CAN THE EURATOM TREATY INSPIRE THE MIDDLE EAST? The Political Promises of Regional Nuclear Communities

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This article examines whether and how the delegation of sovereign regulative powers in the nuclear field by states to supranational regional authorities can further nonproliferation objectives. More precisely, it asks whether the second Rome Treaty, which instituted the European Community of Atomic Energy (Euratom), could serve as a model for the creation of other regional authorities in the nuclear field, particularly among Middle Eastern and Arab nations. It argues that the Euratom Treaty provides interesting technical provisions, particularly regarding 1) safeguards against the diversion of fissile materials by state and non-state actors, 2) confidence-building measures for state actors when they establish R&D in nuclear technologies, and 3) fuel supply assurances for state actors. Building on archival research of the Euratom Treaty negotiations and the Euratom Commission, the article argues that, today, supranational provisions included in the Euratom Treaty would have stronger nonproliferation effects than looser forms of international cooperation. However, the article also points to specific weaknesses in the Euratom Treaty and outlines how legal scholars and diplomats can avoid some of its pitfalls.

KEYWORDS: Euratom; sovereignty; nuclear energy; nonproliferation

On July 13, 2008, the eve of Bastille Day, leaders of the Mediterranean and European nations formed in Paris a new international organization, the Union for the Mediterranean (UfM), which will be presided over on a rotating basis by a nation of the South Mediterranean and a European Union (EU) member state. In the spring of 2008, the UfM, initially intended by French president Nicolas Sarkozy to unite the neighbors of the Mediterranean Sea, had become the new foreign policy instrument of the EU in the Mediterranean: all EU partners were invited to participate.¹ During the summer of 2008, projects of economic cooperation were proposed by the twenty-seven European nations of the EU and by the seven South Mediterranean nations that have decided to become part of the UfM, with the exception of Libya.

Whether the UfM will draw the peoples of the Mediterranean to recognize their shared economic interests and political identity, as the 1957 Rome Treaties did for the EU, is still debatable. So far, the draft cooperation agreements proposed by members of the newly formed UfM concern only the optimization of maritime transport and the decontamination of the sea. Few believe that the UfM, as it stands today, will be able to

Nonproliferation Review, Vol. 15, No. 3, November 2008 ISSN 1073-6700 print/ISSN 1746-1766 online/08/030459-19 © 2008 The Monterey Institute of International Studies, James Martin Center for Nonproliferation Studies DOI: 10.1080/10736700802407135



accomplish the same tasks as the EU. Still, promoters of the UfM often draw the parallel between the two organizations. And in the same way that one of the Rome treaties created one of the first nuclear-related institutions of the EU—the Euratom Treaty—UfM supporters have called for an increase in civilian nuclear cooperation between EU member states that export nuclear technologies and the South Mediterranean countries that import them. It is striking how quickly, in the few months since his May 2007 election, Nicolas Sarkozy has multiplied promises of bilateral contracts of nuclear cooperation with nations on the southern bank of the Mediterranean (including Morocco, Algeria, Libya, and Egypt), as well as with Arab nations without access to the Mediterranean (such as Saudi Arabia).² Some have proposed that interested UfM member states extend cooperation agreements from maritime transport to research and development and energy policies, but no state has yet accepted any specific proposal concerning the latter field.³

If the UfM members were to develop such cooperation in the future, both North and South Mediterranean nations would have a common interest in getting the southern nations to form a parallel supranational organization, as formed in the North by Euratom Treaty signatories. However, the Euratom Treaty should not be studied with an eye for replication by the South, but with the ambition to build positively upon its strengths and weaknesses. This article develops the argument by first placing the negotiation of the Euratom Treaty in the political context of Atlantic policies at the time.⁴ It then explores the legal pros and cons of the Euratom Treaty, in particular its provisions concerning 1) the control and safeguarding of fissile material, 2) the supranational legal framework regulating industrial international cooperation, and 3) the regional fuel procurement agency.

The Euratom Treaty: A Cold War Foreign Policy Instrument

Cold War historians who believe that the U.S.-Soviet nuclear balance of power, attained through the superpowers' nuclear arms race, best accounts for the postwar preservation of peace in Europe usually ignore the role that the Euratom Treaty and other EU treaties played during the Cold War.⁵ Their reading of the Cold War is based on a post-hoc reconstruction of U.S. nuclear foreign policy, largely influenced by the two-player models of system analysis and game theory that operation researchers from the Rand Corporation imposed on nuclear strategizing efforts within the Department of Defense (DOD) after the mid-1960s.⁶

The Cold War and the Integration of European Nuclear Activities

Analysts of European integration who praise the European Economic Community for most of the goods Europe had to offer (peace and prosperity) also often overlook the specific logic and consequences of the Euratom Treaty.⁷ To them, Euratom slowly disintegrated because it picked up the wrong economic field at a time when energy sources cheaper than nuclear better covered European energy needs.⁸ Knowledgeable observers thus

downplay the foreign policy objectives that the Euratom Treaty represented for U.S. officials in charge of foreign nuclear policy in Europe at the time.

Today, because many U.S. officials might be tempted to apply the policies that worked in Europe during the Cold War to other regions, like the Middle East, it is important to retrieve the historical meaning of the nuclear integration EU project in the larger Cold War nuclear history to see whether the Euratom Treaty can help solve today's problems. But if they misinterpret, through anachronistic lenses, how U.S. officials believed the Cold War was fought and won in Europe, they risk compounding mistakes in other parts of the world.

For U.S. officials, ranging from Republicans like President Dwight Eisenhower, John McCloy (the first allied high commissioner in West Germany), and John Foster Dulles (Eisenhower's first secretary of state), to Democrats like George Ball (undersecretary of state in charge of European policy for presidents John F. Kennedy and Lyndon Johnson), European integration in the late 1950s and 1960s was the cornerstone of U.S. nuclear foreign policy in Europe. Unlike Rand operation researchers in Robert McNamara's DOD, these "European federalists," as I call them, did not assume that European nations were just the stake and battlefield in U.S. and Soviet nuclear war plans.

