U.S. and others – other sides to make sure that we have this event today, right on the eve of the next round of discussion – I won't say round of negotiations, but we're just – as Daryl said, we're just now getting back into discussions with the Iranians.

So I'm going to be the science guy here. So pay attention. There's going to be a quiz at the end of this briefing. (Chuckles.) Make sure you know all the elements of a nuclear fuel cycle and the possible diversion pathways. And outside – I think most of you probably grabbed it – there was a one-sheet handout with a rough diagram of the nuclear fuel cycle and just showing a couple of the major possible diversion pathways.

It's worth emphasizing that we shouldn't lose sight of the fact that Iran is pursuing a dual track – uranium enrichment and a possible plutonium pathway – to nuclear weapons. Now, of course Iran says they don't have a weapons program. They don't intend to have a nuclear weapons program. Nonetheless, a lot of the elements are basically in place.

Go back to the NIE from three or four years ago and it clearly said there are three components to a nuclear weapons program. You need to be able to produce the fissile material – the stuff that goes boom. You need a workable warhead. And you need a workable delivery system, like a ballistic missile.

Well, the NIE said there was some evidence that Iran may have placed the warhead component of it on the side – maybe. That's one thing we need to get to the bottom of. And that's one issue – and if we have greater openness and accessibility from Iran, that the IAEA should further investigate.

Clearly, they're still continuing the ballistic missile development, so that leg continues. And they're also continuing with fissile material development, although there may have been some setbacks recently through Stuxnet and other means. But as an analysis by FAS will show

that will be released tomorrow morning, looks like over the past year there actually may have been some improvements in the centrifuge plant as well.

So the news may not be as sanguine as we may hope. So we still have to – we don't want to be complacent and say, oh, we've got plenty of time for diplomacy – and I'm all for diplomacy – we've got to make sure we make the best use of that time. So keep in sight these two different tracks, but I'm going to focus on the uranium enrichment pathway in the interest of time and because that's the most urgent issue before us right now.

Now, of course the best situation for the United States would be for Iran to say, this is all a mistake. We don't need to pursue this uranium enrichment program. We're going to call a halt to it. Well, that's fantasy land. I think – practically, I think, all of us in this panel agree that Iran will continue with some kind of enrichment program.

So the next best thing we can hope for is to keep it limited, to keep the number of centrifuges spinning and enriching uranium rather – relatively small. Well, we'll see what we can do on that – on that behalf, but let's look at the three possible means of diversion – three pathways of diversion into a nuclear weapons program.

So a state could divert weapons-usable material and technologies from a declared – I emphasize “declared” – safeguarded program into a weapons program. Secondly, it could operate a clandestine program, as Daryl indicated in his opening remarks and that program would be as much as possible, parallel and separate to the declared program.

And then finally, a state could say – cite a supreme national security interest and say, we're out of here, we're going to leave the NPT, give 90 days' notice and leave the safeguard system.

Of those pathways, number three is probably the least likely for Iran, at least in the foreseeable future, as long as Iran appears to derive some benefit from staying inside the NPT because if it leaves it's clearly indicating to the U.S. and certainly states in the region its intentions to proceed with a weapons program.

And so there are various options. I'm going to now explore and walk you through briefly for the interest of time. And hopefully we'll get time to talk about them more in depth in the Q&A. And it's important to keep in mind that what we want is a defense in-depth type of safeguards and inspection system.

So not any one element of it is going to be perfect, is going to be a so-called silver bullet to say, a-ha, we can have confidence to detect the clandestine program through that particular option. But it's the layering of the options, having multiple means of detection that allows us to develop a more effective monitoring and safeguard system.

And of course the second pathway mentioned is the most worrisome because right now under the current safeguard system, the IAEA has limited access to only declared facilities. As we saw back in 2009, in September, it was announced that there was a clandestine enrichment

facility near Qom, the so-called Fordow plant. And then the big question is, are there others? And Iran indicates they have interest in developing other enrichment plants. So how can we possibly detect the other activity going on?

So the next major step that Iran could take to instill greater confidence would be for it to ratify and apply the Additional Protocol to Comprehensive Safeguards. Now, as most of you probably know, some years back Iran was voluntarily applying the Additional Protocol, and then it backed away from that once it felt more pressure coming on it.

So if we can get the Additional Protocol, what would be the benefit of that? Well, the Additional Protocol was developed out of the first Gulf War with Iraq. Think back to 1991, and then U.S. forces and – coalition forces, I should say, drove Saddam Hussein's forces out of Kuwait. And then, as part of the condition that – that UNSCOM was developed and the IAEA inspectors came in to look at Iran's nuclear activities.

And it was discovered that Saddam Hussein's nuclear scientists were getting somewhat close to developing a nuclear weapons program. And they did this even though throughout the 1980s and into 1990 that the IAEA inspectors had been continually going in there and inspecting declared facilities. And sometimes literally next door to a declared facility, there was an undeclared activity going on.

So then that was a wake-up call. And the result of that was by the mid-1990s, the IAEA had developed what was called the model additional protocol to safeguards. And the big evolution – revolution in that system was that now it requires inspectors to determine whether there are undeclared facilities and to look at, basically, the entire nuclear fuel cycle.

And it also requires a new mindset for inspectors to not just be the green-eyeshade-wearing accountants and looking over the books and making sure that all the declared material's accounted for. And I know that's a caricature – I don't want to belittle that – belittle that system too much. But the innovation is that now under the Additional Protocol the inspectors are required to have a new mindset, to be more like a Sherlock Holmes, to ask those probing questions, to figure out whether there are any undeclared activities or materials present in that state.

The Additional Protocol offers a complementary and managed access. And it would be a huge step, as I said, for Iran to take. And what we can say is this is not something that's without precedent. The majority of the states, who are non-nuclear weapon states, have signed on to the Additional Protocol. Some major non-nuclear weapon states like Japan and South Korea have implemented the Additional Protocol.

