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Countering CBRN Challenges amid Disarmament and Non-Proliferation Concerns in the Middle East/Gulf

An Overview of This Policy Forum Series

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This new series will focus on countries in the Middle East/Gulf facing multiple challenges emanating from the entire range of chemical, biological, radiological, and last but not least nuclear weapons (CBRN). Endeavors to tackle CBRN security may serve as a unifying factor among the usually splintered actors in the region. With an emphasis on dialogue mechanisms and the role of experts in their various functions, the authors contributing to the series will present feasible, policy-relevant recommendations for improving security in the entire region. A spillover from the CBRN-related communication mechanism to the closely related but stalemated dialogue process on disarmament and non-proliferation would be welcome as an additional result.

Politico-Scientific Goal

his new blue POLICY FORUM series starts from the assumption that security is more than the focus on weapons - in fact productive, solution-driven dialogue mechanisms are an indispensable element of any viable security concept. Non-state/ hybrid actors in particular, such as the so-called Islamic State in Iraq and the Levant (IS, ISIL, ISIS or Da'esh), which may (temporarily) assume features characteristic of a state, have become a major focus of intense discussions and activities at the Track I (government) and II (academia/ experts) levels. In fact, endeavors to tackle CBRN security may even qualify as a unifying factor among the usually splintered actors in the Middle East/Gulf.

It is the main objective of this new blue POLICY FORUM series to assess and perhaps strengthen this discourse as well as the practical endeavors devoted to counterterrorist activities and/or even to propose new initiatives. This goal is the raison d'être of the joint KAS/APOME effort together with the authors of the planned ten blue Policy Forum issues. A spillover from the CBRN-related communication mechanism to the area of disarmament non-proliferation (embodied in the Nuclear Non-Proliferation Treaty [NPT]) would be a most welcome additional effect; it may encourage a constructive interplay of both communities.

For our project two coordinates are relevant: *first*, the literature on 'New' Terrorism and its relationship to the CBRN issue; *and second*, as far as nuclear and radiological materials/weapons are concerned, the Nuclear Security Summit (NSS) process, which was announced by the then newly elected U.S. President Barack Obama in his programmatic Prague Speech on April 5, 2009; since this process is over after four summits the ongoing activities remain crucial.

The 'New' Terrorism and CBRN – the First Coordinate

We would like to offer incentives to our colleagues in the coming issues to give both a detailed assessment of the weapon category they are dealing with and elaborating, if possible, the threats/risks as seen by individual governments in the Middle East/Gulf. The inclusion of preferably Track I/government sources from the Middle East/Gulf as assessed by our regional Track II experts is most welcome. This would provide enormous added value, because the literature is dominated by extra-regional scholars and experts both inside and outside government-related institutions.

The stage will be set in three ways: first, relating the term 'new' of the phenomenon 'terrorism' to CBRN; second, discussing difficulties in dealing with threat/risk-related

uncertainties – with the aim of avoiding extreme assessments, implausible assumptions, and clear-cut, in fact prophetic predictions; *third*, drawing attention to the fact that the CBRN acronym which is often used as an expanded term for weapons of mass destruction deals with extremely different categories of weapons (see last aspect in greater detail below). The bottom line is that while we need to be concerned about CBRN in the hands of all kinds of terrorists, tailored counter-measures are possible and have already been effective.

Taking Relevant Results in Consideration

The most recent literature (Goertz, 2018; Hegemann/Kahl, 2018: 48-59) emphasizes the following 'new' factors:

- New actors in new organizational contexts: a broader and more differentiated range of players of Islamist terrorism/jihadism who are active in a more decentralized way at the local, regional, and global level – cooperating, interacting, and merging with organized crime.
- New strategies and tactics: a broad range of quasi-military, asymmetric warfare, guerilla tactics, insurgency, with the pronounced elements of low-level terrorism/individual jihad ('lone wolves') and suicidal activities/martyrdom, kidnapping for ransom, and psychological warfare (excessive, archaic violence such as beheadings).

» We are faced with a paradoxical situation: in principle, the more probable use of a dirty bomb made using the best accessible radiological material on the one hand and, on the other, the potentially most devastating terrorist use of an actual nuclear bomb as a 'low-probability event' [...].

What will our experts in their POLICY FORUM issues and the decision-makers they will be addressing make of this? In our view one would have to make the strong case that the 'immensity' of the consequences of a 'low-probability event' means that 'even a small chance is enough to justify an intensive effort to reduce the risk'

New instruments: the internet as the indispensable source of the "electronic jihad" (Goertz, 2018: 117) for almost the entire range of activities from recruitment to preaching and showing shocking violence. It seems that in the "Open Source Jihad" manuals on "How to Make a Bomb in the Kitchen of your Mom" mainly refer to conventional so-called Improvised Explosive Devices; also, detailed instructions focus on pick-up trucks as a proven and reliable way Allah's enemies (Goertz, 2018: 124-125, 129-131; quotation: 127).

