

# Bulletin of the Atomic Scientists | 70 Years Speaking Knowledge to Power

BE A DONOR

[ANALYSIS \(/FEATURE-TYPE/ANALYSIS\)](#)

07/14/2015 - 02:31

## The experts assess the Iran agreement of 2015

John Mecklin

After serially breaking a variety of self-imposed deadlines, six world powers and Iran reached agreement on plans for long-term limits on the Iranian nuclear program and the easing of international economic sanctions on that country. The five permanent members of the UN Security Council and Germany (or P5+1) and Iran signed off on the complex agreement, more than 80 pages in length, Tuesday in Vienna. Negotiations were slowed for days by disagreements about the timing of sanctions relief, the degree of access international inspectors would gain to Iranian military sites, and, particularly, a UN ban on conventional weapons sales to Iran, which includes a ban on ballistic missile-related transactions.

The agreement reached this week places restrictions on a broad array of Iranian nuclear activities—including uranium enrichment and plutonium separation—and calls for the International Atomic Energy Agency to monitor the country's nuclear sites. The restrictions and monitoring regime aim to prevent Iran from producing nuclear weapons. As the restrictions take effect, a complex regimen of economic sanctions against Iran will start to be unwound.

The agreement will almost certainly face contentious US congressional review and heated debate around the world. The *Bulletin* has asked top international security experts with a variety of perspectives and backgrounds to offer their assessments of the agreement. Their comments will be published over the course of several days, as they have time to study the complex, lengthy, and unprecedented document.



[\(/bio/john-mecklin\)](#)

**JOHN MECKLIN**  
[\(/BIO/JOHN-MECKLIN\)](#)

John Mecklin is the editor of the *Bulletin of the Atomic Scientists*. Previously, Mecklin was editor-in-chief of *Miller-McCune* (since renamed *Pacific Standard*), an award...

[More \(/bio/john-mecklin\)](#)

**CONTACT**

[\(/MAILTO:JMECKLIN@THEBULLETIN.ORG\)](mailto:jmecklin@thebulletin.org)

**SUBSCRIBE**

[\(/BIO/5059/FEED\)](#)

**FOLLOW**

[\(/HTTP://TWITTER.COM/MECKDEVIL\)](http://twitter.com/meckdevil)

346

Tweet

591

Like

7

+1

70

INVITED EXPERT COMMENTARY

**William H. Tobey, senior fellow, Harvard's Belfer Center for Science and International Affairs**

21 JULY 2015



**Mark Hibbs, senior associate, Carnegie Nuclear Policy Program**

20 JULY 2015



**Oliver Meier, German Institute for International and Security Affairs (SWP)**

20 JULY 2015



**Emily B. Landau, senior research fellow and head of the Arms Control and Regional Security Program, Institute for National Security Studies in Tel Aviv**

17 JULY 2015



**Chuck Freilich, former deputy national security adviser in Israel and current senior fellow, Harvard's Belfer Center for Science and International Affairs**

17 JULY 2015



No country has more at stake in the nuclear deal with Iran than Israel. For the United States and Western allies it is a major foreign policy issue; for Israel it is potentially one of national existence. So no one in Israel takes it lightly.

Premier Netanyahu has come out strongly against the agreement, arguing that it is a bad deal which threatens international security and Israel's future. In his statements he has repeatedly made reference to 1938, evoking the specter of Munich and the Holocaust.

For many in Israel the Holocaust remains the defining moment of modern Jewish history, a cataclysmic prism through which the world is judged. Netanyahu can certainly be accused of overdoing it; Israel is today a regional power. But he is not entirely wrong. Iran's regime is a radical, rabidly anti-Semitic one that has repeatedly called for Israel's destruction and has devoted considerable resources to that end. Hezbollah, Iran's proxy, already has a mind-boggling 130,000 to 150,000 rockets aimed at Israel, according to [Haaretz reporter Amos Harel \(http://www.haaretz.com/news/diplomacy-defense/.premium-1.658648\)](http://www.haaretz.com/news/diplomacy-defense/.premium-1.658648), who bases his numbers on Israeli estimates.

