

Nuclear multilateralisation - and Europe's role

by Christian Dietrich

Civilian nuclear energy programmes have a bearing on non-proliferation as they can be expanded to produce the radioactive ingredients required for nuclear weapons. By identifying dual-use operations and bringing them under the auspices of the international community, multilateral approaches to the management of the nuclear fuel cycle seek to contain the dissemination of such sensitive technologies. In return, they offer assured access to the products and services needed to run a nuclear energy programme.

The most rigorous and radical multilateral nuclear approaches (MNAs) regard such arrangements ultimately as compulsive substitutes for national fuel cycle activities. This notion, however, conflicts with one of the three pillars of the global non-proliferation architecture: a country's right to the peaceful use of nuclear energy. Since it began, the debate on multilateralisation has therefore been met with passionate opposition from many developing countries, especially from the non-aligned movement. As a result, the issue of multilateralisation is nestled along the main rift between 'the West' and 'the rest' within the nuclear non-proliferation regime.

Although considerable progress has been made regarding the implementation of MNAs over the past few years, the drive appears to have already lost much momentum since its reinvigoration a decade

ago. 2013 presents a promising opportunity for the EU to help revive the debate as Romania is designated to chair this year's Preparatory Committee for the Nuclear Non-Proliferation Treaty (NPT) Review Conference, to be held in Geneva from late April to early May. The Union's membership has plenty to offer in terms of its own multi-faceted experience with the nuclear fuel cycle and multilateral initiatives. Indeed, its internal diversity regarding nuclear issues could turn into a foreign policy asset.

The ailments of the non-proliferation regime

The NPT forms the cornerstone of the nuclear non-proliferation regime. It comprises three fundamental pillars: non-proliferation of nuclear arms (Articles I-III of the NPT), the right to the peaceful use of nuclear energy and respective technological cooperation (Article IV), and nuclear disarmament (Article VI). The treaty has played a key role in limiting the spread of nuclear weapons. Since its inception in 1970, only four additional countries have acquired nuclear arms. In addition, overall nuclear-weapons stockpiles are at roughly a quarter of their Cold War peaks, and the spread of peaceful applications of nuclear energy in research, medicine and power generation is well under way. By and large, therefore, the NPT has proved to be a success story, strong enough to even prevent Iran from withdrawing from it - thus far.

However, these achievements fail to provide an accurate diagnosis of the NPT regime's current state of health. Nuclear-weapon states (the five permanent members of the UN Security Council) largely fail to convince non-nuclear-weapon states that their disarmament efforts are genuine. On the other hand, a few non-nuclear-weapon states have embarked on clandestine nuclear programmes that circumvented the NPT. Although the regime's membership spans almost the entire globe, in other words, it remains deeply divided between nuclear haves and have-nots.

Whilst more nuanced, such divisions also exist in the realm of the potential of nuclear technology to be used to both civilian and military ends. Here, the main fault line runs roughly between the Nuclear Suppliers Group (NSG) - that is, most countries involved in industrial activity at any stage of the fuel cycle - and the some 140 have-nots of these technologies. Non-supplier states regularly contend that non-proliferation is often exploited by the West to curtail their right to peaceful use - for political reasons. These suspicions translate into their increasing reluctance to compromise on Article IV rights.

Multilateral approaches

This is where MNAs enter the mix. As the US government became wary of a possible rapid spread of nuclear programmes, it commissioned the 1946 Acheson-Lilienthal Report. Since then, multilateralisation focused on the enrichment of uranium and the reprocessing of spent nuclear fuel (of which 14 and 10 countries, respectively, are currently capable). In these stages of the fuel cycle, fissile materials occur, which could be diverted for use in nuclear devices.

Since the issue was put back on the agenda at the 2003 General Conference of the International Atomic Energy Agency (IAEA), two larger trends have had Western states scrambling for multilateralisation: first, the decline of nuclear power (in terms of legitimacy) in the industrialised world *vis-à-vis* its rising appreciation in many developing countries; second, a response to fears of the diversion of all things nuclear to non-state actors. However, it was the context of the Iranian nuclear programme in which the idea of nuclear fuel banks was first popularly floated at the end of the last decade.

Following a 2005 report by an IAEA Expert Group, some twelve proposals for MNAs have been tabled by various countries. They can be divided into three main categories (in growing order of ambition):

- *assurance of supply* agreements guarantee the supply of nuclear fuel in the event of disruption of supply for political reasons;
- *fuel banks* store and assure the supply of low-enriched uranium (LEU) under similar conditions as in the first category;
- *multilateral facilities* and/or *global infrastructure* proposals envision the full accommodation of the nuclear fuel cycle (from enrichment to reprocessing and waste disposal) in the multilateral realm.