It will be vital to connect the factors to the most relevant actors, in our case to al Qaeda and ISIS, while remaining aware of the fact that these are moving targets adapting to new circumstances, including the eminent role of counter-measures, especially by the United States. At the time of writing - mid-2018 - the record is positive in the sense that the often feared and announced CBRN-related attacks by ISIS, with probably a few exceptions, have fortunately not become reality in the Middle East/Gulf (Dukić, 2017). This is by no means a reason for complacency (as the initiation of our new Policy Forum series clearly demonstrates), but it is a reason for providing adequate analysis - rough as it will be in this overview.

The Need to Work with Transparent and Differentiated Notions of CBRN

CBRN (or unconventional) weapons are indeed "often lumped together" under the heading of weapons of mass destruction. "This is odd, to say the least, given their different nature, both in terms of their make-up, ease by which they may be produced and potential for destruction."

- The material for a B and C weapon is "oftentimes readily available in the open market", yet the actual weaponization and effective dissemination of these agents is the more challenging part, requiring technological knowhow that until today has "largely eluded the capacity of non-state actors".
- "In contrast to this, the key obstacle to attaining a nuclear capability is attaining or mastering the production of key materials", i.e. highly enriched

uranium or plutonium. This remains until today a "significant hurdle" even for ambitious states, not to mention non-state actors with nuclear aspirations (all quotations in HCSS, 2010: 9; see also Sokova 2017). One more option is available that has to be taken utterly seriously: a sophisticated terrorist group could make a crude bomb/improvised nuclear device provided that they got the needed nuclear material by stealing it - "there have been some 20 seizures of stolen weapons-usable nuclear material" in the last 25 years (Bunn/Roth, September 28, 2017). It is this possibility that makes efforts to improve the security of all nuclear facilities and materials imperative.

Radiological weapons disperse radioactive material using conventional methods, possibly an improvised explosive device, called a radiological dispersal device (RDD) or dirty bomb. The ingredients for such an RDD are located in more than 100 countries at thousands of sites such as hospitals for radiotherapy and in industrial facilities or for commercial purposes, for instance, oil exploration. In 2013 and 2014 there were 325 publicly reported incidents in which nuclear and mostly radiological (85 percent) material was lost, stolen or otherwise determined to be outside regularly control. Manufacturing a dirty bomb would require limited scientific and technical expertise (Lloyd's Emerging Risk Report, 2016: 5, 15).

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What will our experts in their POLICY FORUM issues and the decision-makers they will be addressing make of this? In our view one would have to make the case that the "immensity" of the consequences of a "low-probability event" means that "even a small chance is enough to justify an intensive effort to reduce the risk" (Bunn/Roth, September 28, 2017).



The Nuclear Security Summit Process and the Challenges Ahead – the Second Coordinate

In Prague, President Obama assessed the threat – focused on nuclear terrorism – and he set the tone and the agenda with its priorities and concrete actions (especially securing unsecured nuclear material and countering nuclear smuggling) not only for his country and its leadership role but for all participating states in the high-level process:

"[W]e must ensure that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global security. One terrorist with one nuclear weapon could unleash massive destruction." (The White House, Office of the Press Secretary, April 5, 2009).

The NSS process and the subsequent, ongoing activities will allow us to elaborate on the specifics of the Middle East/Gulf in a feasible way. This regards two important NSS-related aspects – the progress achieved through the summit process in the context of still remaining gaps and the enormous challenges ahead. The current expert consensus at least in the U.S. dominated community is ambivalent: substantial progress through the NSS amid the overall unsatisfactory state of the complex nuclear/radiological security architecture (Kutschesfahani/Davenport/Connolly, July 2018; NTI, September 2018).

The Elements of Our Approach

Featuring the National and Regional Specifics

The NSS process and the ongoing activities aimed especially at meeting the terrorist threat in the nuclear and radiological areas allows us to identify the five Middle East/Gulf participants: Egypt, Israel, Jordan, Saudi Arabia, and the United Arab Emirates (UAE). While Israel is the only nuclear-weapon state, the other countries from the Middle East/Gulf mentioned have in common that they are interested in initiating or pursuing a civil nuclear program.

