



UK Export Controls – Introduction
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Agenda

Current enforcement focus on academia, an international perspective

UK Export control responsibilities, limitations on controls & the academia myth

UK controls outline: Military and Dual-Use

“Technology” controls and the extent of decontrols

Focus on Weapons of Mass Destruction (WMD) end-use controls – key enforcement risk

Compliance policies and procedures – risk management

UK Licensing overview

Offences and penalties

The Times, 8 February 2021



HM Revenue and Customs is preparing to investigate 200 British academics for sharing information that could help China develop weapons of mass destruction

MARK SCHIEFELBEIN/AP

HMRC accuses British universities of inadvertently aiding Chinese military

Matt Dathan, Homes Affairs Editor | [Billy Kenber](#)

Monday February 08 2021, 12.01am, The Times

More than a dozen universities may be inadvertently assisting the Chinese military by sharing research in sensitive areas ranging from hypersonic technology to graphene, a think tank claims.

Civitas alleges that 20 British universities have dealings with 29 Chinese universities and nine companies that have military links, including with [Chinese weapons conglomerates](#).

US Department of Commerce



Bureau of Industry and Security

U.S. Department of Commerce
Where Industry and Security Intersect

FOR IMMEDIATE RELEASE

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BUREAU OF INDUSTRY AND SECURITY

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(202) 482-1069

PRINCETON UNIVERSITY RESOLVES ALLEGATIONS OF EXPORT LAW VIOLATIONS WITH ADMINISTRATIVE SETTLEMENT

Today, Kevin J. Kurland, performing the non-exclusive functions and duties of the Assistant Secretary for Export Enforcement, Bureau of Industry and Security (BIS) of the U.S. Department of Commerce, announced an administrative settlement of \$54,000 with Princeton University, located in Princeton, NJ. Princeton University voluntarily self-disclosed potential violations of the Export Administration Regulations (EAR) to BIS, and cooperated with the investigation that was conducted by the New York Field Office of BIS's Office of Export Enforcement (OEE). Princeton University also agreed to complete one external audit and one internal audit of its export compliance program.

“The Bureau of Industry and Security strongly encourages research institutions to maintain robust export compliance programs to prevent violations of the EAR,” said Mr. Kurland. “If violations do occur, voluntarily self-disclosing the violations to BIS will help mitigate penalties imposed to protect U.S. national security.”

This settlement resolves BIS's allegations that on 37 occasions between November of 2013 and March of 2018, Princeton University engaged in conduct prohibited by the EAR when it exported various strains and recombinants of animal pathogens from the United States to various overseas research institutions without the required export licenses. The items were controlled for Chemical and Biological Weapons reasons, and valued in total at approximately \$27,000.

UK Government – Export Licensing



The Legal Basis for UK Export Controls

Export Control Act 2002

Export Control Order 2008

Retained EU legislation concerning dual-use controls

Export Control Act 2002, Section 8

(1) The Secretary of State may not make a control order which has the effect of prohibiting or regulating any of the following activities:

a) Communication of information in the ordinary course of scientific research;

b) The making of information generally available to the public; or

c) The communication of information that is generally available to the public;

Unless the interference by the order in the freedom to carry on the activity in question is necessary (and no more than is necessary).

Section 8 in Practice

Section 8 of the Act places limitations on the power of the Secretary of State to make any control order which has the effect of prohibiting or regulating certain protected freedoms. Any interference in these protected freedoms must be no more than necessary.

The question of necessity shall be determined by the Secretary of State. The Secretary of State has complied with this provision in making the Export Control Order 2008.

In order to be consistent with the requirements of Section 8, any new order made under the Export Control Act 2002 must balance the needs both to control the activity and to respect the freedom to carry on that activity.

Export controls apply to the academic community in the same way as to any other person or entity involved in activities subject to the controls.

Controls are not aimed specifically at the scientific or academic communities but do have potential application in those sectors; for example, in relation to relevant teaching or research activities.

UK ECJU Updated Guidance – 31 March 2021

Limits of academic exemption

Any academic exemption is unlikely to apply to all aspects of research focused advanced postgraduate degrees such as MPhil or PhD looking at areas of controlled technology. Especially as such research programmes will typically be applied research. By their very nature, they will include technology not covered by the 'public domain'.