The nuclear policies that European federalists in the U.S. government sponsored in Western Europe were guided by two principles: 1) to design nuclear-sharing arrangements with European allies in order to share the costs and responsibilities of building the Western nuclear deterrent to defend Western Europe; and 2) to prevent West Germany from obtaining nuclear weapons on its own. U.S. officials in charge of European policy believed that the United States should help the West Europeans unite, and that, when united, the United States should let Europe take responsibility of its nuclear defense within the NATO framework.⁹ To accomplish this objective, Eisenhower twice reformed (in 1954 and 1958) the Atomic Energy Act of 1946, which strictly limited access to nuclear technologies even to U.S. allies in Europe. Eisenhower thus allowed the United States to transfer nuclear civilian technologies (like energy-producing power plants), and military nuclear technologies (like uranium enrichment or submarine propulsion technologies) to friendly nations that had completed "sufficient progress" in the field of military applications of nuclear energy. In his mind, a politically united Europe would have benefited from such aid.

The Originality of the Euratom Treaty

The Euratom Treaty offers a little-known example of how the two principles guiding European federalists' actions were woven together to become EU law. Signed on March 25, 1957, by the six countries of the European Coal and Steel Community (ECSC)—France, West Germany, Italy, Belgium, the Netherlands, and Luxembourg (the "Six")—the Rome Treaties created two new European communities: the Common Market and Euratom. The Euratom Treaty, while it did not prohibit its member states from pursuing nuclear military activities, created a Euratom Commission in charge of proposing development projects for every aspect of the nuclear field, with the exception of the design of nuclear warheads.

The Euratom Treaty was not the first attempt by Europeans and Americans in favor of European integration to create a supranational framework to regulate West European nuclear industries. The first European community, the ECSC (first presided over in 1952 by Jean Monnet, the "founding father of Europe"), followed such logic. It united the resources of coal and steel (two dual-use industries essential for any conventional war effort) of the six founding EU nations by creating a common market for those goods and by setting up an executive planning agency (the High Authority of the ECSC) in charge of controlling production.¹⁰ In parallel with the ECSC Treaty negotiations, from August 1950 to March 1952 Monnet conducted a series of negotiations with U.S. experts, like George Ball, and European experts, like Etienne Hirsh, the future president of the Euratom Commission, to discuss the possibility of extending European integration efforts from coal and steel production to military activities, in both conventional and nuclear sectors. The resulting European Defense Community (EDC) Treaty was signed (but not ratified) in March 1952 by the Six. The EDC Treaty proposed letting a European Defense Commissariat organize the R&D, production, and trade of military technologies (conventional and nuclear) necessary for the defense of Western Europe.¹¹

According to the EDC Treaty, all nuclear activity (except for small-scale cyclotron laboratory research) was deemed "military." Thus, had the EDC Treaty been ratified by the Six, the European Defense Commissariat would have regulated the entirety of the nuclear sector in the West European continent, from uranium enrichment, to power plant construction, to the fabrication of nuclear warheads.¹² The intention of the EDC Treaty drafters was thus to grant to a federal European authority-composed of executive, legislative, and judiciary branches (respectively, the European Commissariat and its Council of Ministers, the European Parliament, and the European Court of Justice)—the ability to ensure the military nuclear preparedness of Western Europe. The EDC Treaty followed Monnet's belief that European nations should delegate parcels of their sovereignty in fields of economic and military import to a European federation if they wanted to avoid the perils of a new arms race between European nations. Furthermore, in the context of a massive threat coming from the East, the Europeanization of dual-use and military activities created, for West European nations, the conditions to attain a level of industrial development commensurate in size with that of the two superpowers.

The Euratom Treaty represented an attempt by European federalists at salvaging the parts of the EDC Treaty that concerned nuclear activity and applying its logic to set up a European organization in charge of regulating peaceful, rather than military, nuclear activities. Indeed, the rejection in August 1954 of the EDC Treaty by nationalist French representatives struck a strong blow to the European integration efforts of U.S. officials in charge of nuclear policy in Europe.¹³ The looseness of the alternative plans proposed by the United Kingdom for the regulation of nuclear activities in Europe explains why European and U.S. officials who feared independent West German nuclear ventures proposed the Euratom Treaty in June 1955 at the Messina Conference.

Indeed, after France rejected the EDC Treaty, the British government convinced the other Allies to grant back to West Germany most of its sovereignty in the fields of foreign

policy, defense policy, and nuclear policy in exchange for its integration in NATO. After 1955, limitations on West German nuclear activities were thus tenuous: although the Allies asked the German chancellor to renounce the fabrication of nuclear weapons in West Germany before they allowed West Germany to enter NATO in May 1955, Chancellor Konrad Adenauer's pledge was more of a moratorium than a statement of definitive policy, as he added to his commitment the clause *rebus sic stantibus* ("everything held constant," in the international context). Furthermore, although West Germany pledged to submit its future nuclear installations to the arms control agency of the West European Union (WEU), the WEU control agency did not start its operations before 1957. Control procedures were based on self-reporting by West Germany itself, and no supranational delegation of powers from WEU member states to the union was planned.¹⁴

Monnet and Dulles turned to the promotion of the Euratom Treaty to organize the nuclear field around stronger supranational principles than the strictly international principles guiding the Pax Britannica of May 1955.¹⁵ At the same time, in order to avoid renewed French nationalistic criticism about the delegation of military powers from the state to a European entity, Monnet reframed the purpose of European nuclear integration, stating that Euratom would engage only in peaceful nuclear activities. The new European Community did not threaten the existing national regulation of military activities in France and therefore had a better chance of being accepted by the French than did the EDC Treaty. But the Euratom Treaty broadly defined peaceful activities.¹⁶ Unlike the EDC Treaty, the Euratom Treaty considered all nuclear dual-use activities, in particular the uranium enrichment technologies (the very activities that the international community now tries to restrict in Iran), as peaceful, and therefore susceptible to fall under the Euratom Treaty framework. It was the hope of Monnet and U.S. policy makers around him that the Euratom Treaty would ensure that West German nuclear industries would develop their dual-use nuclear technologies within this supranational European framework.

