

**Baker
McKenzie.**

Increasing efforts to control new and emerging technologies

Ross Evans, Associate, Baker McKenzie | 14 October 2020

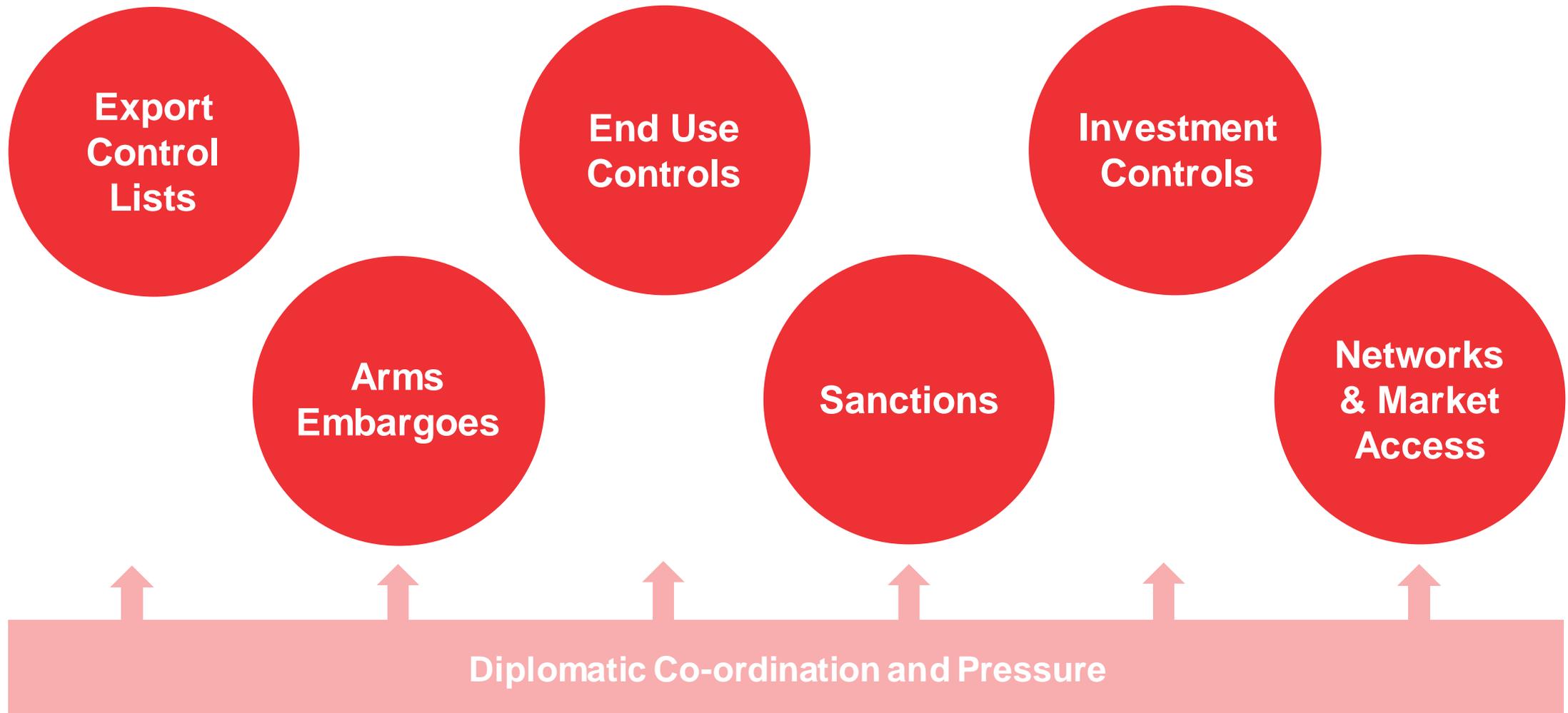


What are new and emerging technologies?

- US Export Control Reform Act of 2018 - process for identifying appropriate controls on emerging and foundational technologies
 - Emerging Technologies: Interim Final Rule for geospatial imagery software
 - Foundational Technologies: ANPRM consultation deadline **9 November 2020**
- EU – Human rights concerns for cyber-surveillance items
- Multilateral export control lists – new and revised entries in multiple categories
- **Increased blurring of national security and industrial policy?**

Controlling emerging technologies

Regulatory toolkit



Changes to UK Investment Review

- Enterprise Act 2002: Govt. powers to review a “relevant merger situation” based on “public interest” grounds including national security
 - *RMS = when enterprises cease to be distinct and turnover or market share threshold is met*
- 2018 reduced thresholds in relation to any ‘relevant enterprise’: development or production of **export controlled items**, IP for **computer processing units and roots of trust**, quantum technologies
- 2020 extended to **cryptographic authentication, AI**
- National Security & Investment Bill expected soon
- Application of EU FDI framework Regulation began on 11 October 2020

Technologies in focus



Processors and silicon

5nm technologies and ML processing

- Notable high profile cases in 2019 / 2020:
 - NL decision to hold review of export licence for shipment of 5nm EUV lithography machines to China under US pressure
 - Domestic and international pressure on UK govt. to scrutinise corporate transactions concerning UK HQ companies
- WA 2019 - 3D003 rewritten: *'Computational lithography' "software" specially designed for the "development" of patterns on EUV-lithography masks or reticles*

Cryptography

- 2019 EU Dual-Use List:
 - 5A002.a Technical Note 2c – algorithms based on lattices, isogenies, random codes (i.e. quantum resistant)
 - Note 2.j new decontrol for certain items with a “connected civil industry application”
- Recast EU Dual Use regulation
 - EU GEA for encryption items
- Consultation on UK Information Security OGEL

Surveillance

- China arms embargo – interpreted to include intercept equipment
- Incoming control 5D001.e – software specially designed or modified for monitoring or analysis by law enforcement (also 5E001.a)
 - *NB: Valid until 31 December 2022*
- Recast EU Regulation proposals:
 - New ‘Category 10’ list of Cyber-Surveillance items?
 - Catch-all end use control for items that may be used in violation of human rights or IHL – limited to CS items that are covert and targeted at actual persons?

Cyber-Attacks, Malware

- New ML21.b.5 - software *specially designed or modified for the conduct of military offensive cyber operations* (not yet implemented in UK)
- EU Cyber Sanctions regime targeting organisations and individuals responsible for or providing support for cyber attacks
 - 3 entities and 6 individuals from Russia, China and DPRK listed on 30 July 2020
- US cyber-related sanctions program (E.O. 13694)
 - 1 October 2020 - Advisory on Potential Sanctions Risks for Facilitating Ransomware Payments (NB: presumption of denial)

5G

- Aggressive approach taken by US towards Chinese tech companies (including use of export control regime to restrict access to US technology)
- Changing attitudes in Europe (and globally) in response to US concerns/policy and appearance of limited access to Chinese markets
- UK rowed back on previous position on Huawei equipment:
 - Ban on purchasing from 2021;
 - Must remove existing equipment from telecoms networks by 2027 (2029 for broadband).
- Similar approaches (short of outright ban) in France, Germany, Netherlands,...