UK ECJU Updated Guidance – 31 March 2021

Transnational Education (TNE)

Both export control restrictions and exemptions apply when a UK institution offers STEM-based courses:

-through an overseas campus

-to overseas-based students by electronic means

When providing these STEM-based courses you must ensure any training, advanced study, continued professional development, or individual research projects:

-comply with export controls

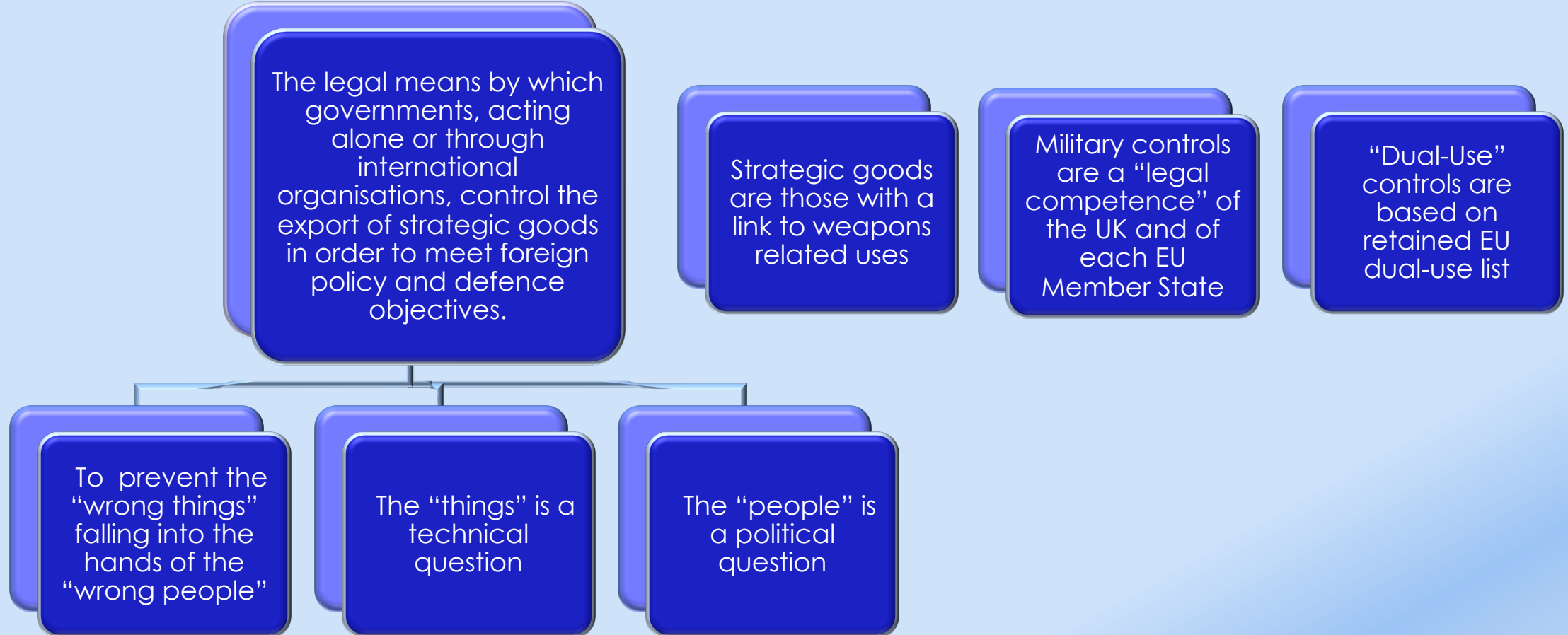
-are not undertaken in support of a WMD programme

Care must also be taken if research is:

-undertaken as part of an applied or work based programme, such as an engineering doctorate

-through a split-site programme of study involving a non-UK based component

What Are Strategic Export Controls?



Bases for Control

The item (goods, software or technology) being exported is on a control list

End-Use Controls – The item being exported is not on a control list but the perceived end-use renders the export licensable