The Euratom Treaty also provided an incentive for West European nations to place their nuclear development under the supranational authority of the Euratom Commission because they could hope to benefit from joint ventures with France and even with the United States, thanks to a 1958 U.S.-Euratom bilateral treaty. Indeed, after the Euratom Treaty was ratified, Eisenhower worked hard to obtain congressional ratification, in August 1958, of the U.S.-Euratom Treaty, which proposed 1) the sale of five to six U.S. nuclear power plants to Euratom member states; 2) the organization of a joint U.S.-Euratom R&D program in nuclear technologies, including dual-use technologies like naval propulsion; 3) the sale of sensitive fissile materials (plutonium and enriched uranium) to Euratom member states; and 4) the substitution of the control that the U.S. Atomic Energy Commission exercised over these exported materials to the Euratom Commission through the newly formed Euratom Control Agency.

The Euratom Treaty of 1957 and the U.S.-Euratom Treaty of 1958 thus discouraged nuclear proliferation on a national basis in Europe. The approach represents a precedent that exporters, or groups of exporters, could emulate if they decide to export nuclear technologies—like France is doing today—to a sensitive region like that formed by the Maghreb and the Middle East (in their strict geographic definitions). Transposed in today's

world, if Sarkozy sought to imitate with the Maghreb and Middle East the policy that Eisenhower applied to Western Europe, he could ask South Mediterranean nations interested in French nuclear technology and nuclear R&D with EU states within the cooperative framework of the UfM to set up a joint organization with powers similar to those of the Euratom Commission. Then, EU states could export civilian nuclear technologies—particularly those with sensitive applications—to this future regional organization, rather than to individual states.

At the same time, reflecting the Cold War logic of the beginnings of the EU project, these old European treaties were not meant to discourage the supranational nuclear proliferation of the newly formed EU organization. Quite the contrary, negotiations over the Euratom Treaty actually involved secret promises of nuclear cooperation in the military field between the three "big" Euratom member states (France, West Germany, and Italy). West German authorities only agreed to sign the Euratom Treaty after they obtained France's agreement to sign a secret bilateral agreement of cooperation in military nuclear R&D. Signed in February 1957 by the two defense ministers, the agreement was kept secret from the public until the mid-1990s.¹⁷ In November 1957, the agreement was extended to Italy.¹⁸ In April 1958, France agreed to open participation in its uranium enrichment plant to West Germany and Italy; the three nations would have shared the fissile material produced there to build nuclear warheads, which they would have co-owned along the supranational lines planned by the then-defunct EDC Treaty.¹⁹ Through these treaties, the White House, State Department, and Monnet sought to link the United States and Europe in all aspectspeaceful and military—of nuclear R&D and industry.²⁰

It is therefore essential, when one analyzes the Euratom Treaty—especially if one keeps an eye to replicating the experiment in the Middle East—to keep in mind the Cold War context in which it was drafted, for the context shaped the goals and the means granted to the Euratom Commission by the treaty drafters.

Safeguarding Nuclear Materials from Non-State Actors

With this awareness of the Cold War context behind the genesis of the Euratom Treaty, it is possible to assess whether a new Euratom-inspired treaty signed by Maghrebi and Middle Eastern nations would be politically desirable. Today, the priority is to provide South Mediterranean and Middle Eastern nations with confidence-building measures that will make their acquisition of nuclear weapons—which they pledged to not to acquire by signing the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)—less likely in the long term. (Israel, of course, is an exception, as it never signed the NPT.)

Safeguarding Nuclear Materials from Non-State Actors: A Necessity

Today, South Mediterranean nations face very different threats than did postwar West European nations. Furthermore, the Middle East—like Europe—is a regional entity that faces diverse security threats. (In this article, the Middle East is defined as the southeastern

region of the Mediterranean and the Red Sea region; others extend the term to the Maghreb, the southwestern bank of the Mediterranean, and even to Iran and Pakistan.)

Today, nations in the Maghreb, such as Algeria or Tunisia, do not face the threat of invasion by a technologically superior, nuclear-armed state. Rather, they face threats in the form of loosely associated transnational networks that seek the transformation of their polity and social fabric. They do not have to deter a technologically advanced enemy from invasion but do have to respond to threats of civil insurrection, political terrorism, and civil war. Therefore, they do not have strategic reasons to build up their technological infrastructure, pool together their scarce nuclear resources, or build a latent nuclear capability, like the West Europeans did in the 1950s. To face today's threats, they have to secure the civilian nuclear technologies that they already have and that they plan to acquire.

For Middle Eastern nations such as Egypt or Lebanon, Israel's possession of nuclear weapons (though officially unacknowledged) and Iran's nuclear activities create other security problems.²¹ Not only do these nations face the threats of terrorism and civil war, but they also face the threat of territorial invasion by a neighboring state possessing nuclear weapons. There is a risk that, faced with Israel's military superiority, or with the threat that Iran could obtain nuclear weapons and threaten Israel, these nations could decide to weaponize their own nuclear capabilities for reasons of prestige or territorial security. The same cycle of reciprocal fear and suspicion that explains Israel's acquisition of nuclear weapons might well induce others to follow the same path.

If Middle Eastern nations face this specific threat, North and South Mediterranean nations face the threat that non-state actors might steal their nuclear materials or attack their nuclear sites for terrorist purposes. Even though the specific problems of the southwestern bank of the Mediterranean make it more unlikely that a Euratom-like treaty could be signed by all members of the UfM, nations of the South Mediterranean (from Morocco to Egypt) that want to increase their nuclear technology investments could very well be interested in signing such a treaty if it reduces the risk of terrorist theft or attack against nuclear installations. Rather than simply creating a subgroup of nations interested in nuclear cooperation within the new UfM, the nations could adapt the logic of the Euratom Treaty to their specific needs.