Taken together, these proposals are characterised by three common elements: (1) they focus primarily on the front-end of the nuclear fuel cycle; (2) they seek to influence behaviour through incentives rather than regulating it through coercion; (3) they have been overwhelmingly drafted and championed by advanced nuclear technology holders.

The first element aims to add zest to the MNA idea and it mirrors open questions about the handling of nuclear waste. The second one, with a focus on creating incentives, is a correction of former IAEA Director-General Mohammed ElBaradei's - ostensibly too ambitious - attempts to associate multilateralisation with denationalisation from the outset (from 2009 onwards his successor, Yukiya Amano, scaled back his ambitions, wary of the sustained criticism MNAs drew from non-aligned countries). The third reflects the original momentum for multilateralisation.

Nuclear technology holders, in particular, tend to emphasise the value-added that multilateralisation brings to non-proliferation. However, for non-supplier countries, such MNAs often fall short of the technical cooperation they are entitled to benefit from in the first place, as the NPT does not prohibit domestic enrichment and reprocessing for peaceful purposes. They suspect that MNAs might add yet another layer to pre-existing restrictions that will ultimately lead to the extension of the NPT's nuclear-weapons divide by means of perpetuating the current civilian technological imbalance.

MNA and the EU

Two fuel banks and one assurance of supply mechanism have been approved by the IAEA in the wake of the recently renewed interest in MNAs. The LEU Guaranteed Reserve in Angarsk (operational since 2011) grants access to a stock of 120 tons of LEU to all IAEA member states. In

addition, the funding threshold for the creation of an IAEA LEU Bank of about half that size was reached in 2009, following an initial – conditional – contribution in 2006 by the Nuclear Threat Initiative, a US non-governmental organisation. To this endeavour, the EU has pledged up to \$25 million in funding and the government of Kazakhstan is currently negotiating with the IAEA over the terms of hosting the facility.

The EU and its member states are no strangers to nuclear multilateralisation, and not just because of the European Atomic Energy Community (Euratom).

URENCO, a joint project of Germany, the Netherlands and the UK, founded in 1971, facilitates the full participation of all partners in research, development, operation and management of the endeavour, each operating its own facilities. In addition, under the French EURODIF arrangement of 1973, participating states Belgium, France, Iran, Italy and Spain own a share of the end product of enriched uranium according to the level of their investment in the project, while the management and operation remain exclusively under French control.

The EU is also a global player in nuclear energy markets. All 27 of its member states are party to the NSG. France boasts the world's highest share of nuclear power in a domestic energy mix (78%), and in 2011 the average share of nuclear energy in the EU (28%) was well above the global average of 12%.

Accordingly, EU member states have authored or contributed to as many as four MNA proposals. Introduced by France, Germany, the Netherlands, Russia, the UK and the US in 2006, the Six-Country Concept envisions the provision of government LEU reserves in case of disruptions of fuel supply unrelated to recipients' non-proliferation obligations. A second proposal, the UK Nuclear Fuel Assurance (2006), was co-sponsored by the EU, Russia and the US. It became operational following a model agreement with the IAEA in 2011. The proposal grants the IAEA the mandate to act as an advisor and co-signatory to supply agreements between states.

Furthermore, Austria and Germany have respectively introduced proposals for far-reaching multilateralisation on their own. The Austrian Proposal on Multilateralisation of the Nuclear

Fuel Cycle (2007) depicts a two-track pursuit of a global nuclear infrastructure through, first, the creation of an IAEA information system on nuclear capabilities and, second, the incremental placement of all nuclear facilities under multilateral control. The German Multilateral Enrichment Sanctuary Project (2007) envisions the creation of an enrichment facility in an extraterritorial area, subsequently ceded to the IAEA in order to remain beyond any national jurisdiction.

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Ends and means

The variety of proposals tabled at the IAEA begs the question: what exactly do MNAs advocates seek to achieve over time? The initiative certainly bears the potential to further peaceful use in the short term: fuel assurances plug the holes left by politically disrupted supply, and fuel banks offer a quicker path to nuclear fuel than the development of domestic capabilities. Yet, it is precisely the main driver of MNAs - the notion of keeping the operation of a full nuclear fuel cycle out of the hands of any one country in the long term - that fundamentally contradicts the right to fully embrace civilian nuclear power under the NPT.