Netanyahu has taken a particularly outspoken position on the Iranian nuclear program, but his views represent a broad agreement among Israeli leaders on the danger it poses. In fact, the national debate is a narrow, but critical one. Many agree with Netanyahu that a nuclear Iran is simply an existential threat to Israel, in the narrowest sense of the word. The logical conclusion from this approach is that Israel must do *everything* in its power to prevent the emergence of the threat.

Others believe that a nuclear Iran poses a dire threat to Israel, but probably not an existential one, in that the likelihood of Iran ever actually using a bomb is low, and that the real threat lies in the influence nukes would provide it in future conflicts. The logical conclusion from this approach is that Israel should do everything it can *within reason* to prevent Iran from going nuclear, but not everything possible. In risking a rift with the United States, the question is whether Netanyahu is now doing what is within reason, or possible.

In essence, Netanyahu's criticism is based on a few primary points that are hard to dispute. First, he argues that the agreement should not have been limited to 10-15 years, but should have been permanent. Second, that the agreement leaves Iran with its nuclear infrastructure essentially intact, instead of dismantling it, and that it will remain a de-facto nuclear state, able to rapidly achieve a nuclear weapon when it expires. Third, that the agreement does not restrict Iran's destructive role in the region, including support for terrorism and organizations such as Hezbollah, and in fact, by opening the financial spigots to Iran, will further enable it in these areas. Finally, that the devil is in the details of an agreement that is over 100 pages long, and that the Iranians are past masters at utilizing every loophole and ambiguous wording to their benefit to continue development of their nuclear program. This will be particularly important for the verification regime.

The US administration counters that this is the best deal that could actually be reached, not the best one possible, and that the alternative, no agreement at all, was worse. A dismantlement of Iran's infrastructure and permanent agreement were not attainable, but a 10-15 year postponement of its programs is a major achievement. Moreover, US officials argue, the agreement was never designed to restrict Iran's other misdeeds, just address the overwhelmingly important nuclear issue, an approach with which Israel was fully in accord in the past. No one doubts that Iran will try to take advantage of every loophole, this argument asserts, but the verification measures are robust.

Netanyahu's intention to take the fight to Congress and to challenge a president's biggest foreign policy initiative on his home turf would be sheer lunacy on any other topic and is misguided on this one. Only the belief that Iran truly presents an existential belief to Israel, and that this deal paves the way for that threat to materialize, can justify taking on the leader of the nation to whom Israel is so deeply beholden, and upon whom its survival depends today.

Israel has never successfully challenged an important presidential initiative in Congress and is highly unlikely to do so now. In the end, it comes down to who is better positioned to sway a small number of wavering Democrats. I am betting on the president. It is time for the prime minister to accept that this is the deal and to do what he should have done from the beginning: engage with the administration on the means of minimizing the threat to Israel and maximizing Israel's contribution to the agreement's successful implementation. Israel has intelligence capabilities and experience that can be invaluable in the years to come.

**Zia Mian, Program on Science & Global Security, Princeton University**

16 JULY 2015



**Sharon Squassoni, director and senior fellow, Proliferation Prevention Program, Center for Strategic and International Studies**

15 JULY 2015



**Lawrence Korb and Katherine Blakeley, senior fellow and policy analyst (respectively), Center for American Progress**

15 JULY 2015



**Kingston Reif, Director for Disarmament and Threat Reduction Policy, Arms Control Association**

14 JULY 2015



**Siegfried S. Hecker, Center for International Security and Cooperation, Stanford University**

14 JULY 2015



**Ambassador Seyed Hossein Mousavian, research scholar and former diplomat, Princeton University**

14 JULY 2015



Tweet 3 Like 591 g+1 7 70 (/ fe

36 Comments

Bulletin of the Atomic Scientists

Login

Recommend 1

Share

Sort by Newest



Join the discussion...