How to Decrease the Terrorist Threat

France and other nuclear exporters should give incentives to South Mediterranean nations to set up better safeguards and cooperative procedures in case of a terrorist attack on their nuclear plants. Such incentives would build on France's new strategy, which emphasizes the non-state terrorist threat it believes all Mediterranean states face. Within the new post–Cold War foreign policy framework, safeguarding nuclear installations in the South Mediterranean can be achieved by at least three methods: 1) extension of Euratom controls to the South Mediterranean, 2) collaboration between national regulatory agencies to design better safety measures, or 3) creation of an organization similar to the Euratom Control Agency by South Mediterranean (and other Middle Eastern) nations.

To improve the security of nuclear installations in the South Mediterranean against the threats of sabotage or theft by non-state actors in a context of increased economic nuclear cooperation between all states of the region, the Euratom Control Agency itself, founded by the Euratom Treaty in 1957, could extend its jurisdiction to those countries of the UfM through an association treaty. Since the end of the Cold War, the Euratom Control Agency has already proved that it is capable of expanding its activities to vast new territories; it now accounts for nuclear fuels and inspects nuclear facilities in East European EU nations. Euratom controls do not prohibit military uses of fissile material, but do dictate that all uses (peaceful and military) be reported to the Euratom Control Agency and verified.²² Although it is a complement to the International Atomic Energy Agency (IAEA), which verifies that nuclear use by NPT signatories is peaceful, the Euratom Control Agency could be responsible for improving national and international control of nuclear materials and installations against the threats of terrorist theft or destruction.

However, there are a number of reasons why South Mediterranean nations would object to Euratom's direct control of nuclear fuels in non-EU territory. Indeed, the Euratom Treaty created not only a control agency with powers to trace the circulation of fissile materials within the community and inspect the use of nuclear fuels in its territory, but also a new system of property of nuclear fuels. The Euratom Control Agency had the power to do so because fissile materials were formally the *property* of the Euratom community, rather than the property of national firms and states, which bought the fuel for power plants. Though the Euratom Commission has no effective rights over the fuel during normal times (even though the fuel is under its formal property, the commission cannot redistribute, sell, or take back the fuel unless the companies that use it are found guilty of misusing it), non-EU members of the future UfM might not want to submit to this form of Euratom control and property.²³ Indeed, if misinterpreted, direct Euratom control in South Mediterranean nations could give the misleading impression that North Mediterranean states want to keep property rights to the nuclear fuel they sell to the South.

If UfM members object to Euratom's direct control of nuclear fuels, a second way to help South Mediterranean nations account for and safeguard their nuclear fuels and installations would be to involve other regional associations. A loose international association could also do the same job quite effectively. Since February 1999, the Western European Nuclear Regulators' Association (WENRA) has conducted a vast audit of the safety and security conditions of nuclear facilities in Eastern Europe and has published recommendations on the "harmonization" of nuclear safety procedures needed for EU candidates.²⁴ Nations in the Maghreb and Middle East could set up similar national regulatory agencies and create their own regional organization modeled after WENRA. If this were done, they could then benefit from cooperation with WENRA, which could take place within the future UfM framework. Such North-South cooperation is pressing. Indeed, because new nuclear power plants might be built in border regions, for instance, at the border of Algeria and Morocco, emergency procedures that incorporate the regulatory agencies of different countries need to be put in place in order to plan against the risks of accidents, malfunctions, or terrorist attacks. A third option exists: South Mediterranean nations could create a regional control agency—this time modeled after the supranational rather than international logic of the Euratom Control Agency—by signing a new treaty, which might be called the "Eurasiatom Treaty" for simplification purposes.

Adding this regional control to the international controls of the IAEA in the South Mediterranean could fulfill an important function during normal times as well as times of international tension, which are likely to emerge in the Middle East if the Iranian nuclear crisis is not resolved soon. Today, when grave suspicions are raised against a member state of the IAEA, there is a high risk of diplomatic escalation, which often leads to an unsatisfying outcome. As the case of North Korea showed, voicing suspicions can cause a suspected country to free itself from all forms of international control. It can reject IAEA video surveillance from its nuclear facilities and kick international inspectors off its territory. If a regional control agency existed in the South Mediterranean, a country suspected by the international community would have less justification to release itself from all forms of control. Indeed, for such a country, it would be hard to justify expelling international inspectors on behalf of a struggle against the North. The existence of a South Mediterranean organization would ensure that some control would remain during future international crises in the region.

Furthermore, during normal times, regional controls similar to those performed by the Euratom Control Agency could complement IAEA controls. In a context where nuclear power plants are expected to blossom in the Middle East, the creation of regional control agencies auditing the flux of nuclear fuels between different power plants could help the IAEA to fulfill its inspection functions. Such a form of control would be efficient, as Libyans would inspect Lebanese, who would inspect Egyptians, who would inspect Algerians, and so on.

Thus, these three solutions could improve the nuclear safety of present and future installations for members of the UfM interested in nuclear cooperation: 1) the adoption of direct Euratom controls, 2) the creation of an international association of South Mediterranean national regulators working closely with their Northern counterparts, or 3) the creation of a South Mediterranean regional control agency similar to Euratom. The first and third solutions would likely be the most difficult to obtain politically. If the threat raised by non-state actors to the nuclear safety of power plants was the only risk confronting South Mediterranean nations, the second solution might prove to be the best solution. However, if South Mediterranean nations adopted a regional treaty inspired by the Euratom Treaty, they could overcome other problems as well.

Creating Trust and Cooperation in Nuclear R&D Projects

The creation of a supranational organization modeled after Euratom might be especially interesting in the Middle East, and, in the present context, less so in the Maghreb. Indeed, Middle Eastern nations face immediate neighbors with either existing nuclear weapons or suspected nuclear weapons ambitions, like Iran. As they face these threats, and as they also buy new nuclear power plants, they might be tempted to develop dual-

use technologies like uranium enrichment. They might do so for prestige reasons, for instance, to match what Iran is now trying to do at Bushehr, or just for economic reasons, claiming, as Iran does today, that they want to fabricate nuclear fuel (mostly low-enriched uranium) rather than buying it from the North Mediterranean consortiums like Areva or URENCO.