So when Iranian leaders sometimes say, we want to be like Japan – great. Be like Japan and implement the Additional Protocol. And it will give the world more confidence that what you're doing is peaceful.

So I'm going to walk through, like I said, pretty quickly some major options that we can consider. And so once – and what I'm going to do is then grade these in terms of low, medium

and high in terms of the cost of implementation and low, medium and high in terms of the increase in confidence by implementing that particular option, and then talk about whether it's compatible with the Comprehensive Safeguard system – what's called INFCIRC/153-type safeguards and then ask if it's compatible with the Additional Protocol safeguards.

So we could apply physical containment measures at uranium mines and uranium mills where what comes out of that is yellowcake – uranium ore concentrate. And you could try to do that, but the cost of implementation would probably be high. The increase in confidence would probably be low. And under the Comprehensive Safeguards, that's not required. And under Additional Protocol, there's no precedent for that type of activity.

You could then consider having material accountancy at the mines and mills, keeping track of all the atoms of uranium going through. That would have a high cost of implementation, a low increase in confidence. And that's not required under the Comprehensive Safeguards. But the Additional Protocol does specify a state must submit information on mining and milling activities. But there's no precedent for a detailed accountancy.

You can move the starting point of safeguards further upstream. So you can look at applying safeguards right as the material goes into a conversion plant – a conversion facility. The cost of implementation there would be probably medium. Increase in confidence, probably medium to high.

Under this – the Comprehensive Safeguards, it says you must apply safeguards at a point at which nuclear material is suitable for fuel manufacture or enrichment. But there's little precedent for actually applying the safeguards on uranium yellowcake. Under the Additional Protocol, you could use complementary access to try to implement some of that – that safeguards activity.

You could try to increase the information that's provided about the IAEA safeguards – publish more of that out in the open. Now, as you know, every three months or so the IAEA does publish a rather detailed report. We could try to publish some more information. The cost of implementing that would be relatively low. Increase of confidence might be anywhere from low to medium.

And under the Comprehensive Safeguard system, that's considered – safeguards confidential information, so there's not a precedent for releasing more of that. And to do that under Additional Protocol, you have to do it in consultation with Iran. And they would probably object to publishing that kind of detailed information.

You could move the timeliness detection goal. You could lower that. And that sounds very – kind of jargony. And basically what I mean by that is to try to increase the ability to detect a possible diversion of nuclear material much faster and do it more – more frequent times of inspection of where the nuclear material is.

Right now, there's a physical inventory that's done annually. And that's under the Comprehensive Safeguards system. Under Additional Protocol, you could try to deploy a

number of practical measures to try to increase confidence about timeliness. The cost of implementing that would probably be about medium. And increase in confidence would probably be high.

You could try to lower the – or, excuse me, increase the detection probability of a nuclear materials diversion. To implement that, the cost would probably be low. Increase of confidence would arguably be – also be low. And the IAEA typically tries to aim for a 90-percent confidence level to try to keep the false-alarm rate relatively low. Under Additional Protocol, you'd have to work that out in consultation between the IAEA and Iran.

You could change the short-notice inspections. You can increase the frequency of short-notice inspections. To try to implement that, the cost would be about medium. Increase in confidence, arguably high. Under the Comprehensive Safeguards, that's not permitted. Under Additional Protocol, it says that you usually need to give at least 24 hours' notice if you're off-site or two hours' notice of inspection if you're actually on-site and you have evidence that something is going on at a particular facility. And you would have to work this out in agreement with Iran.

You could try to enhance the safeguards on an enrichment plant. And there's been some work done in trying to move beyond what's called the hexapartite agreement, to try to have more information about material flows inside an enrichment facility. To try to implement that, the cost is probably about medium. You could increase the confidence to medium or high.

Under the current safeguard system, that's currently not permitted, although I said it's under investigation. And so if the IAEA can develop a new model safeguards for enrichment plants, Iran could be an important test case for that activity.

You could try to deploy wide-area monitoring. You could have sniffers and samplers trying to figure out other clandestine enrichment or reprocessing plants inside Iran. It's a relatively big country. To implement that, you'd probably need several hundred, maybe a thousand – a few thousand of the sampling devices.

To implement that, the cost would be relatively high. Increase in confidence might be around medium. Under Comprehensive Safeguards, there's no precedent for that activity. Under the Additional Protocol, it says it's permitted but under the conditions that the IAEA Board of Governors gives approval if the method is technically proven. So it's kind of a catch-22.

So yes, we can consider wide-area sampling – wide-area environmental monitoring only if we can prove this technically. But you might not be able to get it proved technically unless you get, really, a go-ahead from the board of governors.

You could try to – try to get better verification of centrifuge production, ideally to get access to the companies in Iran or the suppliers of the centrifuge machines and try to account for all the machines that are being produced, or could be produced. The cost to implement that will probably be at least medium, maybe high. But the increase in confidence would be high.

And there's no precedent under Comprehensive Safeguards to do that kind of activity. On Additional Protocol, it says that a state could provide general information on that kind of activity. But this would require a specific agreement for detailed accounting. So there's really no, you know, specific precedent under Additional Protocol for getting that kind of detailed access.

You could develop a special protocol for inspections. And Pierre Goldschmidt has recently written about this on the Carnegie Endowment website, so I recommend you take a look at his article. The cost to implement that would arguably be low. The increase in confidence would be relatively high.

And you can say there has been some precedent for that because Romania, back in the early 1990s, they voluntarily invited the IAEA in to do a special inspection. There was also a special inspection done on North Korea – I think it was around 1993. But that was involuntary. And then there's been some discussion about doing such an inspection with Syria because of the suspicious activities going on in Syria in recent years.

And then one of the final things to consider is to do interviews with Iranian scientists and officials, and also with other scientists at universities. And the cost of implementing that would be relatively low. And you might be able to increase confidence anywhere from medium to high.

Under the Additional – under the current Comprehensive Safeguards, it's not permitted. But under the Additional Protocol, you would have to try to work out some kind of agreement with Iran as to what people you want to get access to. And so far, Iran has been seriously resisting that type of option.