“Technical assistance” controls – under export control or sanctions regulations

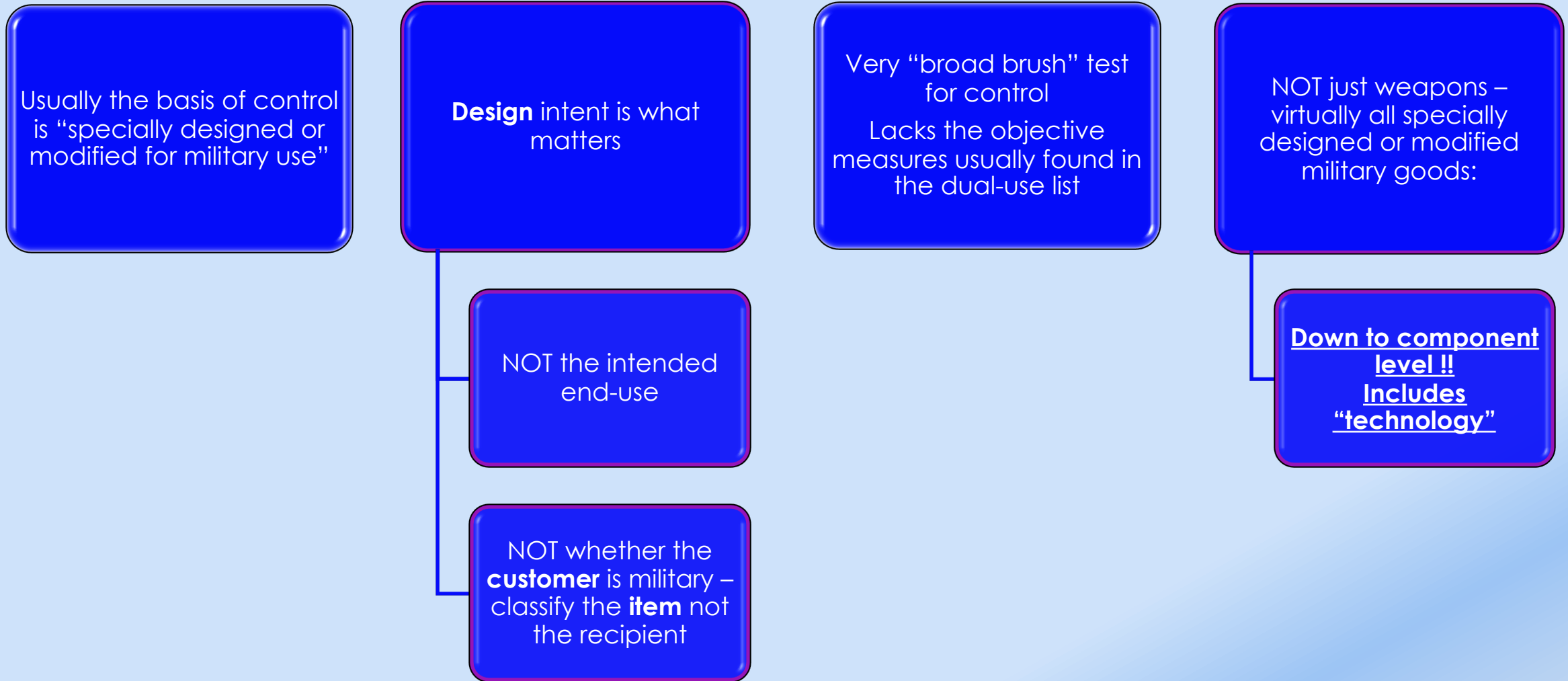
What is an Export?

The physical taking or sending of a controlled items outside of the UK

The electronic transmission of controlled items outside of the UK

The UK has a very limited concept, approximating US “deemed export” controls, only when such an activity is linked to a WMD end-use.

What is Military?



Is the Item SDMFMU ?

Note: “specially designed or modified” – NOT simply manufactured or tested to MIL-STD



An uncontrolled part for use unmodified on a military application does not become controlled because of the customer



But beware of the military end-use control, if either the direct customer or ultimate end-user is in an embargoed country



Be aware of “COTS” – modified is not COTS

Military List Example

ML6 Ground "vehicles" and components as follows:

N.B.: Electronic guidance and navigation equipment is controlled in ML11.a

ML6.a. Ground "vehicles" and components therefor, specially designed or modified for military use;

Technical Note:

For the purposes of ML6.a. the term ground "vehicles" includes trailers.

Note: In ML6.a. modification of a ground "vehicle" for military use entails a structural, electrical or mechanical change involving one or more specially designed military components.

What is Dual-Use?

Dual-use goods are those items which, although not designed for military use, may have a military application

