

Short-term Steps on Multinational Fuel Cycle Arrangements: Screening Through the Proposals

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Introduction

What particular steps should the international community focus on in the short term to enhance the confidence of users of fuel services that their needs will be well served and that their reactors will not run out of fuel due to political conditioning on part of the suppliers? This is the central theme of this paper. First, I screen through the proposals that are on the table in order to distinguish between those that do not require much work by the international community because they are self-sustaining national projects, those which can be realised rather in the long term, and those that might have a prospect for relatively prompt implementation if a process can be devised to deal efficiently with the stumbling blocks that are still on the road. In the second part I propose a procedure to tackle this "stumbling block" problem, deviating somehow from the routine diplomatic ways in which such issues are handled usually.

1. Three categories of proposals

1.1. Self-sustaining initiatives

The first category of proposals include those where a supplier (or a group of suppliers) has taken the initiative, has set up, by itself, a national initiative that is basically constructed as an offer to consumer countries, and pursues this initiative as a matter of national policy. Since national policies can be pursued notwithstanding the reactions of the international community, this is more or less a self-runner and does not need too much elaboration in the near future by other actors to stay alive.

In this category I count the US national stockpile offer, the proposed Russian multinational fuel center in which the Russian Federation will remain the only technology holder, but in which consumer countries are invited to participate, and the Six-Countries-Initiative to create a virtual enriched fuel or enrichment services reserve as a matter of co-ordinated national

policies to help recipient countries in good non-proliferation standing should they confront a fuel crisis due to political decisions by their erstwhile supplier.

All three proposals profit from the advantage that key elements of the projects are already in place. Not much has to be done in terms of creating the necessary physical or legal conditions to fulfill the promises contained in them. A second plus is the straightforward procedure which can be summarized in the time-honoured "take it or leave it" principle (though in the case of the 6-countries-initiative, the IAEA Board of Governors would have to agree that the Director General might act as a broker in fuel dealings that are conditioned on the recipient's renunciation of what are, in fact, NPT Art. IV rights, namely the full development of peaceful nuclear technology). A third advantage, connected to the first two, is that these projects will go ahead anyway, as a matter of national policies.

The same factor that stands behind these three advantages, however, contains also the major disadvantage: Since the projects have been developed strictly as a matter of national supplier policies, they do not convey a sense of ownership onto users; this might make them politically unpalatable, as the sense of discrimination between "haves" and "havenots" could be rather exacerbated than mitigated through this circumstance.

1.2. Long-term proposals

The second category comprises complex, long-term multilateral projects that need considerable lead time to create the necessary physical, political, and legal conditions. The IAEA regional fuel center falls among them, as does the idea of the German Foreign Minister to place such centers in extraterritorial status. This proposal contains a couple of interesting features which might be suited to solve some of the most pressing problems in connection with fuel assurances and multinational fuel cycle arrangements. It promises to provide a far-reaching solution to the frequently discussed "breakout scenario" where the host state of the MNA nationalises the facility and kicks the "partners" out. In the Minister's idea, the host state would have to defeat international guards, thereby confronting the international community with a violent aggression - quite an impressive barrier. Secondly, the "ownership" for the "have-nots" would be greatly enhanced, if they could participate in the scheme and if the host state would be one of them. As the devil is always in the detail, more thoughts must be given to them before this proposal will be mature for realisation.

The third project in this category is the IAEA fuel bank proposed by the Nuclear Threat Initiative.

All three projects bear the advantage to be truly multilateral. As such, they convey a sense of ownership onto all, suppliers and consumers, and may thereby engender very positive politico-psychological consequences. On the negative side, they all require new physical structures and contain complex legal and political issues that must first to be solved before the proposals can make it into reality. This includes the question of siting, who will be responsible for the physical security of the site; and what would happen in the case of political upheaval or attempts at breakout in or by the host state.