I'm out of time, Daryl? Okay, good. I know – like I said, a lot of options to consider. And like I said, there will be a quiz at the end. So I will step off the stage at this time and let Greg Thielmann come up.

MR. KIMBALL: Thank you, Charles. And as Greg comes up, just to clarify, when you were saying that the cost of this option is low or medium or high, you're referring to the resource costs, the monetary costs of that particular operation?

MR. FERGUSON: That's correct. I should have made that clear. And of course, the political cost could be relatively high for almost all of those.

MR. KIMBALL: All right. That's all. Greg Thielmann – thank you very much.

GREG THIELMANN: Thank you. And I appreciate the interest of the audience in this important subject. I wanted to offer a few thoughts on negotiating tactics. So it's a little bit narrower focus than in Barry's presentation.

The first point I wanted to make is, the time is right for talks. We now have leverage. The fourth round of U.N. Security Council sanctions are in place. And their implementation is

increasingly effective. Unilaterally, U.S. and European measures are intensifying the economic impact of the Security Council sanctions. And I think Barry had a good summary of the different categories of sanctions and how that is working.

Moreover, Iranian diplomatic efforts to divert attention from Tehran's noncompliance with its NPT obligations have basically fizzled. They were not successful in their last-minute effort to derail the sanctions in the spring. The last-minute tour that they offered of Iranian facilities just a few days ago also seemed to be not very convincing to the international community.

And I think it's also important to emphasize that at least as far as we know from reading statements of intelligence service officials, Iran still has not made a decision to ultimately take that final step to develop, test and deploy nuclear weapons. So another encouraging aspect, which has already been mentioned, is that the estimates of the time required for weaponization are moving outward.

For some months, the Obama administration has been signaling that it would take at least a couple of years to develop a nuclear weapon, even assuming the quickest and least likely path, which would be to use the centrifuges and stored low-enriched uranium that Iran now possesses to enrich to weapons-grade level. And of course, even the Israelis are now projecting at least three to four years rather than 12 to 18 months for Iran acquiring a nuclear weapons capability.

And U.S. officials acknowledged in the fall of 2009, that they had overestimated the speed of Iran's long-range ballistic missile development program. Missile experts like Michael Elleman of the International Institute of Strategic Studies argues that Iran's missile option for threatening regional targets with nuclear weapons is most likely the solid-propellant Sejil-2, which is still, in his view, several years away from being deployed.

And reports of technical problems in Iran's nuclear program and more realistic assessments of Iran's missile capabilities have muffled the beating of the war drums in the U.S. Congress and in Israel. I would encourage you to recall that Jeffrey Goldberg was predicting only four months ago in his Atlantic article that an Israeli attack was likely in the spring of this year.

And I second the comments made by Barry that the talk of the military option makes it harder, not easier, to reach agreement. This is a basic disagreement with others who have opined that we really need to hold the threat of a military option out or wave it around in order to convince the Iranians to negotiate seriously. I disagree.

With regard to North Korea, the U.S. has called for strategic patience. But with regard to Iran, I would suggest something like patient persistence as an appropriate watchword. Since the end of the Iranian hostage crisis – exactly 30 years ago today, by the way – direct meetings between Iranian and U.S. officials have been rare. And of course, there is much bad blood to overcome.

There is also the risk that compromise by Iran will open up the Iranian leadership to attacks from both hardliners and reform elements. And I think we've already seen an example of this in the U.S. suggestion for a fuel swap last October.

Negotiating on nuclear issues with Iran, we should anticipate setbacks and half-steps. Arriving at a satisfactory agreement will take months, but we must be persistent in the pursuit. We cannot passively wait for Iran to run up a white flag and announce capitulation to the P5+1 demands. So instead of wasting time pushing desirable but non-attainable positions, we should recalibrate our objectives.

Forget about the zero-enrichment solution. Pursuit of this objective could have been more productively pursued in years past through persistent diplomacy. It is not a realistic option today. We must use our current leverage and the time available to reach a negotiated solution, but a solution that nonetheless diminishes the prospect of an Iran with nuclear weapons.

So let me talk about, in a little bit greater detail, some realistic objectives. Political impediments to fruitful negotiations lurk in the background. The very success of sanctions in raising the cost of defying the international community can encourage an overreach by U.S. and European negotiators – for example, setting sights on abandonment of the full nuclear fuel cycle or Iranian regime change, both very much in the air whenever we look at our sanctions working.

We must make sure that the core issue with Iran's nuclear program is clearly understood and articulated, giving the IAEA sufficient leeway to ensure that the program is peaceful. Our objective is not to deny rights granted to others or to keep Iran weak. This may be a part of our negotiating leverage; it is not what we are seeking in negotiations with Iran.

The U.S. should stress that for Iran to enjoy full privileges under the Nuclear Non-Proliferation Treaty, it must do no less than what is expected of other non-nuclear weapon state signatories. And I very much enjoyed Charles' comment about Japan. Indeed, let's treat Iran like Japan – or let's say, Iran should behave like Japan in order to be treated like Japan.

While the NPT establishes no unconditional right to uranium enrichment, neither does it prohibit uranium enrichment. And the U.N. resolution calls for suspension, not abandonment, of enrichment. Secretary Clinton made clear in a December 2010 BBC interview that the United States was not inalterably opposed to Iran's enrichment of uranium.

In her words, "Iran can enrich uranium at some future date once they have demonstrated that they can do so in a responsible manner in accordance with international obligations," unquote. This must be repeated often and loudly. It is rarely said by the U.S. government or many other parties.

Realism also requires that we separate our distaste of personalities and regime characteristics with the task at hand. Negotiating with Iran means negotiating with the government of the Islamic Republic of Iran as it is, not as we wish for it to be – and I apologize for sounding like Donald Rumsfeld. (Laughter.) One would think we had learned this basic

principle from our nuclear negotiations with the Soviet Union, hardly our favorite interlocutor or our bosom buddy.

