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**NUCLEAR VERIFICATION IN
A MIDDLE EAST
WMD FREE ZONE**

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1. Introduction

- Ideas for a ME nuclear-weapon-free zone go back almost 60 years
 - lack of progress both frustrating and alarming
 - risk of a nuclear capacity race in the region - leading to a nuclear arms race - greater than ever.
- Previous proposals failed because of the many **political** challenges
 - instead, progress can be made by focusing on **technical** aspects:
 - **how could such a zone be made to work in practice?**
 - **specifically, how to ensure verification is effective?**
 - a study by regional experts on this question could enhance common understanding, build mutual confidence, and create a more constructive atmosphere for political decisions.

Key messages (1)

- (1) It is possible to create a WMDFZ in such a way as to serve the national interest of all ME states.
- (2) This will require each state to analyse its interests dispassionately
 - not productive to think in terms of preserving rights or avoiding restrictions
 - rather, each state should ask:
 - **what would it like to see apply in other states, particularly those it considers a threat?**
 - whatever the desired measures, they must be **reciprocal**.

Key messages (2)

- (3) The greatest challenge for the zone is **nuclear latency** – *development of capabilities that could be used for nuclear weapons*
- specifically, **enrichment** and **reprocessing**
 - verification cannot guarantee timely warning if these are misused.
- (4) This paper focuses on **nuclear** aspects, but obviously other WMD, and also delivery systems, need to be addressed
- all of these need to be considered within the broader regional political and security context.

2. Delineating the zone

- No generally agreed definition of the Middle East region.
- The paper follows the working definition from the UNSG 1990 study:
 - the 22 members of the Arab League plus Iran and Israel.
- Necessary also to consider appropriate mechanism for involving Turkey.

3. Prohibitions and complementary measures

- What needs to be verified?
 - what prohibitions and obligations are needed in the zone?
 - what applies already, and what will be new?
- Existing prohibitions and obligations
 - all but Israel are NPT NNWS
 - almost half are parties to the African NWFZ - *Pelindaba Treaty*
 - over half have ratified CTBT

Prohibitions and obligations (1)

Existing -

- Renunciation of nuclear weapons – *NPT + Pelindaba*
 - incl. R&D – *Pelindaba, JCPOA*
- Exclusively peaceful use of nuclear energy – *NPT + Pelindaba*
- No stationing of nuclear weapons – *Pelindaba*
- No nuclear testing – *Pelindaba + CTBT*
- No attacks on nuclear facilities – *Pelindaba*
- Elimination of nuclear weapons – *Pelindaba*

Prohibitions and obligations (2)

Additional? –

- Constraints on dual-use technologies, esp. enrichment/reprocessing, and relevant inventories – *JCPOA*
 - elaboration of possible *weaponization* - *JCPOA*
- AP and CTBT – *discussed next*

4. Verification

- Today all nuclear activities in the region, except in Israel, are subject to IAEA safeguards (*'comprehensive'* safeguards)
 - also CTBT IMS applies.
- IAEA safeguards objectives are:
 - high probability of detection – providing timely warning
 - deter violations through risk of detection
 - ideally compliance is based on *assurance*, not deterrence.
- IAEA has emphasised assurance on absence of *undeclared* material/activities requires both CSA + AP
 - **zone cannot provide effective verification without AP**
 - AP, and CTBT, should be obligatory
 - *as in Semipalatinsk Treaty (Central Asian NWFZ).*

Is the AP sufficient?

- What more required?
 - inspector right of access at any time to all relevant places, documents and personnel – *Euratom, IAEA Statute, South Africa*
 - additional monitoring of sensitive manufacture, imports – *JCPOA*
 - elaboration of measures for dual-use activities and items of possible application to *weaponization* – *JCPOA, Joint Commission*
 - limits on proliferation-sensitive technologies and materials
 - **mutual inspections?**
 - challenge inspections?
 - complementary measures – CBMs, transparency.

Who will conduct verification?

- IAEA has independent responsibility for safeguards
 - legal requirement (NPT where applicable) and international expectation.
- Complement IAEA safeguards with regional system?
 - **mutual inspections** can have important confidence-building role
 - ABACC or Euratom model – or a combination?
 - ABACC is system of mutual inspections, operating jointly with IAEA
 - Euratom is *supranational*, takes place of national authorities
 - partnership approach with IAEA.

5. Disarmament

- How will zone apply to Israel – outside NPT and comprehensive safeguards, believed to have nuclear weapons?
- Two basic approaches -
 - exclude Israel unless/until it accepts comprehensive safeguards
 - include Israel under phased approach.
- Phased approach requires agreement on phases and timeframe – progressive steps and verification
 - initial step likely to be material cut-off
 - key question – will nuclear weapons dismantlement be verified, or only corresponding material transferred to safeguards? (*South Africa*)
 - likely to take extended period, progress based on milestones rather than specific dates
 - meanwhile, stopping further nuclear weapon proliferation would provide immediate benefit to all parties.

6. Conclusions

- ME NWFZ can play vital role reducing tensions and motivation to proliferate
 - but **only if** all parties are fully confident of zone commitments being honoured.
- Suggested next step - establishment of study by regional experts to examine technical and practical aspects.
- In parallel, states can take practical supporting steps such as:
 - concluding APs and engaging proactively with IAEA safeguards
 - refraining from actions that will impact negatively on prospects for the zone
 - reviving discussions on regional security structures.