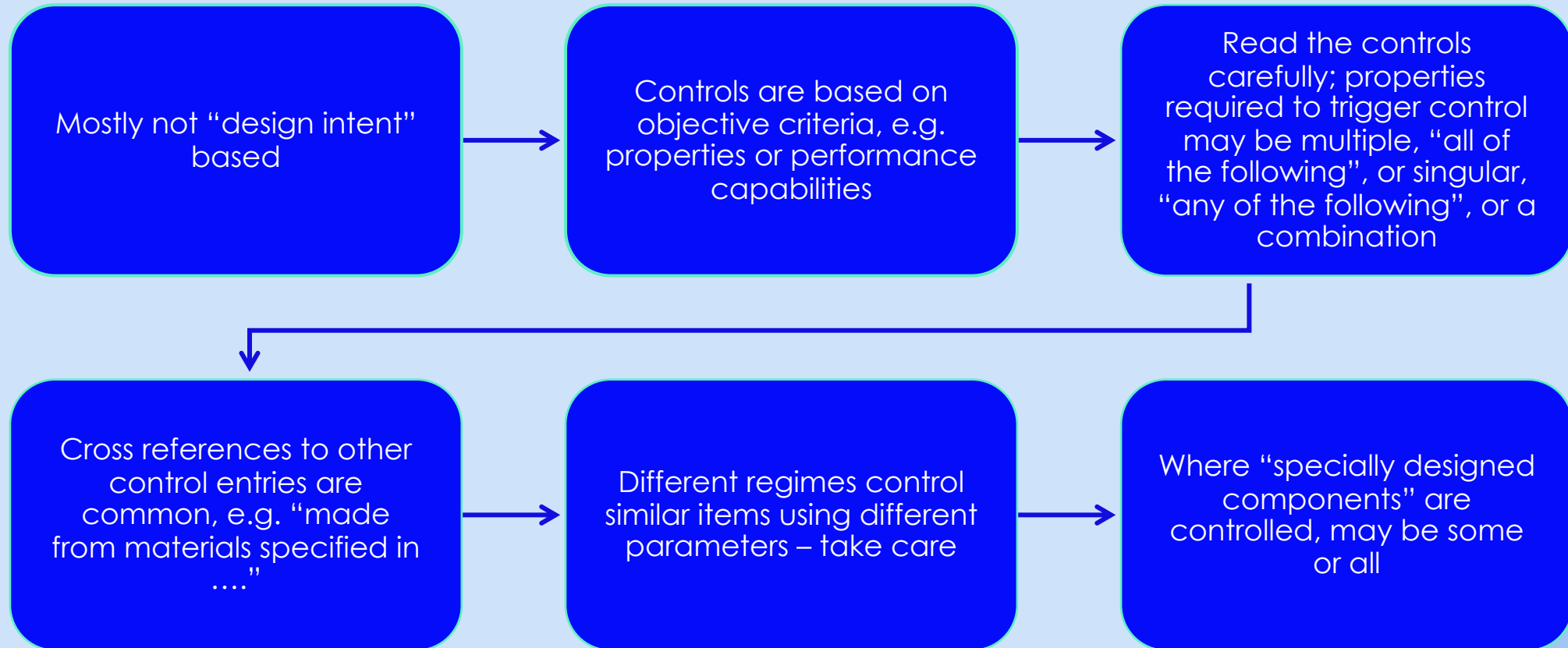
In essence, that which is not military is dual-use **BUT** not all dual use items are controlled

Controlled dual-use goods are those defined in the dual-use control list (Retained Annex I to EC Reg 428/2009)

Uncontrolled dual-use goods may still require a licence

Dual-use controls are mostly based on performance parameters - NOT design intent and are difficult to interpret correctly - they catch many types of goods from electronic components to raw materials
BEWARE!

The Basis of Dual-Use Controls



How to Classify Dual-Use Items

Consider Category 5, Part 2
(Information Security) first

Be inclusive/expansive – do not
focus too narrowly on a single list
entry

Do not assume that ruling out one
list entry means that your item is
not controlled

For example, inertial measurement
equipment or systems have several
control entries, depending on
whether ML or dual-use.

Dual-Use

Categories

0 Nuclear materials, facilities & equipment

1 Special Materials & Related Equipment

2 Materials Processing

3 Electronics

4 Computers

5 Telecommunications and Information Security

6 Sensors & Lasers

7 Navigation & Avionics

8 Marine

9 Space & Propulsion

Sub Categories

A Systems, Equipment & Components

B Test, Inspection and Production Equipment

C Materials

D Software

E Technology

Followed by three digits denoting the international regime or arrangement from which the control entry originates, e.g. **2B007**

Dual-Use List Example

2B007 "Robots" having any of the following characteristics and specially designed controllers and "end-effectors" therefor

N.B SEE ALSO 2B207

a. Not used;

b. Specially designed to comply with national safety standards applicable to potentially explosive munitions environments;

Note: 2B007.b. does not control "robots" specially designed for paint-spraying booths.

c. Specially designed or rated as radiation-hardened to withstand a total radiation dose greater than 5×10^3 Gy (silicon) without operational degradation; **or**

Technical Note:

The term Gy(silicon) refers to the energy in Joules per kilogram absorbed by an unshielded silicon sample when exposed to ionising radiation.

d. Specially designed to operate at altitudes exceeding 30 000 m.

What is "Technology"

Specific (technical) information, in virtually any form, necessary for the "development", "production" or "use" of "goods".