Let's talk about some small steps that are needed initially to build confidence because I think in the route to a negotiated agreement, small steps are absolutely essential for making larger steps possible later. One small step is an agreement to meet again after the talks in Istanbul. This may be setting a very low bar for success, but I will be satisfied if the talks starting tomorrow lead to a firm commitment for another round.

Initiating bilateral conversations on the margins at Istanbul between American and Iranian delegates would be another constructive small step – it did not happen at the last meeting; establishing procedures and venues for future talks – and by that, I mean for regular, substantive, detailed and confidential exchanges on all nuclear issues; identifying common interests outside the nuclear portfolio and opportunities to open up parallel discussions in these other areas.

And as Barry said, one important piece of this subject is to drop the current restrictions on diplomatic contacts between the United States and Iranian diplomats. This is very counterproductive to our pursuit for a constructive diplomatic engagement.

So thinking a little bit beyond the small first steps, I think we do have to think about creative approaches. The ultimate requirement for resolution of our current impasse is Iran's acceptance of IAEA measures, such as those outlined by Charles, to ensure sufficient confidence that Iran's nuclear program is exclusively peaceful.

But there is room for interim steps in the meantime. Even though it wasn't successful, the proposal for swapping Iranian low-enriched uranium for the manufacture of plates to refuel the Tehran research reactor was a creative and positive attempt to create a win-win, confidence-building measure. And indeed, this basic formula continues to be a real option even now.

As a more direct interim confidence-building measure, the P5+1 could offer to freeze future tightening of sanctions in exchange for Iran capping the current number of working centrifuges. This is sometimes called a "freeze-for-freeze." And this could perhaps be coupled with relaxation of certain categories of currently prohibited trade goods. There is a list of things that would not break sanctions, but it would be a significant contribution to lowering the heat of the tension between Iran and other countries.

Another confidence-building measure and one, by the way, which was previously proposed by Tehran, would be for Iran to ship low-enriched uranium to other countries for manufacturing fuel pellets to be used in Iranian civilian-power reactors.

So these are a number of creative possibilities. There are many more, obviously. This is something worthy of more attention. In the pursuit of such opportunities, I would just like to say that I think the U.S. has to take full advantage of collective efforts, exploiting the good offices of other countries.

We should be wary – and I’m particularly talking here about the U.S. Congress – should be wary of passing more stringent unilateral measures that could end up subverting the overall sanctions regime. The last thing we want is to create fissures between the United States and other countries in the enforcement of these sanctions that the U.N. Security Council has endorsed.

And I would say the potential contributions of other countries such as Turkey and Brazil should not be ignored or dismissed or denigrated. Both of these countries can help us solve the Iranian nuclear puzzle. Accepting Turkey’s offer to host the Istanbul talks is a good start. I don’t expect dramatic progress at the talks. But let’s hope that Istanbul becomes another step in the patient and persistent pursuit of a negotiated outcome. Thank you.

MR. KIMBALL: Thank you very much, Greg. Now, it is the audience’s turn. We have ample time for questions and discussions. We have a couple of gentlemen from the Arms Control Association with microphones who are ready to come to you if you raise your hand with a question. So Fred, if you could come up here. If you could just identify yourself. And please state your question as a question. That would be great – thanks.

Q: Yeah, Hugh Haskell from the Institute for Energy and Environmental Research. My question is for Charles. You talked about the confidence levels of the inspections as being set at 90 percent in order to reduce the false-alarm rate. Does that mean that the earlier confidence levels were lower? Because it seems to me if you’re reducing the confidence levels from a higher – you’re actually going to increase the false-alarm rate.

MR. FERGUSON: Right. Maybe I misspoke, Hugh. But typically, IAEA, whether it’s inspecting Iran or other places under Comprehensive Safeguards, seeks a 90 percent confidence level. And that’s a balancing act between trying to keep the false-alarm rate relatively low, but also having fairly high confidence that you could detect a diversion of nuclear material.

So what I meant to say – maybe I didn’t say it correctly up there – is that if you want – just so you’re saying – if you want to increase the confidence, say, from 90 to 95 percent, that’s going to increase the false-alarm rate. But that could give you more confidence that you could detect a diversion of material. But I was basically arguing against – did I say that wrong or no.

Q: (Off mic.)

MR. FERGUSON: No. Maybe it’s discussed offline. Yeah. I don’t think it’s such an important point because basically, I was trying to downplay that option. I don’t think it’s really going to – I think its cost – it will cost too many resources to implement. And increasing in overall confidence – the detection, something – isn’t really worth that price. Okay.

MR. KIMBALL: Yes, sir. Right here, in the middle. And then we’ll move over here. And then to the back.

Q: Yeah, Dan Lieberman (ph). Iran has greatly improved its relations with Iraq, Syria, Lebanon, Turkey, and also with Venezuela and Brazil. Now, will this new arrangement help

Iraq as a safety valve against all of the sanctions imposed upon them by the West? Will it provide relief to Iran to gain both the materials and know-how that it will need and not be dependent upon the West anymore?

MR. KIMBALL: All right. And Barry, do you want to address that? I'm sure your study group looked at all these different issues.

MR. BLECHMAN: We had a working group that looked at Iran's relations with other countries. And there are – particularly, Turkey – some banks and companies in Turkey have, in the past, helped Iran in the recent past to kind of slide past some of the sanctions. The U.S. is working on them through the Treasury Department to make clear to them the cost of continuing to do that, as well as the EU representatives.

MR. BLECHMAN: You know, much of their diplomatic gains with countries who have their own beefs with the U.S., like Venezuela, are – you know, it helps Ahmadinejad and his stature in a way, but there's no tangible benefit to it. So probably the most troubling is Iran's influence in Lebanon through Hezbollah, and that situation is a very dangerous one. But the – you know, the globetrotting, visits to Latin America and so forth, I think that's all theater and not very important.

MR. KIMBALL: Greg or Charles, anything on this question? If not – or yes?