Planning Ahead to Prevent Future Proliferation

It might be too late to solve the problem raised by Iran's willingness to conduct uranium enrichment activities on its own. Unfortunately, calls from Europe, the United States, and the IAEA for Iran to internationalize the operation of its enrichment plant are not given enough credit.²⁵ But if the Iran problem is solved in the near future, in the long term, new problems still might emerge with other regional powers—Libya, Egypt, Iraq, or Saudi Arabia might raise tomorrow's nuclear proliferation threats. With these nations, there is still time to prevent such problems from emerging, if nuclear-exporting nations refrain from proposing bilateral export agreements with Middle Eastern nations and instead organize these North-South technology transfers within a coherent, constraining, multilateral framework rather than within a purely international framework like that proposed by the UfM.

To solve these long-term problems, there exists only one ideal solution: South Mediterranean and Middle Eastern nations should create a new international organization modeled after Euratom (Eurasiatom) and leave the door of this organization open to nations that might not be ready to join now—just like the EU started with only six nations. Indeed, the other two options mentioned above to improve the safety of nuclear installations seem out of reach. There is no well-functioning Euratom joint-development agency that could extend its jurisdiction to the South Mediterranean and allow it to benefit from the North's technological information. And there is hardly any possibility that the North European international consortiums (like Areva and URENCO) will open their capital to South Mediterranean nations. Thus, the only solution to solve the problem of trust between states developing nuclear technologies in the Mediterranean is to create a Euratom-like organization whose territorial boundaries could partly overlap with the UfM's.

The Euratom Treaty offered the possibility for the joint development of prototype reactors, power plants, and enrichment and reprocessing technologies. The treaty created a legal status of "Community Enterprise," which member states could use to give legal standing to their joint R&D activities. It created a separate system of Euratom patents that stopped industrial secrets from falling into non-EU hands, while making sure that all Euratom member states could have access to the knowledge gained through Euratom money. Euratom Treaty drafters hoped all member states' scientific and technical nuclear information would be pooled.²⁶ Similar procedures of protecting knowledge could today build confidence among Middle Eastern states that too often suspect one another of secretly developing forbidden knowledge in nuclear matters. The circulation of scientific and technical authority, could enhance trust among scientists and engineers across national borders. Since scientists and engineers are often the most vocal nationalistic supporters of military

nuclear programs because their access to knowledge often depends on national military authorities, it would be wise to shift their allegiance to a supranational nuclear agency in charge of developing well-funded R&D projects and giving them access to the knowledge thereby produced.²⁷

Furthermore, the Euratom Treaty created a legal and political framework that set up a democratic political structure of governance, inspired by the liberal theory of the division of powers. Initially, the legislative power was shared by the Euratom Commission, which had the exclusive right to introduce R&D and industrial projects funded by Euratom; the Council of Ministers, which had the exclusive right to decide, either by qualified majority voting (QMV) or consensus (depending on the import of decisions), the funding of the policy proposals introduced by the commission; and the European Parliament, which only had a consultative role.²⁸ The executive power to carry on these projects was given to the Euratom Commission, and the judiciary power to litigate conflicts between corporations, member states, and the commission was attributed to the European Court of Justice.

Today, the Euratom Treaty thus provides a unique example for Maghrebi and Middle Eastern countries that want to follow principles of democratic governance in the management of large, international techno-scientific projects in the nuclear field. However, the largely undemocratic nature of South Mediterranean nations might be the main obstacle to adopting such a supranational democratic framework—even greater than the territorial disputes within the region. After all, territorial disputes between France and West Germany, for instance over the status of the Saar region, did not prevent the two former enemies from signing the EDC Treaty in the 1950s; yet both nations aspired to advance democracy at home.

As they debate exporting democratic values to the Middle East, Western countries should be reminded of their past experiments in democratic rule-making at the supranational level, instead of just imposing democracy by force, as the "coalition of the willing" tried to do in Iraq when it was feared that the country was proliferating. Taking the example of the bilateral agreement between the United States and Euratom, EU countries have a unique window of opportunity to help South Mediterranean countries pool their bids for future nuclear resources into a supranational community, whose governance, if it is modeled on the Euratom Treaty, will be more open to scrutiny than that of any international consortium, like URENCO. Indeed, a proposal for a EU-Eurasiatom solution, managed within the framework of the UfM, could place aggressive bilateral export policies pursued by France into a coherent legal and multilateral scheme.

Even though the Euratom Treaty offers an interesting basis for discussion, its legal provisions can be improved in at least three ways: 1) making it mandatory to use the future Eurasiatom framework to develop dual-use activities like uranium enrichment, 2) giving Eurasiatom a budget for joint R&D independent from the generosity of its member states, and 3) restricting participation in Eurasiatom to NPT non-nuclear weapon states.

Avoiding Treaty Frameworks: A Mistake That Should Not Be Repeated

The use of the Euratom legal framework to conduct Euratom R&D undertakings depended on the governments of the member states, represented by their foreign ministers in the

Council of Ministers. The Euratom Treaty did not make it mandatory for states to use the Euratom Community framework for nuclear R&D cooperation. As a result, after General Charles de Gaulle returned to power in 1958, France multiplied bilateral and trilateral agreements that avoided the Euratom Treaty framework. Examples abound: the Franco-German nuclear research centers in Grenoble (France); France's participation in Eurodif (an international gaseous diffusion enrichment plant); and France's opposition to attempts to "Euratomize" its own isotopic separation plant. As a reaction to France's unwillingness to use Euratom in the enrichment field, and to develop centrifugation techniques, West Germany, Britain, and the Netherlands created URENCO outside the Euratom framework.²⁹ The Euratom Community framework that was planned for joint R&D and industrial projects did not survive de Gaulle's divisive efforts.