Therefore, the adoption of an incremental approach is a vital component in preventing the multilateralisation project from contradicting itself. Just as peaceful use has emerged as a third pillar of the NPT in response to growing demand for nuclear power, the relocation of Article IV rights into multilateral rather than domestic domains is conceivable. Yet, it requires that changes in the normative structures of non-proliferation and peaceful use are given sufficient time and dedicated efforts are made on both sides of the divide to push for feasible compromises. As a first step, strengthening the involvement of non-suppliers in the drafting of proposals would help develop approaches that take their points into account - symbolically as well as substantially.

Framing multilateralisation as an enabler of nuclear cooperation rather than an obstacle to peaceful use can also go a long way in de-politicising the debate. But no country can realistically be expected to go as far (in the name of giving up the nuclear-weapons option) as to voluntarily curtail its right to peaceful use of nuclear energy, at least as long as those arms enjoy the political status they currently do. A change in non-proliferation and disarmament cultures is indispensable if the



multilateralisation project is to have a future. In turn, MNAs can prove central in supporting these changes.

A role for the EU

The EU has long been a proponent of multilateralisation - in principle. This is impressive in its own right as the Union includes - apart from two nuclear weapons states and vocal advocates of nuclear abolition - countries on paths of nuclear power prohibition, phase-out as well as expansion. This diversity might well prove to be an asset in furthering multilateralisation, as EU members are formidably equipped to coordinate their approaches thanks to - rather than despite - their (uniquely different) points of departure.

Sweden, for instance, is a long-standing advocate of nuclear disarmament while nuclear power figures prominently in its energy policy. Ireland is similarly vocal in terms of disarmament, but harbours a strong environmentalist sentiment against nuclear power. Germany has embarked upon a course which aims for a complete phase-out by 2022. France faces limited domestic opposition to its nuclear weapons while it boasts a considerable presence in nuclear energy markets and first-hand experience with plurilateral nuclear arrangements.

For the EU, the future of MNA might therefore come down to a matter of leveraging the complementarity of the backgrounds and interests of its member states. Their general agreement on the value-added of nuclear multilateralisation - as expressed in a Working Paper presented at the 2007 Preparatory Committee (PrepCom) to the 2010 NPT Review Conference - serves as a solid basis for the member states to advocate greater multilateralisation, bilaterally and in clusters, and for bridging the regime's current internal divide. They have the capacity to offer understanding and tailor-made advice to non-aligned countries, who are not nearly as homogenous a group - in terms of nuclear energy demands and capacities - as their political cohesion in non-proliferation disputes suggests.

What is more, the Union also looks well placed to mediate across that divide and even within the NSG. Steadily declining European defence budgets are expected to leave their mark on the nuclear-weapons programmes of France and the UK. By necessity if not also by choice, therefore, Europe can gain extra credibility on disarmament and add extra weight to its advocacy of MNAs. Rather than overt leadership, the kind of 'leading from behind'

that involves identifying sentiments and alleviating contentions might indeed be the most suitable role for Europe.

2013 and beyond

At the 2012 PrepCom, concerns among non-aligned countries over the ability to guarantee that MNAs will be applied in a non-discriminatory, transparent manner overshadowed any genuine desire to pursue the project further. NPT members merely 'noted' the IAEA's approval of assurance of supply mechanisms, while other issues took precedence. It became clear that the multilateralisation debate needs fresh momentum.

What is more, last January the Arab League made public its dissatisfaction with the cancellation of a conference on the establishment a WMD-free zone in the Middle East by the end of last year. It threatened to boycott this year's PrepCom if no substantial progress on holding the conference is made soon. Keeping sensitive nuclear technology out of a region which is plagued by deep-rooted rivalries and political instability is a widely shared interest. The issue of MNAs might therefore surface at the Middle East conference - if it materialises this year around - as a means of facilitating safeguards and verification in the area.

At the upcoming PrepCom, however, multilateralisation is widely expected to feature only marginally with little more than a ritualistic pledge to further deliberate on 'the development of multilateral approaches to the nuclear fuel cycle'. Like many of his predecessors, Ambassador Cornel Feruta of Romania will be left with a mountain to climb in his capacity as President of the PrepCom in the coming weeks. Players on either side of the argument have concessions to offer, but their impact will depend on the separation of the MNA discourse from the debates surrounding the Iranian and North Korean nuclear programmes. Having a representative from an EU member state preside over the PrepCom offers an opportunity worth taking for Europe to revive the MNA debate and bring to bear the benefits of its own internal diversity at a global level.

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