MR. THIELMANN: I would just say that most of the countries – I think Barry identified some of the dangers, but in terms of acquiring materials and know-how, these are not the countries that Iran most needs help from.

MR. KIMBALL: All right. Paul Kerr with Congressional Research Service, your question.

Q: This question is directed at Barry. Did your – I was wondering if your report looked at the – or your group looked at the question of sort of the history of U.N. Security Council sanctions related to proliferation, because it's a fairly ugly history. I mean, in the case of Iraq, they started to comply; we invaded them anyway. In the case of India and Pakistan, they are – did not comply with Security Council Resolution 1172 and, to say the least, haven't suffered because of it.

It seems like because of that, a reasonable strategy for Iran – and I'm reasonably sure they're thinking about this, based on some of their statements – is to simply wait out the sanctions, or to progress to the point where people will say, well, we need to change our strategy because Iran is now nuclear-capable or whatever. So it seems to me that there are some potential limits to how long we can enforce sanctions. We can't do it for it perpetuity. So I was wondering how that factored into your analysis, or if it did.

MR. BLECHMAN: Yes, we did look at that. And the history of sanctions more broadly is not very effective. The Peterson Institute has done a study looking back decades at sanctions

for various purposes, and they work best when core national security issues are not at stake. They tend to work poorly when something like nuclear program is at stake.

One change is this development over the past few years of enforcing these financial sanctions and raising the danger to potential violators of sanctions, that they'll be barred from operating within the U.S. market or other advanced markets. So they have – really have something to lose by violating the sanctions.

Nonetheless, we don't – I think we state explicitly we don't believe that sanctions in themselves can cause Iran to drop its program or to reach a compromise on it. That's why we say the sanctions are putting this pressure on them, accentuating the political conflict. Now, let's take advantage of that and try to bolster those who are more pragmatic, might wish to reach compromise by showing them more positive incentives to reach agreement.

But I think certainly – there – we're really just starting to tighten enforcement of the sanctions during the past year, so I think there's time to go on that.

MR. KIMBALL: All right. Over here, please.

Q: Hi. I'm Adam Melkitz, in Georgetown Security Studies program. I have one for Mr. Thielmann. There's like – Paul Bracken had the concept of the second nuclear age, and obviously we're going to have a lot of more counterproliferation challenges in the future. Is Iran's case providing any sort of lessons for nuclear diplomacy in the future with these types of states? Or is it just so sui generis that we can't generalize anything out of it?

MR. THIELMANN: Yes. (Laughter.) I would say both. It does have lessons, and it's sui generis, as with most things, I guess, in the realm of international affairs. I think we've clearly learned things. We've learned things from our Iraq experience, with direct applicability to Iran. One hopes, anyway, that our learning curve is not flat, that every time the world confronts a crisis we figure out what works and what doesn't work as well.

I think one of the things that we realize a lot more deeply or thoroughly now is that some of the encouragement that the Nuclear Non-Proliferation Treaty and the whole IAEA operation for nuclear power, that if we could renegotiate the NPT it would have included additional protocol right off the bat, that there would be more safeguards for – to prevent the diversion of nuclear weapons.

And we have seen in the Iranian case how far a country can go professing adherence to the NPT as a signatory and claiming to be operating consistent with its safeguard agreements, but actually doing something very differently. So I think some of these things – obviously the additional protocol came about as a result of trying to make up for some of our mistakes at an earlier era. And I think we're still learning.

I think it's important all the way along not just to get to a negotiated solution with Iran but to always be conscious of what other signals are being sent around the world to other countries, to potential Irans, to countries of proliferation concern, to see that we're not actually

rewarding Iran for bad behavior. And that's one of the dilemmas in trying to construct a policy: How do you make proposals that can be perceived, as Iran, to somehow benefit them or give them a solution that is also to their advantage without, then, compromising the international standards and the message to other countries?

MR. KIMBALL: All right, I think we had a couple questions here. And if – Howard, and then we'll go in the back, and then we'll come back over here.

Q: It's Howard Morland. This is the usual question I ask at these things. If it's okay for Israel to have a nuclear arsenal, why is it not okay for Iran? And does your – how persuasive is your answer to this question to the other nations of the region?

MR. KIMBALL: Okay, I can take a crack at that, unless others of you have a more clever –

MR. : Please. (Laughter.) (Inaudible.)

MR. KIMBALL: Well, because we've heard this question before, Howard. It's a good question. And it is one that, you know, we do need to address in the context of the broader Middle East. It is not okay for anyone to have a nuclear weapon. All countries are obligated to support the – not just the pursuit of but the achievement of total nuclear disarmament. But we're at a point in history where there is one country in the region, Israel, that has nuclear weapons. It's had a secret program for many years.

And, you know, the Iranian program I think we all – we all have to recognize is not there simply because of Israel. There are other historical reasons why the Iranians have pursued nuclear research. So, you know – plus, of course, the fact that Iran has – is a signatory to the nuclear Non-Proliferation Treaty. Israel, unfortunately, is not. And so there are different obligations – legal obligations, international obligations – that Iran is obligated to pursue that it has not been fully pursuing.

So the – you know, the broader question of how we're going to deal with the other countries in the region with nuclear programs, you know, it – that is also a longer-term question. There is a unique opportunity, I think, coming up in 2012 with the agreement on a meeting about the pursuit of a – zone-free weapons of mass destruction in – Middle East. And that is – that – the planning for that is on the very early stages. It's a very tenuous opportunity, but it's an opportunity that all the countries in the region should look at as a way to increase their own security and the region's security, including Israel. And so there's an event next week at which I'll be talking about that particular issue. And maybe you can ask your question again, and I can answer it a little bit better now that I've rehearsed it. (Laughter.) So we've got a couple other questions. In the rear, please.

Q: Harry Blaney, Center for National Policy. Daryl kind of raised what I was going to ask a little bit about. My assumption is that Iran does not want to give up the chance of having nuclear weapons, that in some way this is a fundamental element of their national security policy

in the present context. The second element that's at work, it seems, is that what we are doing, either in carrots or sticks, in that context is probably not sufficient to change their mind.