Examples: CAD/CAM models; drawings; blueprints; technical specifications

Usually, but not always, where the product to which the "technology" relates is itself controlled

2E001 "Technology" according to the General Technology Note for the "development" of equipment or "software" specified in 2A, **2B** or 2D.

2E002 "Technology" according to the General Technology Note for the "production" of equipment specified in 2A or **2B**.

2E201 "Technology" according to the General Technology Note for the "use" of equipment or "software" specified in, **2B007.b.**, **2B007.c.**,

What is "Technology" (2)

Note broad language – technology controls are usually **but not always** expressed in the context of controlled goods

2E003.b. "Technology" for metal-working manufacturing processes, as follows:

1. "Technology" for the design of tools, dies or fixtures specially designed for any of the following processes:

a. "Superplastic forming";

b. "**Diffusion bonding**"; or

c. 'Direct-acting hydraulic pressing';

2E003.e "Technology" for the "development" of integration "software" for incorporation of expert systems for advanced decision support of shop floor operations into "numerical control" units;

The General Technology Note (GTN)

Applies to dual-use Categories 1-9 **only** but similar principles apply, in practice, to most military technology
(Art 18 and Art 26 ECO 2008)

"Technology" "required" for the "development", "production" or "use" of goods under control remains under control even when applicable to non-controlled goods

Controls do not apply to that "technology" which is the minimum necessary for the installation, operation, maintenance (checking) and repair of those (dual-use) goods which are not controlled or whose export has been authorised

Controls on "technology" transfer do not apply to information "in the public domain", to "basic scientific research" or to the minimum necessary information for patent applications.

“Public Domain” in Practice

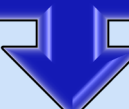
Intent to publish is not sufficient to remove controls pre-publication, e.g. during peer review



Different courses present different risks, e.g. first degree vs. post-grad research



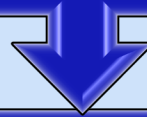
ECJU will not accept an argument that a document comprising entirely public domain information is itself public domain – aggregation adds value. The test is whether the actual document exported is itself in the public domain. (Not tested in court).



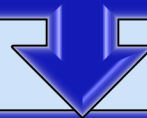
Public domain means legitimately so – it is unlikely that Wikileaks would be regarded as public domain by UK authorities

GTN in Practice

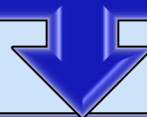
The intent of the GTN is to control only that portion of “Technology” that is specific to dual-use controlled Goods.



The result is that any “Technology” used in both Controlled and Non-Controlled dual-use Goods is **Not Controlled.**