In the 1960s, the Euratom Commission tried to overcome French opposition to using the Euratom framework to embed its techno-scientific program by using the QMV procedures in the Council of Ministers to pass resolutions that used the Euratom framework. That is what Etienne Hirsh, then president of the Euratom Commission, did in 1961 when he proposed that the development of breeder reactors (which use proliferation-sensitive fissile materials) should use the Euratom Community framework. Hirsh decided to go ahead after the Council of Ministers applied QMV, and all states but France voted for the idea.³⁰ The QMV procedure was permissible under the Euratom Treaty, but de Gaulle threatened to cut France's financial contribution to the Euratom fiveyear plans if the other five member states decided to go along. Hirsh did not bow to de Gaulle's will, so de Gaulle fired him and replaced him with his interior minister, Pierre Chatenêt, as the new president of the Euratom Commission.³¹ Chatenêt's first act was to impress on the six ministers that all decisions in the Council of Ministers would require unanimity, giving a veto right to everybody. The program of Euratom breeder reactors was abandoned.

Maghrebi and Middle Eastern nations should learn from this mistake in order to not repeat history. It is clearly neither necessary nor desirable for a future Eurasiatom Treaty to prevent its member states from building or buying proliferation-resistant nuclear power plants on their own. But at least the builders of a future supranational organization in the Middle East should make it mandatory that all dual-use activities, like uranium enrichment and plutonium reprocessing R&D, should fall under a future Eurasiatom Community framework. Indeed, had Iran chosen to develop centrifuge techniques with its neighbors within the legal framework of a treaty similar to the Euratom Treaty (with a scientific, technical, and managerial staff from Turkey, Saudi Arabia, Egypt, and so on), its neighbors and the international community would not have raised suspicions and sanctions against its nuclear behavior. Instead, as Iran developed centrifuge techniques with its own internal resources and the clandestine network of A.Q. Khan, both its neighbors and the international community have raised legitimate doubts about the true purpose (military or peaceful) of this program.³² If programs of nuclear dual-use R&D in the region were not only controlled from the outside by the IAEA, but also developed in common by engineers from the region under a supranational political and legal framework and in a community territory (like the Euratom Common Center in Ispra, which is not in Italian territory per se, but in European territory), then the level of trust would dramatically increase in the region—even if new uranium enrichment projects were developed there.

Uncertain Funding: A Second Mistake

Euratom Treaty drafters made a second mistake, also apparent in the story related above about the conflict between de Gaulle and Hirsh. France was able to impose its idiosyncratic interpretation of the Euratom Treaty—abrogating the QMV procedure because it held the strings of the Euratom purse. Whereas the ECSC Treaty made sure that the executive branch (the High Authority) directly raised its own taxes from West European coal and steel trade, the budget that the Euratom Commission used to fund its five-year plans was based on the appropriation decided by each member state for the new year. Furthermore, the Council of Ministers asked that the decisions regarding R&D investments follow the principle of "fair return," whereby investments were allocated in the territory of member states in a commensurate proportion with their financial participation. Such dependency vis-à-vis national governments made it extremely vulnerable to governmental change.

The drafters of a future supranational organization in the Middle East should seek to emulate the financial provisions of the ECSC Treaty, which gave financial autonomy to its supranational executive branch by granting it the right to raise a tax on trade. Similarly, a tax appropriated by a future "Eurasiatom Commission" on energy-related products, like oil, would underline the fact that Maghrebi and Middle Eastern countries pursue nuclear activities because of the long-term extinction of fossil fuels like oil. Oil export revenues would not only serve the immediate goals of these states and their leaders, but they would ensure long-term future mastery of the region's energy needs. Financial contributions by each member state, along with other criteria such as population size, could give differential voting weights to the different member states of a Eurasiatom Community. Decision making in the Council of Ministers was organized by the Euratom Treaty along these lines, as it planned that, in the Council of Ministers, qualified majority was attained by votes distributed according to the size of the states' population and their financial weight. A similar weighting system could be adopted by nations interested in setting up a new supranational organization in the nuclear field.

Mixing Weapon States and Non-Weapon States: A Third Mistake

As mentioned, the Euratom Treaty was a Cold War foreign policy instrument, designed not only to prevent West Germany from developing dual-use activities on its own, but also to encourage the joint development of dual-use activities at the European level, with the ambition to create a European nuclear force in the long run. Today, the creation of a regional supranational nuclear deterrent in the Middle East is obviously neither desired nor desirable. Fortunately, since the opening of the NPT for signatures in 1968, the international legal environment regulating nuclear exports has changed. It is now impossible to encourage the acquisition of nuclear weapons by newly constituted supranational communities (with the exception of the EU, since West Germany and Italy

introduced in ratification of the NPT the so-called "European clause," which said that West Germany and Italy will inherit the rights held by France and Britain to produce nuclear weapons after a European Federation is created). Sticking to the institutional regime set up by the NPT and the IAEA (and reinforcing its authority by adding signatures to the Additional Protocol) is of prime importance in nonproliferation.³³ The reinforcement of the nonproliferation regime means that only the nations that adhere to the NPT as non-nuclear weapon states can become party to this new supranational organization.

Indeed, the Euratom experiment did not completely succeed in its task to build confidence between nations, largely because of the imbalance between one nuclear weapon state—France—and five other non-nuclear weapon states—in particular West Germany and Italy-which undermined the authority of the Euratom Commission. As France was free to conduct R&D in military nuclear activities on its own, it could label some R&D activities as military if it decided unilaterally to do so. Therefore, France was legally able to deny information requested by its Euratom partners if it declared it to be "military," while other Euratom countries could not do so, as they had no military activities. This freeriding capacity undermined the system of collective trust. During Euratom Treaty negotiations, West Germany feared that France would conduct itself in such a way. West Germany preferred to sign a secret bilateral agreement that imposed upon France to share its "military" knowledge as well; Italy proposed granting the capacity to discriminate between peaceful and military knowledge to the Euratom Commission.³⁴ It was a mistake as, upon his return to power in 1958, de Gaulle canceled the tripartite agreements of November 1957, which made it mandatory for France to share with its two European allies its military knowledge.³⁵ Thus, far from systematically enhancing equality and openness between nuclear and non-nuclear weapon states, the membership of both types of countries destroyed the confidence-building measures.