**mortuccio** • 7 days ago

If you really believe that Iran should not have nuclear weapons then you have to cut off the major artery to producing one-- national enrichment, either by buying out and removing the infrastructure or converting the facility to multinational ownership that can be extended eventually to create a Middle East WMD free, including Israel. This is not a new idea proposed earlier by Egypt and Iran but ignored by the UN. The current deal does not prevent Iran from obtaining a bomb.

Reply • Share



**xexon** • 8 days ago

Until you make Israel become a team player and open their facilities to the SAME inspections as Iran, anything we accomplish with Iran is going to be buggered by our own hypocrisy...

And I think that's how much of the world sees this.

These negotiations are far, far more about Israel maintaining it's military superiority in the region than it is anything else.

Beside Iran doesn't need the bomb. Because neither Russia or China is going to allow anything to happen to them. Do we really want to wake up the Russian bear or the Chinese dragon?

No, boys and girls. We do not.

But we can de-escalate this by restoring diplomatic relations with Iran. They do have legitimate concerns with us. They need to be talked out. And we need to make Israel sit in the corner while we do.

x

3 ^ | v • Reply • Share ›



**ConnieHinesDorothyProvine** • 8 days ago

Israel likes to portray itself as the victim of Iranian aggression, but opening back up to Iran will be good for Israel. And anyway, it's Israel that's the Mideast's military superpower. It could wipe out every other country in the region in a few minutes (and would probably like to).

2 ^ | v • Reply • Share ›

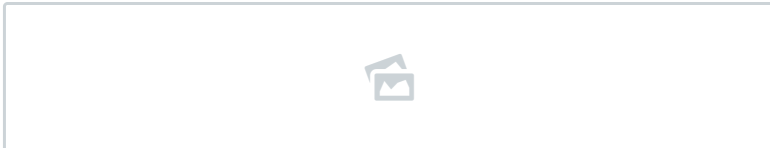


**RobGoldston** • 8 days ago

The deal between the P5+1 and Iran is extremely good for Israel. It is vastly better than the world Israel will face if the US Congress prevents the US from signing on. For example, a maximum 24-day delay for inspections anywhere is vastly better than no inspections, no-where, no time. It takes much longer than 24 days to build up to, or clean up from, an enrichment facility. 5060 centrifuges and 300 kg of 3.5% enriched uranium hexafluoride are much better than 25,000 centrifuges and 12,000 kg of UF6. Zero weapons-grade plutonium production is much better than one or two bomb's worth per year.

If Congress scuttles the deal, both the international sanctions and the monitored limits on Iran's program will quickly evaporate. This is the worst of all possible worlds. There will be no coherent restraints on Iran, and Iran will want to show its resolve, just as it has done before. So in a few months we will be back at the red line PM Netanyahu warned about at the UN in 2012.

See <http://blogs.timesofisrael.com...>



3 ^ | v • Reply • Share ›



**R Spitzer** • 8 days ago

Now we learn the US, UK, France and China are EXCLUDED from inspecting the sites forever. Iran will not allow representatives of these countries to inspect their sites. The US allows Russian inspectors in to US nuclear sites.

Please one reputable response explaining to me how we can have inspections without members party to the agreement inspecting the sites?

^ | v • Reply • Share ›



**Jay** → R Spitzer • 5 days ago

The five countries that are party to the deal, the P5, members of the U.N. Security Council, is a representative body of the U.N. and therefore of the world. That US, UK, French and Chinese inspectors are excluded should not be a deal breaker. The IAEA, the body that will be conducting inspections, is not lacking in nuclear experts from other countries. Besides nothing prevents experts from the excluded countries from instructing, supervising or checking work done by allowed inspectors.

1 ^ | v • Reply • Share ›



**Desert8Eagle9** • 8 days ago

Sig Hecker, former director of Los Alamos National lab and an expert in plutonium metallurgy, skips over the relationship between the type of international scientific and technical cooperation Iran wants to choose... and its relationship to the scientific basis to design, test and build miniaturized warheads and three-stage thermonuclear bombs with yields up to 10 megatons.

Plasma physics is very important to understanding what happens when the primary fission point explodes and transfers energy through neutrons and

intermediate structures to trigger the secondary and then on.