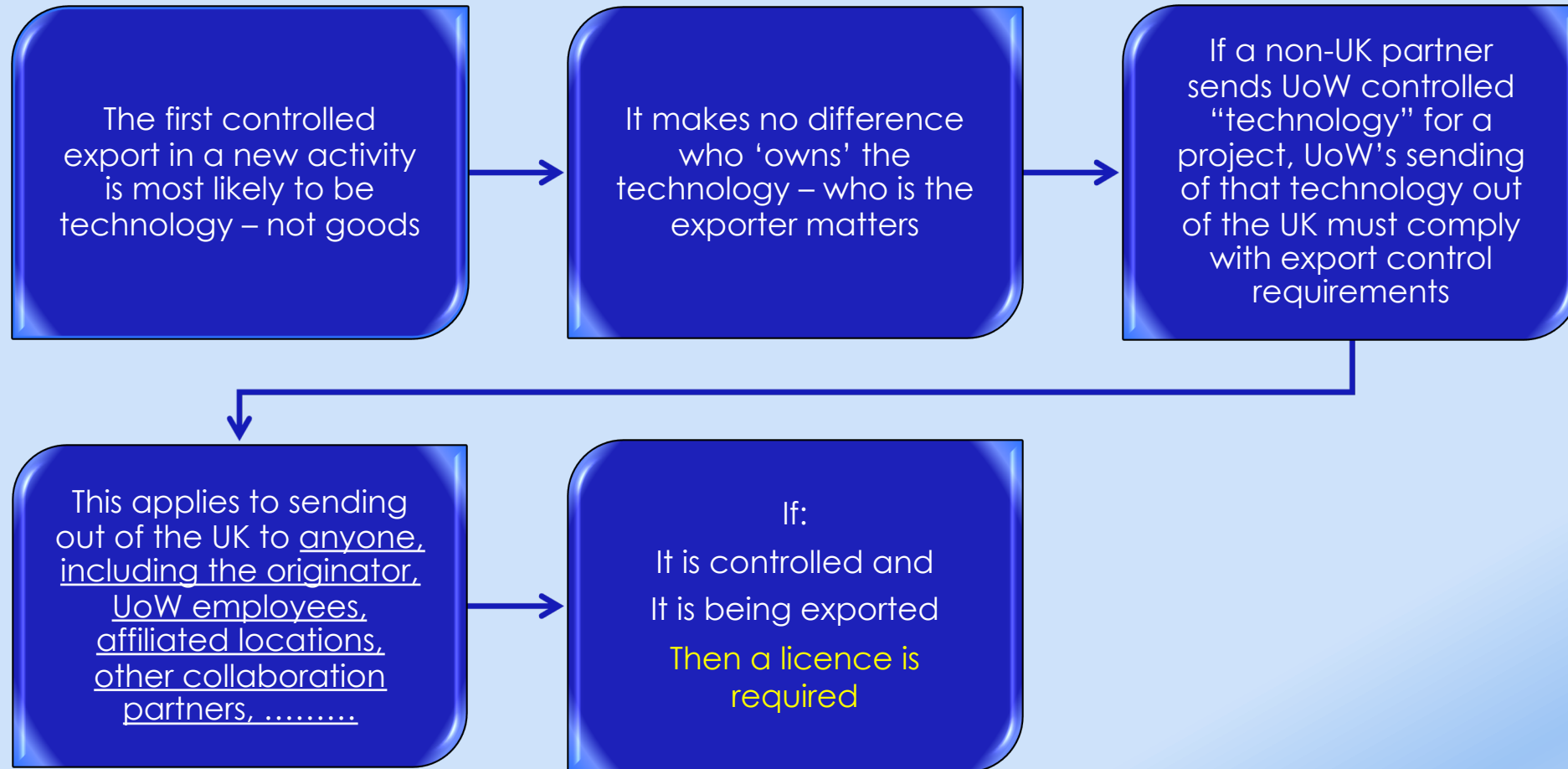


For example, if the Technology to “Produce” a general **purpose** seal for industrial pumps is the same as the Technology to “Produce” a seal for a highly corrosion resistant pump, then the “Production” Technology is not controlled.

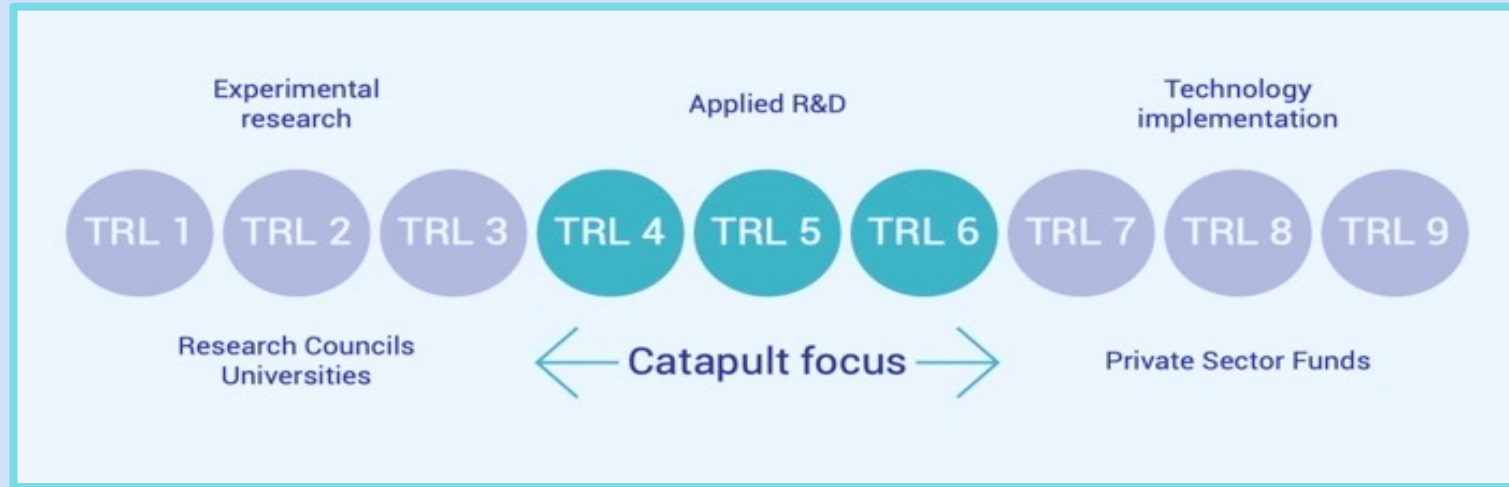


If, however, the “Technology” to “Produce” the seal for a highly corrosion resistant pump is different to that used to “Produce” the standard general purpose seal for industrial pumps, then the “Technology” for the corrosion resistant pump seal is controlled (actually as “technology” for the pump)