In addition, questions about the role of the IAEA must be addressed. These are not exactly legal questions, as the possibility of the Agency's running such a facility are clearly opened by its Statute. Rather, the question is whether it is wise to involve a huge international bureaucracy in activities that are at least partially commercial, as the center must buy and sell fuel at least under certain circumstances. Even more dubious is the blurring of the roles in management, on the one hand, and regulation and oversight, on the other hand. If the IAEA is the owner and manager of the plant or the storage site, it must at the same time apply safeguards to its own plant in its regulatory capacity. This mixture of roles has not worked well at the national level (it is no incident that the ownership of nuclear fuel by EURATOM, as written into the EURATOM Treaty, has remained purely nominal, while effective property rights and related decisions rest with the companies operating the plants in Europe, while EURATOM's verification role has been exerted strongly and effectively). Lastly, long-term funding of the running costs might evolve into a liability once start-up funding has been exhausted. The record of member states in according the Agency steady and needed funding does not create full confidence that these costs will be indeed met through the regular budget, notably when and if one of the major funders will be disgruntled by the decision of the IAEA to supply fuel to a party to which this very fuel has been denied by the funder for political reasons.

To be clear: I am second to none in my appreciation and admiration of the good work of the IAEA, and as will be revealed later, I envisage a quite central role for the Agency in the process leading up to a fuel assurance system. However, it is exactly my concern for the

integrity and effectiveness of the IAEA that I feel compelled to warn against an overburdening and a mixing up of roles that might, eventually, compromise either.

None of these considerations should lead to the conclusion at this time that these proposals are not worth pursuing; indeed they are, with the German Foreign Minister's being the most promising one . However, they need more studying and certainly protracted negotiations until they can be put in place and work effectively. For this reason, they will not be available in the short term.

1.3. Proposals to be tackled now

There is yet a third category of proposals. They build on existing structures, but create new legal frameworks of rights and obligations. By doing this, they offer "ownership" to users, for they require negotiations for being put in place. Since these negotiations require the participation of recipients with a view to achieve consensus, these are included into the procedure rather than being merely the object of decisions taken by others - a situation which is all too well known for non-aligned countries and not appreciated at all. It is unlikely that MNA approaches will prove successful unless such "sense of ownership" is credibly offered and widely felt.

The World Nuclear Association has proposed a three-layer-system, consisting of the existing market as first layer, a to-be-created mutual commitment by enrichment companies to jump in once one of them is hindered to fulfil valid supply contracts to a party with solid non-proliferation credentials, and a virtual fuel bank in the form of nationally mandated stockpiles of enriched uranium, based on a supplier-user agreement, which would offer supply for fuel fabrication in case that the market and the inter-company agreement would not offer sufficient quantities of needed enriched uranium feedstock to meet the needs of the aggrieved recipient. This proposal has the charm of the practical sense of industry.

Likewise, the United Kingdom has amended the six-country initiative by proposing a commitment by suppliers to waive case-by-case reviews and prior consent rights for politically motivated supply interruptions to parties in a good non-proliferation standing, transferring decision rights unambiguously to the IAEA. This proposal has the charm of

taking into account user countries' concerns that found their way into the IAEA's MNA Expert Group's report of February 2005.

These two projects may go together; they may in addition be complemented by Japan's suggestion to have an early warning system, based on close observation of the market. Since they rely on existing physical structures - the "virtual fuel bank" is based on national holdings that, in one or the other form, exist or could easily be created at existing, licensed facilities - the hurdles to go from here to their realisation appear definitely lower than for the second category, while the degree of users' ownership promises to be clearly superior to proposals in the first category.

2. A procedure to go forward

In the following, I propose a procedure for handling the next phase which deviates considerably from the traditional ways of moving towards international agreements. The reasoning behind this approach is to avoid political posturing that stands in the way of effective agreements, to deal with practical issues in a concrete rather than an abstract manner, and to put the Agency in reasonable control of the procedure.

2.1. Step I: Devising a system

In the first step, the IAEA would install two separate, but parallel working groups under its auspices. Either would be given the WNA/British proposals as templates to guide their deliberations without necessarily limiting them. The first one would consist of present or probable near-term users of nuclear fuel. This group would thus include representatives of developing and developed countries. It would also be composed of government and industry representatives of each of the countries concerned in order to insure that practical expertise will be well presented within the group.

The main mission of this group would be to determine the type and degree of the assurances desired by users. What is it that recipients of nuclear fuel without their own enrichment (and, possibly, fuel fabrication) facilities would want from suppliers (and/or the IAEA)? This desire is by no means clear, as the proposals on the table are almost uniformly products of the supplier side alone (with the IAEA Expert Group report and, partially, the WNA proposal,

being partial exceptions). The second charge would be to define the desired role of the IAEA from a recipients' perspective. Of course, the group would be free to put any additional items it deems relevant into its report.

