The International Export Control Regimes: Achievements and Future Challenges

GONZALO DE SALAZAR

UNSCR

- **1540 (2004):** 3. To establish, develop, review and maintain appropriate effective national export and trans-shipment controls, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;

- **1887 (2009):** 27. To take all appropriate national measures in accordance with their national authorities and legislation, and consistent with international law, to prevent proliferation financing and shipments, to strengthen export controls, to secure sensitive materials, and to control access to intangible transfers of technology.

- **2325 (2016) 13.** To control access to intangible transfers of technology and to information that could be used for weapons of mass destruction and their means of delivery;

- **XXI century technological evolution & cumulative process of innovation.**

- **Data can also be turned into cognitive mechanisms and artificial intelligence**

- **New perception of space: cyberspace + land, sea and air**

- **Accessibility for non-state actors**

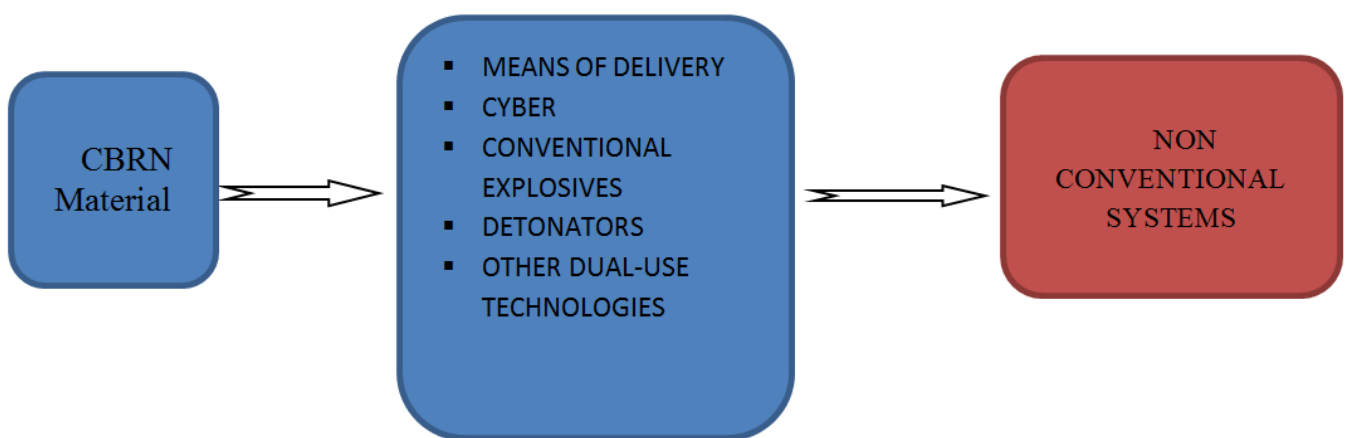**New inventions and innovative uses of existing technologies: advantages and challenges.**

- Steam engine: textile industry, successfully adapted to trains and vessels in the XIXth century.

- GPS: designed for military purposes, used for civilian applications (planes, cars, vessels, hiking, asymmetric warfare…)

- Cell phones: wireless communications, text, GPS, remote-controlled detonators…
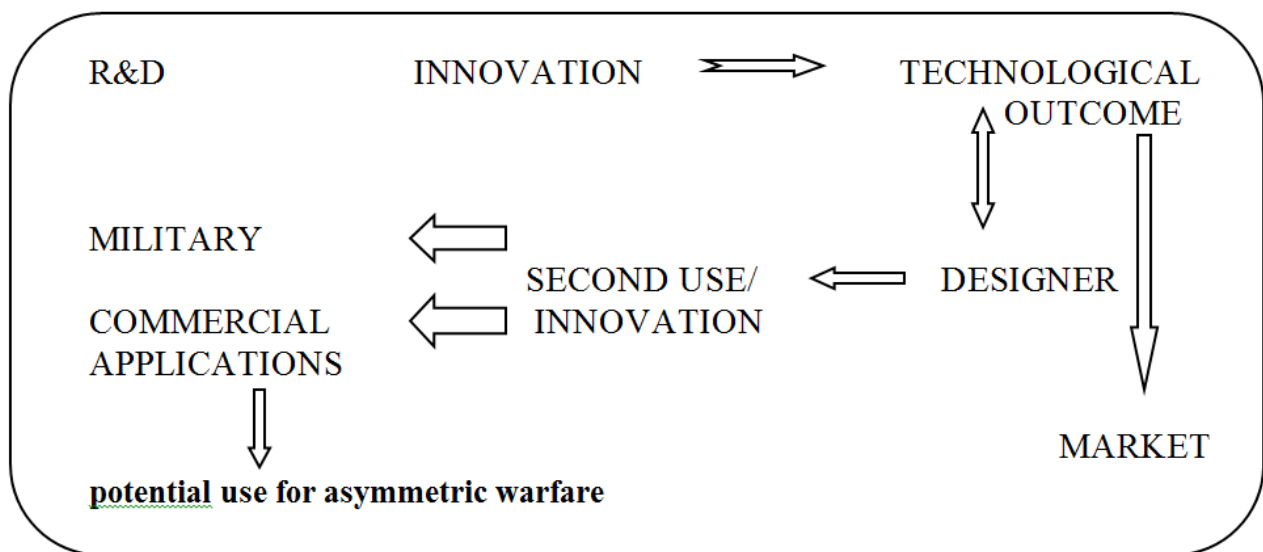
TECHNOLOGICAL EVOLUTION VERSUS EXPORT CONTROL

- **Information age & new technologies**

- **Market globalization, intangible technology transfers, off-shoring policies & technology diffusion worldwide:**

  - **positive factors to improve productivity, expand trade and increase economic growth**
  - **important challenges for supplier countries, which require adequate tools to effectively implement export controls**
  - **particularly important in industries operating in the nuclear, chemical, biological, aerospace and military sectors.**

- **Many dual use technologies not listed as "controlled items" might be relevant for future WMD or conventional weapons programs. ..**

- **But technological change through cumulative innovation occurs faster than our ability to update lists of controlled items.**

- **Conceptual challenges**

- **Intangible technology transfers**

- **Conceptual gap in dual use technologies**

```
┌──────────┐        ┌─────────────────────────┐        ┌──────────────┐
│          │        │ ▪ MEANS OF DELIVERY     │        │              │
│  CBRN    │  ═══>  │ ▪ CYBER                 │  ═══>  │     NON      │
│ Material │        │ ▪ CONVENTIONAL          │        │ CONVENTIONAL │
│          │        │   EXPLOSIVES            │        │   SYSTEMS    │
│          │        │ ▪ DETONATORS            │        │              │
│          │        │ ▪ OTHER DUAL-USE        │        │              │
│          │        │   TECHNOLOGIES          │        │              │
└──────────┘        └─────────────────────────┘        └──────────────┘
```

A FUTURE DEBATE ?

- **Defining the *conceptual gap*** between the XXth century designed operational weapons systems and an innovative use of new technological resources for military purposes.

- ***Compliance in an intangible space:*** *a*ssessing *information transactions* where the concept of *national boundary* is blurred and traditional customs and enforcement controls cannot be implemented.

- ***Updating the methodology*** for non-proliferation, disarmament and arms control mechanisms: new concepts and tools to measure and assess capabilities, both conventional and non-conventional, based on tangible and intangible factors.