Neutron science is important to every stage of the weapon.

Modeling criticality in nuclear fission is an import stage of weapon design.

And studying fusion takes scientists in high energy-density research.

Iran has proposed, and Dr. Moniz has agreed, that any nuclear weapons state can send nuclear scientists to teach Iranian scientists and build advanced equipment. There is no restriction on China or Russia or North Korea to not send a nuclear scientist with past nuclear weapons experience.

And recruits for the nuclear weapons program have always been drawn from those who trained in academic nuclear physics and worked on high energy equipment.

2 ^ | v • Reply • Share ›



**pfbonney** → Desert8Eagle9 • 8 days ago

Wow. No one else is talking about that.

^ | v • Reply • Share ›



**Paul Sa** • 9 days ago

More responsibility and control for nuclear weapons, because it is possible that in the near future, with the serious international crises that are entering (climate change, scarcity of resources, global warming, overpopulation, extremist ideologies), there are chances that some countries or extremist militant group, use nuclear weapons to counter the opponents.

^ | v • Reply • Share ›



**pfbonney** • 10 days ago

I guess we are really supposed to be thankful that Obama didn't give the Iranians one of our TRIDENT II submarines fully equipped with 24 nuclear-armed missiles, to incentivize the Iranians to quit their quest for nuclear weapons.

Conspicuously absent from the above assessments are any that condemn the agreement. Obviously, comments were solicited only from those people who are of the belief that a bad deal is better than no deal.

And as such, further confirms the American political right's belief the political left wants ONLY the West to disarm.

For those not familiar with the issue, it was the left, led by Julius and Ethel Rosenberg, that gave the Soviet Union the bomb, stealing the design from the United States. Then, once the Soviets had successfully detonated their first atomic bomb, the left started protesting ONLY the West's nuclear weapons, emphasizing the need to engage in nuclear disarmament, which, of course, would leave all the non-western, anti-American countries with nuclear arms. (Do THOSE countries succeed in "huaining their children with

see more

1 ^ | v • Reply • Share ›



**Charles Carey** → pfbonney • 8 days ago

Rubbish-not one word about the deal in this comment. This is the tact of those against the deal.Trident II subs? really? UFB

1 ^ | v • Reply • Share ›



**pfbonney** → Charles Carey • 8 days ago

I did reference the deal, indirectly. You just weren't reading closely enough.

What did you want for me to say about it, anyway?

1 ^ | v • Reply • Share ›



**pfbonney** → pfbonney • 8 days ago

Okay. Anyway. I'll go ahead and say what it is that I think is important about the deal. I think anyone can figure out from what I have written already that I don't support it. But, specifically:

Obama declared that the agreement was "built on verification," not trust.

For starters, there is no clear path to inspections. There is no assurance that you can do any inspection, any time, for anything. There is no indication that, after the agreement's term, that Iran is going to then agree that they (Iran) is not going to pick up the pursuit of nuclear weapons.

As is so often the case, President Obama is misleading the American people. The fact is there will be no 24/7 "anywhere, anytime" inspections allowed of undeclared suspicious sites. The fine print of the final

[see more](#)

^ ▾ • Reply • Share ›



**Jay** → pfbonney • 5 days ago

The center of your critique seems to be that Iran has a say in the inspections request process, and that the process allows room for enough delays for Iran to prepare for the inspection.

Both are valid points. However, I think there's sufficient reason not to be worried about those potential loopholes.

Before I elaborate, I'll quickly address one of your other critiques...about "no anywhere, anytime" inspection. No one can blame Iran for not allowing that. I understand their concern about such a provision allowing inspection of other non-nuclear related areas and revelation secrets, which they're fully entitled to as a sovereign country. I mean, think about it, do

[see more](#)

^ ▾ • Reply • Share ›



**pfbonney** → Jay • 4 days ago

I do appreciate your measured, reasoned response.

I certainly do hope they find whatever we need to be finding, myself. Iran has never been forthcoming and straightforward on much.