This example shows that if non-nuclear weapon state signatories of the NPT let nuclear weapon states, like Israel, or a country suspected of nuclear military ambitions, like Iran, participate in the creation of their future supranational community, the likelihood that confidence-building measures will work properly will decrease. If a future Eurasiatom Treaty is signed by South Mediterranean states not suspected of conducing military nuclear activities, and if it succeeds, it could give a powerful incentive for Iran to clear all suspicions with the international community to become a full member of this new community—and maybe Israel as well.

Improving Guarantees of Nuclear Fuel Supply

The Euratom Treaty also offered an original solution to the problem of getting credible guarantees of nuclear fuel procurement, which do not necessarily involve constructing uranium enrichment plants or engaging in R&D centrifugation activities. In effect, the Euratom Treaty created a regional procurement agency, the European Supply Agency (ESA), whose design could inspire Middle Eastern countries.

An Original Guarantee of Nuclear Fuel Supply

In the mind of the Euratom Treaty drafters, all imported nuclear fissile materials had to go through this procurement agency before being distributed to its member states, according to established rules of fairness. As Bertrand Goldschmidt wrote during the Euratom Treaty negotiations, "the French representatives, influenced by Monnet, set out the principles of community priority in the supply of nuclear materials, with equal access to all member states. This principle was established with a view to possible uranium shortages in the community, if not throughout the whole world."³⁶

The idea behind the ESA was also to prevent the politicization and radicalization of potential conflicts between countries exporting nuclear fuels (at the time, mostly the United States and Great Britain) and countries importing them (at the time, all European continental states). The ESA insured Euratom member states against the risk of exporting states playing great-power politics in Western continental Europe. If the United States wanted to stop exporting nuclear fuel to a member of Euratom for reasons unrelated with the nuclear behavior of the importing state, then it had to stop exporting nuclear fuel to all the member states of the Euratom community. Indeed, the ESA was sovereign in its decisions to allocate imported nuclear fuel to its member states, and it could not forbid one of them access to nuclear fuel, except in the case of nuclear misbehavior verified by the Euratom Control Agency. This mechanism of collective insurance increased the market penalty for an exporting state willing to adopt imperialistic practices with importing nations.

The existence of such a regional procurement agency could assuage the fears of Middle Eastern countries that presently feel (rightly or wrongly) that exporting states can play great-power politics in the Middle East by cutting the fuel supply to nuclear power plants. Iran says that it engages in uranium enrichment activities because it fears that exporting states (essentially the members of the UN Security Council, plus Germany and the Netherlands) can blackmail states importing nuclear fuel from them into adopting policies that conform to their visions and interests in the Middle East. Different solutions have been proposed to reduce the risk of nuclear blackmail, such as giving the IAEA custody of a stock of nuclear fuel, which an importing country like Iran could use for reloading its power plants. But so far Iran has deemed these conditions unsatisfactory and degrading. The solution initially imagined by Euratom Treaty drafters could offer a satisfying solution to the countries of the region.

If a regional procurement agency in the South Mediterranean existed, and if exporting states decided to cut exports of nuclear fuel to states such as Egypt, for instance, for reasons that the future regional supply agency did not recognize as legitimate, then all member states of the future Eurasiatom community would suffer from this decision, whose consequences would be shared by all. In that case, the decision would not only affect Egypt, for example, but also Algeria, Turkey, Lebanon, and so on. It is clear that under these conditions, the decision by EU and other exporting states would not be taken lightly, since they would be surely deprived of access to oil in the region. Hence, the existence of a regional procurement agency working within a supranational framework would clearly reduce the strategic uncertainty that Iran declares responsible for its decision to engage in uranium enrichment.

Setting such a nuclear supply agency in the South Mediterranean would represent for the EU what President John F. Kennedy, using the words of Jean Monnet, called an "equal partnership" between powers.³⁷ Considering the devastation of Middle Eastern economies due to the latest adventures of Western countries in the region, it might be time to lay down the basis of a harmonious and more egalitarian development for North America, Europe, the Maghreb, and the Middle East. Furthermore, EU member states could also benefit from the existence of a regional nuclear fuel supply agency, as a better fuel supply assurance offered to South Mediterranean nations would reduce their incentives to engage in costly and dangerous uranium enrichment activities. This consideration alone should convince Western states to encourage its creation.

However, if they want to set up such a regional fuel supply agency, South Mediterranean nations should take care to avoid mistakes made by the Euratom Treaty drafters. During Euratom Treaty negotiations, the Six, under pressure from West Germany, which had privileged access to U.S. nuclear fuel, eventually agreed that the ESA was not granted monopoly over fuel supply for the region. Member states were allowed to contract fuel supply arrangements bilaterally with exporting nations if they benefited from better deals.³⁸ The Euratom Treaty conferred "to the Community the right to transfer to Euratom, the rights and duties convened within the framework of bilaterals with member states agreed upon before the Rome Treaties were signed."39 Yet the Euratom Commission noted in 1960 that "until now, efforts by the Commission to transfer all bilateral agreements from member states to the commission have not succeeded to produce any concrete result."40 The escape clause destroyed the supranational logic of the ESA, and as a result, the ESA was little used.⁴¹ Hence, in order to avoid the same mistake, if nations of the Middle East want to ensure that a regional supply agency will work along supranational lines, they will have to fold all bilateral contracts of its member states during the negotiations of the future treaty, rather than postpone the decision. Furthermore, they will have to ensure the legal monopoly of the regional supply agency in the treaty itself.