The second group would consequently consist on representatives of governments and industry from present and probable near-term suppliers of enrichment services. Again, this would make up for a group in which, besides a majority of developed states, some developing countries would participate. Here, the main focus would be to agree on the conditions under which suppliers would be willing to give assurances, in other words, those factors that would trigger a legitimate claim to release enriched uranium or to provide the desired enrichment services. As the other group, the supplier group would be ask to give its definition of the envisaged role for the IAEA.

On the basis of the two reports, the IAEA Secretariat would then develop a draft fuel assurance system. This draft would probably envisage flexible parameters in order to accommodate differences in views within and between the two groups and technical uncertainties that are in the nature of the beast. The Secretariat, as the groups, would use the WNA/British suggestions as templates without being totally bound by their features.

Step II: Testing the system

At this point, usual diplomatic practice would put this draft to a negotiation forum, turning it over to diplomatic treatment. I propose something quite different: To scrutinise the workability of the system in a series of test runs, that is, in simulations on how it would work in practice. The simulation would take place under IAEA auspices and with full participation of the members of the two groups, government and industry alike. The tests would simulate several kinds of supply interruptions, varying the triggering supplier state and the affected recipient state. In addition, whatever variability the Secretariat would have built into the system's parameters would be tested by varying these parameters.

This is by no means a "first ever". Simulation has been, of course, an instrument used frequently in the nuclear industry as well as in the IAEA. It has a tangible model in the test runs for the OECD's International Energy Agency's emergency oil supply system which, in many ways, has functional similarities to what we envisage as a fuel assurance system. And

likewise, the verification system for the Comprehensive Test Ban Treaty has undergone test runs. Experiences of the xxx located in the same building complex as the IAEA might prove helpful for the Agency Secretariat.

The key questions for these test runs would be: Does the system work at all? Is demand met in time? What are the costs involved in the system's standby as well as crisis states? What expected or unexpected stumbling blocks for a smooth functioning are met in practice - for example in the fuel fabrication sector - and how must the system be adapted to handle them successfully? These are the questions which the Secretariat would be requested to submit to the most careful analysis.

This analysis would be submitted to the two working groups. On the basis of their comments, the Secretariat would then revise the draft system and put the revised system to a new test run. Step III - the start of formal negotiations - would not be entered before the Secretariat was satisfied that the system would, indeed, work reasonably efficiently in practice.

3. Advantages of the proposed procedure

The present proposal for an unorthodox procedure is aimed at avoiding the deadlock that has haunted previous attempts to come to grips with multilateral solutions for the problem of fuel assurance. In comparison to the usual sequence - a draft put to negotiations - this procedure promises the following advantages:

- It helps participants to deal with technical and legal problems not in the abstract, but in a practical way; fuel fabrication bottlenecks is a case in point. The simulation exercise induces p people to search for practical solutions rather than to complain about prospective problems.
- Industry is fully involved. Indeed, industry can be expected to be in the leading position during much of the test runs. This puts politics (and politicking) to the backburner.
- All participating countries can develop a tangible sense of ownership. They participate in the exercise, whether supplier or user, developed or developing country. Nothing happens over the heads of a particular group.
- Sterile antagonistic bargaining along haves/havenots frontlines is avoided in favour of practical cooperation.

- Since the system draft is put to negotiations only when it looks like it would work reasonably well, all participants should have a stake in its realisation. This might help provide an atmosphere for expediency rather than long-drawn out controversies.
- Negotiators, once they start their difficult work, know the beast they are dealing with from their participation in the exercises. This, in turn, might straighten the negotiations considerably.

At first glance, this unusual suggestion might appear somehow outlandish. Yet we have been wandering in circles on this very subject for half a century. It is time to break out of this circle, and this should force us to “think out of the box”.

4. Final remark

The flood of proposals to address the multilateral fuel assurance subject shows that time might be ripe to deal with this issue earnestly. By looking at the discussion as it goes on - noting, in particular, the distrust by which non-aligned countries received the six-country initiative during the June IAEA Board of Governors session - betrays the degree of fragmentation that characterises the NPT community at present. Whatever assurance of supply system we come up with in the end, its elaboration requires an awful lot of mutual confidence. However, an atmosphere in which the government of one IAEA member state calls for another member state to be wiped from the map, another government puts high value on regime change elsewhere, rights derived from NPT Art. IV are subjected to unilateral attempts at rewriting, and nuclear disarmament is stalled does not strike me as overly conducive for creating such confidence.