^ ▾ • Reply • Share ›



**Jay** → pfbonney • 4 days ago

And I don't think anyone is blind to Iran's mendacious tendencies or expects them to be forthcoming. That's why the burden of proof is on us to to prove whatever we're accuse them of. The P5 and the rest of the world got on board with the crippling sanctions that brought

Iran to the negotiating table in the first place because we made a compelling case. We provided the evidence of secret activities. So rather than "hope", I'd encourage you to inquire of your elected representatives of efforts to ensure that our agencies have those tools and resources that they need to do their work.

^ | v • Reply • Share ›



**iharry** → Jay • 4 days ago

Ok, so, if the Iranians store properly shielded (more than 10cm in thickness) HEU at what becomes a suspected site, do you think those inspectors will find anything?

^ | v • Reply • Share ›



**Jay** → iharry • 4 days ago

Now you're asking the kind of questions that anyone who is really concerned, and I hope Congress, will be asking.

First, I don't know Iran even has any "HEU" or weapon-grade uranium. The news often talk about them having "enough uranium for x number of bombs. But everything I've read says that Iran's most "potent" stock is of 20%-enriched uranium, which is good enough for medical applications, but no where near the 90-95% enrichment needed for a bomb.

Second, as I intimated in a previous comment, detecting Iran's clandestine activity is totally on us (as in the collective world "us" represented by the IAEA). We have no choice but to trust the international institutions that we are part of. The

see more

^ | v • Reply • Share ›



**iharry** → iharry • 4 days ago

forgive me. I meant assuming the Iranians move the shielded HEU before the inspectors arrive (which of course they would do).

^ | v • Reply • Share ›



**Charles Carey** → pfbonney • 8 days ago

What ,exactly , is wrong with it other than references to the Rosenbergs, and Trident subs. Actually , Reagan faced the same naysayers with the arms limitation deal.

^ | v • Reply • Share ›



**pfbonney** → Charles Carey • 8 days ago

Now, I'm not following YOU. Before, you were sounding critical, now you're sounding sympathetic. I almost didn't pick up on the fact that you were the same person I had just replied to.

[Edit] Okay. I re-read it twice more and finally got your meaning. You were so angry you couldn't write clearly. But, had I put force the necessary effort. I could have (and did) get your



meaning.

1 ^ | v | • Reply • Share ›



**boonteetan** • 10 days ago

The deal has finally arrived.  
Curb of nuclear activities in exchange for sanction relief, that is the nutshell of deal. Nothing concrete as yet, US congress has to approve first. Also, how would IAEA carry out its supervision on Tehran effectively? Could Israel sit quietly? Will Saudi not react?

^ | v | • Reply • Share ›



**Scott in VA** → boonteetan • 8 days ago

The "nutshell"?  
As you know, the devil is in the details, such as NO wherever/whenever inspections and immediate release of hundreds of millions of dollars to a terrorist nation.

1 ^ | v | • Reply • Share ›



**David Szabo** • 11 days ago

Peace is a word that has many meanings in the middle east.  
religion  
land  
energy  
you can share religion  
  
you can share land  
  
you can share energy  
only then can you have peace  
middle east is swimming with money that can be used for the benefit of all  
  
better life better homes more water more food  
Israel has turned the desert into a breadbasket to feed it,s people  
that knowledge can be shared  
  
and energy from uranium must be phased out and oil as well  
the sun is abounded in the middle east Saudi Arabia is already starting on this venture

as for Iran it is a strong hold for the right,s of humanety but you will not get it with force only allah can do that it is true that we have the messangers of good that come to us from the Creator he is known by many names let us hope we can show him that we can live in Peace and he will forgive us because we are after all his children

1 ^ | v | • Reply • Share ›



**hans** • 11 days ago

the next world war is coming thanks to idiots that call themself educated. well i am not but war and reading about war is a big hobby. Iran is the biggest sponsor of terror against Israel and the west. So thinking this averds war is stupid.

Saudi Arabia is seeking nukes through Russia, that looks for money. So "peace" is nothing but a word on paper.