And the question I want to ask is the macro question, which Daryl, in some ways, brought up: What is – could be put on the table in a macro way to change the game and to change the assessment? And of course, one possibility is what Daryl mentioned, and that is a larger agreement in the region and in other elements.

So I'd like to ask particularly Barry and Greg what their thoughts might be. Would it be a game changer, essentially, beyond what we are doing now, the bits and pieces that might change the environmental landscape that would induce, either by carrots or sticks – carrots or sticks, that game changer? Thank you.

MR. BLECHMAN: Well, I agree with your assessment that Iran has desires – or the Iranian elite desires to acquire nuclear-weapons capability. The question – the purpose of our policy should be to persuade them that the cost of doing that is too great – not only the cost being imposed by sanctions and covert ops and so forth, and isolation – diplomatic isolation, more or less – but also the opportunity cost in terms of what they're forgoing in terms of improving the economic well-being of their people and of themselves.

Iran is not a happy place. There's, you know, 25- to 40-percent unemployment, there's terrible drug problems. The economy is going nowhere. And, you know, one, just have to shift the calculus, the weight of opinion within these elites so that they can say, well, yes, we still want nuclear weapons, but let's put that off for a while. For now, let's come to some agreement that satisfies the West that is not humiliating to us, you know, by permitting us to continue enrichment and so forth; and let's see what – you know, what the West can deliver to us.

And that buys you more time, and hopefully then you can reach a broader regional solution to the problem, or we could move down the road toward disarmament more broadly in the world, so.

MR. THIELMANN: I would only add a couple things to that. Game changers are a little bit hard to articulate before the game has changed. I do think that it's worth noting that, looking over the long term, there are a lot – there are a lot of interests in common on the part of the United States and Iran. It's just – it's just sort of in the – in the nature of international affairs and geopolitics that there are a lot of things that Iran and the U.S. could pursue in common.

And so I don't think that we're in a situation where here are two countries that are destined to always be adversaries all across the board. So I think if one considers that that is in the background context, I think it's possible to hope for a change in the game, even if it's not dramatic and quick.

The other thing I would mention is that there are things related to nuclear disarmament and arms control which I think one should also keep in mind. If more progress is made on the Comprehensive Nuclear Test-Ban Treaty – and I think more progress is possible in the next – in the next few years – that will create a higher barrier to one of the things that Iran would need to

do, which is to test nuclear weapons. Iran does not want to be a North Korea. And the higher the barrier – the obstacle is to actually lighting off a nuclear explosion and then Iran explaining to its people why the fatwa meant nothing, and all the other things that they would have to do in order to do that, this suggests that progress on the CTBT would help with the Iran situation.

And I'm – I don't rule out – I can imagine an Israel that could accept a CTBT. That would also be a step which would make it that much harder for Iran actually to test nuclear weapons. So I don't think it's – things are quite as glum as they always seem to appear.

MR. KIMBALL: All right, we had a question over here.

Q: Mark Gubrud, University of Maryland. Barry, part of your proposed strategy was to increase emphasis on ballistic-missile defense. You blamed the Gulf states for not cooperating and creating an effective missile defense, but you didn't tell us what you meant by effective or what kind of missile defense you thought would be effective.

One thing we do know is that the systems that the United States is selling to NATO, and would probably push on the Gulf states, will have at most a limited impact on Iran's ability to threaten Europe and those states with its current conventional ballistic missiles without countermeasures; would have essentially no effectiveness against future nuclear missiles with simple countermeasures that are well known.

So there are other concepts out there for potentially more effective forms of missile defense. But these are also – we have to consider perhaps that they would create a more dangerous situation, a greater confrontation by forward-deployed interceptors and so on – interceptors on aircraft.

Well, while you're thinking of an answer to that, I have a second question I can throw out for the entire panel, which is, when we hear that Iran will have a nuclear weapon next year, and then a few months later some of the same people tell us, well, it's going to be four years in the future, you have to wonder about political manipulation of these numbers. And I wonder if the administration is taking advantage of the recent publicity about Stuxnet just to try to throw some cold water on the need for immediate nuclear attack.

MR. KIMBALL: So Barry, if you could deal with the first issue, please?

MR. BLECHMAN: Yes; I was – what I was talking about was a sort of regional defense system for the Gulf countries – I wasn't think of a European context – something that would give the Gulf countries some confidence to help us avoid additional proliferation should we fail in our efforts to keep Iran from acquiring nuclear weapons. And thinking of the sort of system we're developing with Japan, and probably will with South Korea, against the North Korean attack that might involve some land-based missiles like THAAD and the Aegis system on U.S. warships, all internetted and dependent on U.S. early-warning and tracking systems.

On the second question, I think it was the Israelis that were manipulating the threat. The U.S. has been pretty consistent. In recent years, General Cartwright, back in June, said they were

two to five years away. And the big change was the Israeli announcement from the retiring head of Mossad that they were in the same ballpark. So I don't think that's being manipulated by the U.S., the greater thing.

MR. KIMBALL: And I would – on this threat-assessment issue – I don't want to interrupt you, Charles – but there is an op-ed that Greg Thielmann and Peter Crail, our nonproliferation analyst at ACA, did for the Christian Science Monitor, that's out on the table, that tracks what some of these past threat assessments were. I mean, I would just say that, you know, the mainstream-media discussion on the threat assessment has not tracked with what the credible government and credible nongovernmental estimates have been.

And so that's one of the reasons why we continue to try to reiterate the point that, while the program – Iran's program and its lack of cooperation with the IAEA is troubling, we do have time. And it will be certainly some time, some years, before Iran has the capability that we're worried about. But Charles, you were going to comment on that.