Technology Transfers – Real World



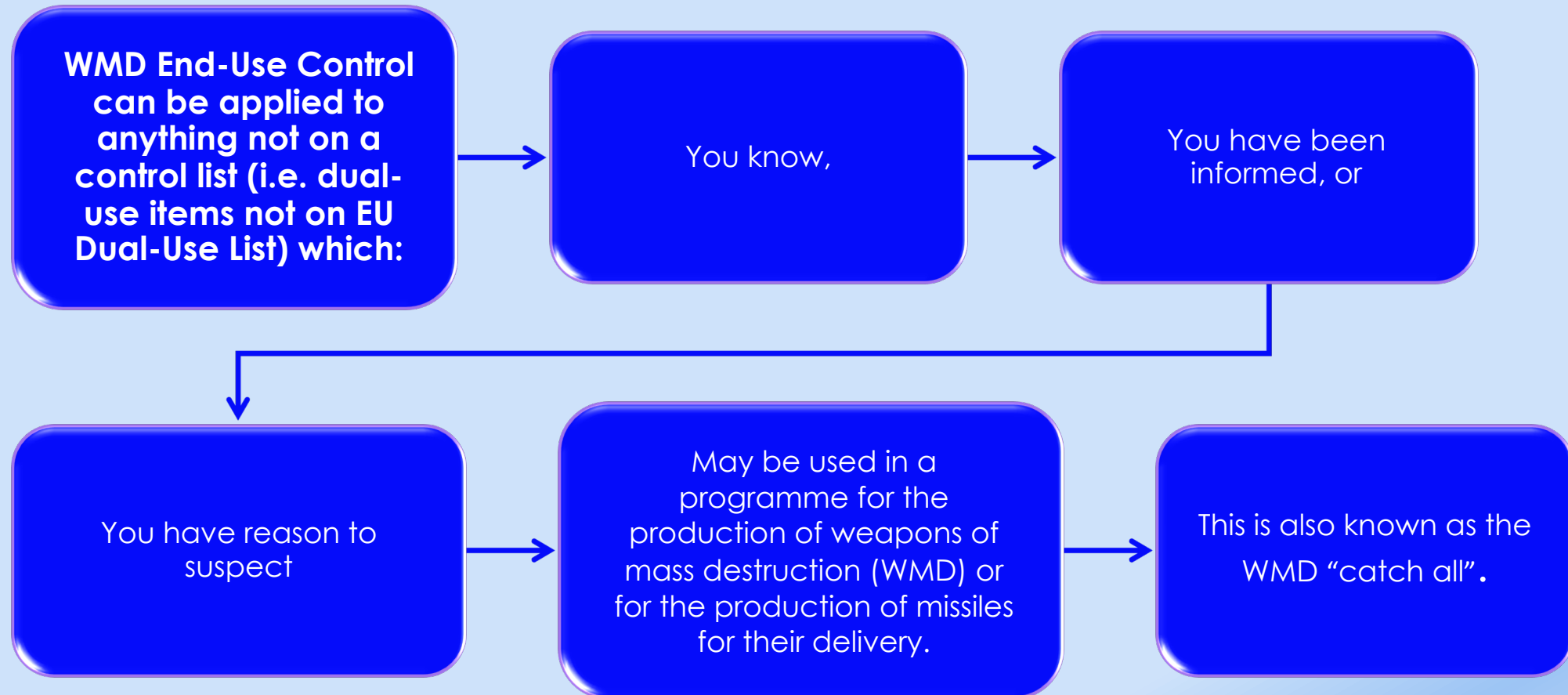
Export Control and TRL Correlation



Australian DoD Guidance to Exporters								
TRL 1	TRL 2	TRL 3	TRL 4	TRL 5	TRL 6	TRL 7	TRL 8	TRL 9
No	No	Maybe	Maybe	Yes	Yes	Yes	Yes	Yes

Remember: the above are guidance only and relate to controlled technology
WMD End-Use Controls extend to normally uncontrolled technology

WMD End-Use Control



What is a “WMD End-Use”?

“use in connection with the development, production, handling, operation, maintenance, storage, detection, identification or dissemination of chemical, biological or nuclear weapons or other nuclear explosive devices, or the development, production, maintenance or storage of missiles capable of delivery such weapons”.

