

# CBRN Weapons

Global Security Pulse, Strategic Monitor 2019-2020



## Novel and Important Signals to Watch: Threats and Opportunities

- **Massive investments by all possessor states in nuclear weapons and related missiles**
  - Modernization of nuclear weapon arsenals. [New York Times \(1\)](#); [SIPRI \(1\)](#)
  - Development of low-yield weapons & new types of missiles (hypersonic & cruise missiles). [UNODA](#); [The Guardian \(1\)](#); [IISS \(1\)](#); [New York Times \(2\)](#)
  - *How could the EU influence nuclear weapons states to prevent a dangerous nuclear arms race?*
- **Diffusing lines between CBRN and conventional weapons**
  - Increasing number of delivery systems with dual use capabilities. [BBC \(1\)](#); [BASIC](#)
  - Risks involved by entanglement of Command & Control systems. [Carnegie](#); [Arms Control Association \(1\)](#)
  - *What measures could the EU propose to nuclear weapon states to prevent nuclear warfare due to misunderstandings?*
- **Developments in biotechnology with risk of creating new biological weapons**
  - Rapid emerging new gen-editing technologies such as CRISPR. [Deccan Chronicle](#); [IDSA](#)
  - Biological dual-use technologies become more easily available for non-state actors. [SIPRI \(2\)](#); [WEF](#); [IDSA](#)
  - *What policies could the EU develop to prevent any weaponization of new biological technologies?*
- **Developments in chemical science with risk of creating new chemical weapons**
  - Increasing convergence between pharmaceutical and military applications. (Frequently mentioned during expert discussion)
  - Chemical dual-use technology becomes more easily available for non-state actors [SIPRI \(3\)](#)
  - *How could the Organisation for the Prohibition of Chemical Weapons be strengthened to prevent any abuse of dual-use chemical technology?*

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## Long Term Trends: Development of the Threat

### Multifactor Threat Assessment (10-year timespan)

#### Trends

#### Indicator

##### Arsenals

Number of CBRN weapons



Investments in modernisation of weapons



Investments in missiles



##### Policies

Political threshold for CBRN weapon use



Non-state actors' access to CBRN weapon technology



Clear lines between CBRN and conventional weapons



Trust in multilateral system regarding CBRN



■ Decreasing threat

■ Increasing threat

▲ Upward

▼ Downward

— Net-zero / Stable

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## Novel and Important Signals to Watch: The International Order

### • Demise of existing CBRN arms control agreements

- US & Russian withdrawal from INF Treaty & nearing end of New START. [IISS \(2\)](#); [Arms Control Association \(2\)](#); [Arms Control Association \(3\)](#); [Jane's 360](#)
- Problems with JCPOA & tensions within NPT, CWC, BTWC and CTBT context. [Politico](#); [CSIS](#); [BBC \(2\)](#); [The Guardian \(2\)](#)
- *How could the EU strengthen (trust in) existing arms control agreements?*

### • Lowering threshold for nuclear weapon use

- Political rhetoric with implicit threats of nuclear war in of some nuclear weapon states. [Reuters](#)
- Perception in some nuclear weapon states that nuclear weapons are 'usable' in war. [The Bulletin of Atomic Scientists \(1\)](#); [The Bulletin of Atomic Scientists \(2\)](#)
- *What could the EU do to ensure that nuclear weapons will never be used again?*

### • Proliferation of CBRN technology

- International concerns about the nuclear programs of Iran & Saudi Arabia. [Brookings](#); [Bulletin of Atomic Scientists \(3\)](#); [The Economist](#); [IISS \(3\)](#)
- Little control & knowledge regarding the spread of new biological & chemical technologies [SIPRI \(2\)](#); [IDSA](#)
- *How could the EU prevent any proliferation of CBRN technologies?*

### • Impunity of chemical weapons use

- Chemical weapons were used in Syria, Malaysia and United Kingdom [SIPRI \(3\)](#)
- So far, few serious consequences were faced by perpetrators (state & non-state), which may encourage other actors to use chemical weapons as well. [Arms Control Association \(4\)](#); [SIPRI \(3\)](#)
- *In what way could the EU end the perception of impunity of actors using chemical weapons?*

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## Long Term Trends: Development of the International Order

### Multiyear Regime Analysis (10-year timespan)

#### Norms

#### Trend

States should work towards a world without CBRN weapons



CBRN weapons should never be used



#### Rules

#### Trend

States should work towards a world without CBRN weapons



Arms control agreements should not be violated



Access of non-state actors to CBRN weapon materials should actively be prevented



▲ Upward    ▼ Downward    — Net-zero / Stable

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