MR. FERGUSON: Yeah, basically, I was going to just amplify what Daryl just said. And it's kind of – I'll take it and almost treat it as a softball question – (chuckles) – saying that's why we need organizations like the Arms Control Association and Federation of American Scientists to do those independent credible assessments. And I don't want to preempt too much: The report is going to be posted tomorrow morning on FAS's website. But Ivanka Barzashka, who's a Bulgarian physicist, she's done the calculations. She's set up the computer model, done the math, solved differential equations, et cetera.

And you know, her analysis a year and a half ago indicated that the centrifuges were underperforming by about a quarter. They're about a quarter as effective as the mainstream news media was saying they were. And so then that was good news, in effect, in terms of diplomacy.

But now, her latest calculations show that, you know, it looks like Iran has made some progress in the past 12 months, putting aside Stuxnet and also their covert ops aside. So we have to continually be doing these assessments. We need to do the peer review of what the government and other sources say.

MR. THIELMANN: Just to state the obvious: that intelligence assessments are very difficult for the public to absorb. For one thing, they're secret – (laughter) – and so you're absorbing usually leaked or carefully scripted summaries of complicated intelligence assessments. And it's hard for the press to capture the essence and headlines without losing some of the important qualifications and so forth.

I would certainly never want to imply that any governments ever distort intelligence assessments for political gain. That would be far too cynical. (Laughter.) But the public and interested public like the people who are here need to read things carefully to make sure that you understand the qualifications of intelligence assessments as given when there is information available.

And I think that means, also, however enthusiastic one can be about the success of industrial sabotage, to disabuse yourself that we can sabotage our way to a satisfactory solution to the Iran nuclear problem. The National Intelligence Estimate, as reported, that – our last glimpse of this pointed out that Iran can develop nuclear weapons if that is what it decides to do. And so I take that as a reality, and that sabotage and sanctions are a way to delay that outcome and not to prevent that outcome, if Iran is ultimately determined to achieve it.

MR. KIMBALL: All right, we've got some other questions. Yes, sir? Any others? Okay, thank you.

Q: Alan Krass, formerly with the State Department. Last week, I attended an event at which David Albright talked about the potential Iranian program. His claim is that they have a design – this is relevant to Greg's statement about testing being necessary – that they have a design which they feel confident can be deployed, I guess, without testing.

Now, the Israelis, of course, have developed what everybody believes to be a very credible nuclear-weapons capability without testing. Do you – do you really believe that somehow it's going to be necessary for the Iranians to test in order for them to convince the world or persuade significant parts of the world that they have a capability? Or would they reserve testing as a different – actually, a more political kind of statement, that they would, in fact, handle it in a very – that would cause them to come out in a very, very different way? Thank you.

MR. THIELMANN: My quick answer is yes, I believe that Iran would want to test a nuclear weapon before it deployed systems that it wanted to rely on as a nuclear deterrent. That's just my opinion. I think you can respectably argue the opposite. And I listened to what David Albright said; I raised my eyebrow; I wondered.

But some of the things that you are saying I'm not sure are generally accepted. I mean, I personally believe Israel did test a nuclear weapon in the south Atlantic. That's a divided opinion, but there are a lot of experts who believe that they did. So how many countries have deployed a nuclear arsenal and have not tested nuclear weapons? I mean, if I'm right about Israel, then I can't think of any, right offhand. So I think it's a reasonable assumption.

The other thing I would say is that if one looks at the Iranians with regard to their ballistic-missile program, one sees a very different approach than that of North Korea. You know, we heard from everyone in the late '90s that we had to completely rethink our view about ballistic-missile testing, because the North Koreans had only one successful test of the Nodong missile and then started deploying them. And so I think that we all over-recalibrated our thinking to say, oh, well, that's what emerging countries do.

But then we watch Iran, and Iran tests and tests and tests, spends years improving the Shahab-3 before they deployed it, before it was operational. So the way Iran approaches its ballistic-missile program and some aspects of its nuclear program, I think they're very serious and sober about how they do things. They are not a North Korea. So I think that they would want to do that. And having said that, I would just acknowledge the final point is, it is true that

you don't have to have a nuclear potential that everyone knows would work to achieve the gains of nuclear deterrence. And that means both for Iran and for the other countries reacting to Iran.

The example I often give is, if a – the national security advisor to the U.S. president, in a crisis with Iran, assures him that we are 80 percent confident that Iran has no nuclear threat against the United States, the president will act as if there's a hundred-percent chance of a nuclear threat against the United States.

So yes, you can accomplish a lot without nuclear testing. It's just my own reading that Iran, if they – if they wanted to – if they wanted to benefit from – if you want to call it that, "benefit" – and be penalized by an open nuclear deterrent, that they would want to make sure that they had a nuclear deterrent.

MR. KIMBALL: And I would just add quickly that, you know, we – as we look at Iran and the Middle East and the second nuclear age, I mean, we need to think about, how do we increase the barriers that help prevent – "help" prevent, but not totally prevent – countries from acquiring more fissile material and more sophisticated capabilities.

The test-ban treaty has been and continues to be one of those barriers, because even if Iran could build a – manufacture a device based upon a design that someone else may have tested, that may be – you know, that – it would be useful if that would be the limit of its capabilities. A decade later, if it could conduct a nuclear – a series of nuclear test explosions, it could produce a second-generation device that's smaller, more compact, and could more confidently be delivered on a – you know, on a medium- or a long-range ballistic missile.

So we can't just be thinking about, you know, what's going to happen in 2015. We got to think about what the situation might be in 2020, '25 and beyond.

All right. We had a couple more questions. What I want to try to do is take those two questions and pair them, and then our panelists will answer.

Go ahead, ma'am.

Q: Is this working?

MR. KIMBALL: It is working.

Q: I'm Samira Daniels (ph). I'm interested in negotiation capacity. And the question that I have in these last 14 years, 15 years is whether – and this – probably Greg Thielmann can respond to this, and anyone – whether you see the emergence of a – in terms of nuclear diplomacy, real progress. I mean, do you – do you see countries or these international bodies looking to really improve the quality of negotiations, given that you have a – as one person said, this cacophony of voices within the United States, you know, some very strident towards Iran and so forth. And there's got to be more, you know, research in terms of how to really improve, you know, diplomacy, you know, given that Ahmadinejad is, you know, responding and reacting to one person one day, another person – you know, this is a problem I see.