3 ^ | v | • Reply • Share ›



**dinkydave** → hans • 17 hours ago

If Saudis really feel need for nukes, they seem to have agreements in place with their Wahabi buddies in Pakistan. Fun, wow!

^ | v | • Reply • Share ›



**Gunnar Westberg** • 11 days ago

REJOICE - WITH TREPIDATION.

Gunnar Westberg

How I would like to say: Peace is saved! I would like to go out in the summer evening and sing: Blessed be the steps of the peacemakers.

I will do so. Yes, I will.

But there are fears in the recesses of my mind: Is the deal really safe from the warmakers in the US Senate? It ought to be because if they say No, the rest of the world is likely to go on and stick to the deal, and the US would be the great loser, losing trade and influence. But I do not know what tricks the US senators may have up the sleeve. After all, their defeat will be difficult to bear.

And Netanyahu, what can he do? He will look for ways to make it seem that Iran is about to attack Israel. There are ways to produce subterfuge. Groups under Israeli influence may kill Israeli diplomats or blow up a building in Israel. Israeli terrorists could launch an attack on a US embassy, or a US passenger plane, making it look as an attack from Iran.

I do hope my fears will not come true. I do, I do, I do

1 ^ | v • Reply • Share ›



**General\_Chaos** → Gunnar\_Westberg • 10 days ago

And you have no worries about what Iran will do with sanctions relief? Might it not increase its support for the murderous Assad regime, the Quds Force, the IRGC efforts underway in several countries? This deal will hand over billions of dollars for the largest state-sponsor of terror on the planet, and a state that the IAEA last week says is still not complying with its obligations...and you are worried about the US Senate. Wow.

4 ^ | v • Reply • Share ›



**pfbonney** → General\_Chaos • 10 days ago

Yeah. This guy is as gullible as they get.

2 ^ | v • Reply • Share ›



**Boleslaw Bierut** → pfbonney • 3 days ago

not just gullible; he's a conspiratorial anti-Zionist or, to put it simply, an antisemite.

1 ^ | v • Reply • Share ›



**pfbonney** → Boleslaw Bierut • 3 days ago

Yeah. Probably that's a lot closer to the truth.

^ | v • Reply • Share ›



**R Spitzer** • 11 days ago

All this deal means with a 14 day delay between request and inspection is a Arab/Sunni Bomb.

Even if the Iranian's keep this deal and the West believes them, the Sunni Arab states are on record they expect the exact same deal.

Then the West can not control the end result in that circumstance.

4 ^ | v • Reply • Share ›



**RobGoldston** • 11 days ago

Indeed! Next we need an Israeli-Palestinian agreement.

1 ^ | v • Reply • Share ›



**pfbonney** → RobGoldston • 10 days ago

We've already been down that road. Yassir Arafat never showed up. The Palestinians voted in Hamas only because they saw Hamas as being the most uncompromising of the candidates. not because they

... saw Hamas as the best administrators, e.g., keeping taxes low, attracting jobs with a living wage, establishing low-crime policies, promoting the "Lawn of the Month" awards, etc..

Besides, the last thing we need from this administration is another bad one like this one.

1 ^ [v] • Reply • Share ›



**RobGoldston** → pfbonney • 9 days ago

Just to be clear my point was that we need an Israeli-Palestinian agreement before we can expect to negotiate a NWFZ in the Middle East. As I understand it, this is - more or less - the position of the State of Israel. How we get to an Israeli-Palestinian agreement is another question. Got any ideas?

1 ^ [v] • Reply • Share ›



**pfbonney** → RobGoldston • 9 days ago

None.

While what you say is true, about that being a prerequisite for a deal, as intransigent as the Palestinians are (in view of the failed prior deal with Arafat, where he was to receive all of his stated goals for not much in return) and as much as Israel needs security deals due to her precarious situation, I'm thinking the whole thing is a lost cause.

The chain of events have already been set in motion for some degree of calamity. Let's hope not nuclear.

1 ^ [v] • Reply • Share ›

[Subscribe](#)

[Add Disqus to your site](#)

[Privacy](#)