We suggest structuring the Policy Forum series along the CBRN and the relevant dimensions related to them; this does not exclude portraying the profile of the countries in question. We are not interested in replicating the international debate, but instead we propose taking the specific national and regional factors into account: domestic interests, cultural traditions, and economic priorities as well as limited resources, or the geographic situation, for instance as a transit country sharing porous borders with its neighbors. These factors may explain obstacles, progress, and perspectives, but also tensions between individual Middle East/Gulf countries with extra-regional actors (control over trade) in dealing with CBRN-related aspects.

With reference to the NSS process, it would appear helpful to identify progress by examining the following focal points: nuclear and radiological security; countering nuclear and radiological smuggling; education and training initiatives; governance structures and processes on participation in Joint Statements. All in all, our experts may want to determine whether the overall profile consists of visible ownership and leadership and whether it involves efforts to overcome the general inertia; embraces new initiatives (combined with new thinking); and involves eagerness to solve problems with a distinct preference for cooperative measures including efforts to replace dangerous sources by adapting of alternative technologies, for instance in the radiological area.

Focus on Experts, Their Selfunderstanding and Institutional Affiliation(s) – Combined with the Leitmotiv of Featuring the Two Communities and Their Potential Interplay

Whenever possible, we suggest, focusing on experts, which will allow us to provide in the case of all ten issues a coherent and systematic view of the vital dimensions of the overall complex issue – experts are cross-cutting actors also in the societies of the Middle East/Gulf. Experts are active in governments or affiliated with institutions close to governments. They represent civil society groups, work at universities, are part of transregional institutions and projects – and have a distinct and different self-understanding. Regarding the

last aspect, three ideal types are relevant (based on Kubbig, 2004: 589-601):

- The experts, while not being neutral/objective, will primarily carry out weightings guided by cognitive-scientific/scholarly standards and less by normative criteria such as peace building and cooperation.
- The experts will sometimes be guided by cognitive-scientific/scholarly and sometimes by normative standards again peace building and cooperation come to mind.
- The interest-guided advocates representing an interest group or an institution (whether government-related or independent) with specific missions instrumentalize knowledge to pursue their specific interests and objectives.

Without going into detail, which will be provided in the corresponding POLICY FORUM issues, we combine the experts approach with an emphasis on regional specifics, including the cooperative aspect. Here, the SESAME Project, a multilateral advanced research center situated some 35 km north of Amman, comes to mind (the scientists working here ought to belong to the first category of experts). The President of the SESAME Council Rolf Heuer (2018) has emphasized the uniqueness of this "peace building project".

The role and perspective of experts should also be taken into account when it comes to radiological weapons and bio-security. In both cases we suggest not only discussing the challenges in the context of the latest developments related to non-state/ hybrid actors, but also elaborating on the opportunities of regional cooperation as well (Radoini/Mayer, 2016). In view of the trans-regional fears in Europe posed by chemical weapons of the once mighty ISIS, an emphasis on this category of weapons of mass destruction is warranted; this does not in any way exclude the other types. As already mentioned, a sober and differentiated threat analysis will be relevant, assessing previous forecasts and certainly providing cautious ideas about possible options in the future. One further issue stands out: a focus on dual-use trade control, preventing nuclear smuggling and counter-terrorism. We suggest coping with this major problem by describing the regional Centres of Excellence in Jordan, the UAE and Saudi Arabia as well as their dealings with the Joint Research Centre of the EU Commission in Brussels (Radoini/Nasser, 2016).

The suggested leitmotiv of featuring the CBRN security and the disarmament/ non-proliferation communities and their potential interplay can be described where proliferation concerns come into play, in addition to the nuclear security area. The case in point is the establishment of a legal framework for engaging in civil nuclear cooperation under agreed-upon non-proliferation and control standards (the so-called 123 Agreement). The connection between nuclear safety and nuclear proliferation regards the issue of highly sensitive enrichment and plutonium separation/reprocessing facilities. They are especially attractive for terrorists who may want to steel such weapons-grade material and for states with nuclear aspirations. In concrete terms, tensions may arise or intensify between the United States on the one hand and the UEA, Saudi Arabia, and Jordan on the other (see the green POLICY FORUM series, issue No. 10: 7, online available at http://www.academicpeaceorchestra.com).

The leitmotiv of addressing the two expert communities will also come up in connection with the work of the Centres of Excellence, and certainly in our final reflections on the entire publication series and the way forward. We will not lose sight of our politico-scientific goal of bringing the different expert communities together in view of the 2020 NPT Review Conference. In fact, concrete steps reflecting this endeavor have already been taken in the Middle East/Gulf in this respect and can be repeated in the near future.

The Author

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