Conclusion

These reflections show what Maghrebi and Middle Eastern countries could gain from the establishment of a conference of diplomats and legal scholars devoted to exploring how a regional and supranational nuclear organization could be settled in the region. Such a proposal is ambitious, as it assumes a will to cooperate that may not exist among these countries. But it is also realistic, since it does not seek to hide the risks that such a regional authority might not function properly.

This proposal could also further the goal of disarmament, promoted by those who call for the immediate establishment of a nuclear-weapon-free zone in the Middle East. Until the structure of international relations has changed in the region, there is no reason to believe that states that believe their security depends upon the maintenance of a nuclear force to deter inimical states would think otherwise. In order to change their

minds, and in the context of increased doubts about the credibility of the NPT regime, the only solution might be for the other states of the region to delegate their nuclear sovereignty to some form of supranational authority, which would become the legitimate actor in nuclear matters in the region. If these nations follow that road, and if, after some time, their bet proves successful, countries that keep a nuclear deterrent might be convinced that their weapons are no longer necessary.

ACKNOWLEDGEMENTS

Many thanks to Katherine Newmann and the Global Network on Inequality; to Frank von Hippel, Zia Mian, and Alexander Glaser for their encouragement; and to the Departments of Sociology and History of Science at Princeton University. The views expressed in this paper are the sole responsibility of the author.

NOTES

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- Grégoire Mallard, "Exporter du nucléaire, une décision politique" [Nuclear Exports, A Political Decision], Le Monde, August 13, 2007.
- Nathalie Nougayrède and Philippe Ricard, "Le projet d'Union pour la Méditerranée conjugue ambitions et incertitudes" [The Union Project for the Mediteranean Combines Ambitions and Uncertainties], *Le Monde*, July 13, 2008.
- 4. This article is based on archival research in the Archives of the European Communities, where I consulted the following papers: Jean Monnet, Jules Guéron, Etienne Hirsh, Max Kohnstamm, François Duchêne, Ministère des Affaires Etrangères Français (MAEF) [French Ministry of Foreign Affairs], Commission Euratom, Parlement Européen; and in Princeton University's Mudd Library, where I consulted the following papers: John Foster Dulles, George Ball, and Livingston Merchant.
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- 6. Bruce Kuklick, *Blind Oracles: Intellectuals and War from Kennan to Kissinger* (Princeton: Princeton University Press, 2006), pp. 24–38.
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- 10. Jean Monnet, *Mémoires* (Paris: Fayard, 1976), p. 114.
- **11.** EDC Treaty, Article 106.
- 12. EDC Treaty, Annex 2 of Article 107.
- **13.** Lawrence Scheinman, *Atomic Energy Policy in France* (Princeton, NJ: Princeton University Press, 1966), p. 104.
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- 16. MAEF, "Projet de procès verbal de la conférence des affaires étrangères des Etats membres de la CECA des 20 et 21 octobre 1956" [Report on the Conference of Foreign Ministers of the ECSC member states], MAEF/460f/56mts, Florence: European Archives, November 13, 1956, p. 4.
- 17. Some analysts hypothesized that some form of agreement might have existed between West Germany and France, at the time, but no proof was given before the 1990s. See Wilfrid Kohl, French Nuclear Diplomacy (Princeton, NJ: Princeton University Press, 1971), p. 74.
- 18. MAEF, "Protocole secret entre les Ministres Français, Allemand, Italien de la défense" [Secret Agreement between the French, German, and Italian Defense Ministers], MAEF000019-21, Florence: European Archives, November 25, 1957, pp. 1–3.
- Georges-Henri Soutou, L'alliance incertaine. Les rapports politico-stratégiques franco-allemands, 1954– 1996 [The Uncertain Alliance: Franco-German Politico-Strategic Relationships, 1954–1996] (Paris: Fayard, 1996), p. 113.
- 20. When, during the December 1957 NATO meetings, the heads of state of France, West Germany, and Italy informed Eisenhower and Dulles that they signed these nuclear agreements, U.S. officials gave them a green light—as long as unification of continental nuclear efforts went along with political integration of Britain and the United States. See for instance: MAEF, "Communiqué de la rencontre entre Christian Pineau et Macmillan" [Report on the Pineau-Macmillan Meeting], MAEF 000019-21, Florence: European Archives, November 26, 1957. Gerard Smith, then head of the Policy Planning Staff at the State Department, even prepared drafts of a treaty instituting a "North Atlantic Nuclear Authority" (NACNA), approved by Dulles and Adenauer. Gerard Smith, "Interview with Philip Crowl," John Foster Dulles Oral History Project, Princeton University: Mudd Library, October 13, 1965, p. 46.
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- 22. Euratom Commission, "Memo on the Safeguards on Peaceful Nuclear Activities of the NPT by the American Mission to the Euratom Commission," JG-000124, Florence: European Archives, April 3, 1967, pp. 1–5.
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- **26.** MAEF, "Note 614 sur la Coopération économique" [Note 614 on Economic Cooperation], MAEF 000613, Florence: European Archives, November 9, 1956, pp. 1–3.
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- **28.** The European Parliament was supposed to have a great import in the legislative process when elected by universal suffrage, even though it waited a long time to acquire this power.
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- **32.** On Iran and the Khan network see David Albright and Corey Hinderstein, "Unraveling the AQ Kahn Network and Future Proliferation Networks," *Washington Quarterly* 28 (Summer 2005), pp. 111–128.
- **33.** Joseph S. Nye, "Maintaining a Non-Proliferation Regime," *International Organization* 35 (Spring 1981), pp. 15–38.
- 34. MAEF, "Projet de procès verbal de la conférence des affaires étrangères des Etats membres de la CECA des 20 et 21 octobre 1956," p. 8.
- **35.** Soutou, *L'alliance incertaine*, p. 137.

- **36.** Bertrand Goldschmidt, *The Atomic Complex: A Worldwide Political History of Nuclear Energy* (LaGrange, IL: American Nuclear Society Press, 1982), p. 295.
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