MR. KIMBALL: Right. Okay. All right.

And then we had one other question in – yes, sir.

Q: My question is about the sanctions. Firsia Kiafa (NOT) (ph) at the State Department – about the sanctions and the role of Turkey. Specifically, you mentioned that we have finally gotten the Europeans on board and the Japanese and the South Koreans and some of the Gulf countries, especially the UAE, where the Iranians did the bulk of their business with the – with the front companies.

But the question that I have is about Turkey, given the fact that they have a government in power there with the AQ party, which, you know, given what happened during the Gaza crisis and trying to get the ship over there, they're not very pro-Israel, and they have their own issues with Israel. And so there's some kind of a sympathy now with Iran, and this alliance that has been building between Tehran and Ankara. How difficult is it – I mean, okay, given the fact that you know, again, Turkey being a NATO ally – but I guess the question is, how we do – how do we convince the Turks to cooperate more with us when it comes to the sanctions? Because I honestly look at Turkey as a – as a big sort of hole that the Iranians are taking advantage of.

MR. KIMBALL: Okay. All right.

Q: Before, it was Dubai, and now it's Turkey.

MR. KIMBALL: Barry, maybe Greg, if you could address those questions? And then we invite each of you also just to make any concluding – closing comments.

MR. BLECHMAN: Turkey certainly is a problem. And Turkish policy has changed dramatically in recent years, not only with regard to Israel but with regard to its stance toward the Middle East overall. It's – has this no-enemies policy now, and – in part a reaction to Europe's rejection of it, in part because of the growth of greater religious spirit and political power of the religious elements within Turkey.

And it is a problem for Iranian sanctions. I don't think it's capable of negating the effects of the sanctions; it's just kind of a loophole. And I believe Mr. Levey from Treasury is working to see Turks have a lot of interest in U.S. economic relationships. So hopefully the worst of it can be controlled. But it's certainly a problem. But as Greg said, we can use Turkey also as a conduit, and should use them as a way to improve communications with Iran.

On the broader question, I'd say there has been positive movement on the nuclear issue, broadly, over the last 15, more years. Nuclear weapons increasingly are marginalized, and it's in part because of the no-testing moratorium, in part because of the progress the U.S. and Russia have made, in part because of concerns of nuclear terrorism and the progress made in securing nuclear materials.

So we have these bad actors, but they're very isolated. It's North Korea, it's Iran, it's – maybe it's Burma – not really, but possibly. And although progress has come slowly in terms of what's acceptable, what's considered acceptable international behavior, nuclear threats and nuclear aspirations I think are increasingly being pushed to the margin.

And if I take any comfort from what's happened in the nuclear field over the years I've been in it, it is this marginalization of nuclear options and thinking of nuclear weapons, which I think has much to do with the test ban and the treaty and the moratorium on testing.

MR. THIELMANN: I'll try to respond briefly on both questions. First of all, since I spent 25 years as a diplomat, I can only applaud any study of diplomacy as worthy of attention. I think case studies on – particularly on arms-control negotiations are very worthwhile. I mean, we do – we've spent a lot of time over the last few decades negotiating things that ultimately determine the survival of the planet.

We need to pay close attention to what we have learned and what happened in previous circumstances when the world was really on the brink. So what's out there, we have to study and be aware of it. And I think one of our – one of our great needs is for Congress to have more of an appetite to do some of that studying.

And one of the ways is for the Congress to be involved in study groups, arms-control study groups, actually spend time with negotiators, talking to them about the task at the hand and talking to the foreigners with whom we're negotiating to make them more aware of the complexities of the issues. So I certainly endorse that.

On Turkey, let me make a brief point about both Turkey and Brazil, since I think they got a lot of bad press from their efforts last spring to come up with a way out of the impasse on the swap issue. Turkey does have a no-enemies policy now, as I understand it. They want to improve relations with all of their neighbors, which doesn't seem to me a bad thing.

And Turkey is also – has provided us with an example of a country that mixes democracy, prosperity and Islam. That also seems like a very good thing in our current times. And in the case of Brazil, you have a country that has a conspicuous effort of success, historically, at helping facilitate serious border disputes in South America. And you have a country with a world-class diplomatic corps.

It seems like with the characteristics of these two countries, this should be an asset for us, that these two countries are both much more trusted by Iran than we are. That doesn't mean that we don't have complaints with Turkey and Brazil. And I'm very sorry that both countries could not at least have abstained in the sanctions vote rather than voting against sanctions.

But nonetheless, there's a lot to work with here and I think it would be very foolish for us not to take advantage of it.

MR. KIMBALL: Charles, any final thoughts?

MR. FERGUSON: Well, if there's any hope for any of the increased technical measures I talked about in terms of increased competence of monitoring safeguards, it's through what Barry and you and Greg have been talking about in trying to develop better relations with Iran, but not necessarily just letting them have what they want.

But you know, sanctions can play a role, but coercion alone is not going to get us to increased confidence in Iran's nuclear program. So we have to offer clear incentives that play to Iran's interest and also support our interests as well.

MR. KIMBALL: All right. Well, I want to thank all of our panelists for their short, smart and insightful comments at this critical time. And we've had a very rich discussion on issues beyond what we planned to talk about.

Let me just remind everybody that this is the second in our series of briefings on "Solving the Iranian Nuclear Puzzle," and there's a transcript of the first briefing, which was about the status of Iran's nuclear-missile program. So that's online at armscontrol.org. And there'll be a transcript of today's session online early next week.

And next month, we plan to pull together the third session in the series, and that one will be focusing on the effect and the limits of sanctions and where to take that in the months ahead. So thanks, all, for coming, and please join me in thanking our expert panelists. (Applause.)

(END)