End-Use Controls (“Catch All”)

Regulation, **Article 4(1), (4)**: Physical export and electronic transfer of goods, technology or software from the EU to a destination outside the EU where you are aware or have been informed

Article 6 ECO 2008: Physical export and electronic transfer of goods, technology or software from the UK to a destination outside the UK where you have grounds to suspect that there is a WMD end-use risk (**unless, having made all reasonable enquiries, you are satisfied there will be no WMD end-use**)

Article 10 ECO 2008: Electronic transfer or non-electronic transfer (e.g. face-to-face discussions or demonstration, passing course notes hand-to-hand, etc) of software or technology within the UK where you are aware or have been informed by Government that there is a WMD end-use risk and that the final destination is outside the UK.

NOTE - Article 10 ECO 2008 does not apply to software or technology in the public domain.
Article 10 ECO 2008 **DOES** apply to basic scientific research

Article 11 ECO 2008: Electronic transfer or non-electronic transfer of software or technology by a UK person located outside the UK where the person is aware or has been informed by Government that there is a WMD end-use risk. This only applies where the transfer is to a destination outside the UK or, broadly, where the transferor knows or has been informed by Government that the final destination is outside the UK.

NOTE - Article 11 ECO 2008 does not apply to software or technology in the public domain.
Article 11 ECO 2008 **DOES** apply to basic scientific research

End-Use Controls (“Catch All”)

Article 12 ECO 2008: Non-electronic transfer of software or technology from the UK where you are aware or have been informed by Government that there is a WMD end-use risk and either the immediate destination is outside the UK or you know the final destination is outside the UK.

NOTE – Article 12 ECO 2008 does not apply to software or technology in the public domain.
Article 12 ECO 2008 **DOES** apply to basic scientific research

Article 19 ECO 2008: Provision of technical assistance directly or indirectly to a person or place outside the UK (e.g. related to repairs, development, manufacture, assembly, testing, use, maintenance or any other technical service), either from the UK or from a place outside the UK. UK.

NOTE - Article 19 ECO 2008 applies where the person providing technical assistance:

- is aware that the subject of this technical assistance is intended, in its entirety or in part, for ‘WMD purposes’; or

- is informed by Government that the subject of this technical assistance is or may be intended, in its entirety or in part, for ‘WMD purposes’.

End-Use Controls – Summary

Provision	Activity	Excludes	Cognizance	Final destination
Art 4 Retained EC Reg 428/2009	Physical or electronic transfer from UK		Know/Informed WMD End-Use	Outside UK
Art 6 ECO 2008	Physical or electronic transfer from UK		Suspect WMD End-Use	Outside UK
Art 10 ECO 2008	Transfer by any method in the UK	Public Domain – per Art 18(2) Basic Scientific Research (BSR) NOT EXCLUDED	Know/Informed WMD End-Use	Outside UK
Art 11 ECO 2008	Transfer by any method by UK person outside UK	Public Domain – per Art 18(2) (BSR) NOT EXCLUDED	Know/Informed WMD End-Use	Of the actual transfer – can include to the UK WMD End-Use must be outside the UK
Art 12 ECO 2008	Transfer by non-electronic means	Public Domain – per Art 18(2) (BSR) NOT EXCLUDED	Know/Informed WMD End-Use	Immediate or final destination outside UK
Art 19 ECO 2008	Provision directly or indirectly of “technical assistance” from anywhere		Know/Informed WMD End-Use	Outside UK (directly or indirectly)

UK Technology Export Controls & Related Sanctions

Decision Tree Numbers

(1) Is the Technology Subject to US Controls?

(2) The UK Technology Control Status

(3) End Use Controls
(4) Sanctions



(1) If US Controls are applicable seek advice

2a. Is the technology controlled? UK Control List

3a. WMD Technology Assistance?*

2b. Is Information "required" or "necessary" for the development, production or use of the controlled item?

3b. Informed of WMD Concern?

Apply for Licence (which is unlikely to be granted)

2c. Basic Scientific Research?

3c. Aware of WMD Concern?

Conclusion: This Is Controlled Technology But Not Subject To Sanctions

Is There an OGEL which covers the Technology to the Destination?

No

2d. Is it in Public Domain?

3d. Suspect WMD Concern?

Check with ECJU

No

R&IS apply for Individual Licence

Yes

R&IS Administer Licences

*Including face to face and assistance within the UK for WMD end use outside UK

Proceed Licence Not Required

Is the Technology subject to Sanctions?

No

Penalties Relating to “WMD End-Use”?

Export Control Order 2008 Art 34(3)

A person who contravenes a prohibition in Part 2 or 3 of this Order that is engaged because the person—

(a) has been informed;

(b) is aware; **or**

(c) has grounds for suspecting that goods, software or technology are or may be intended, in their entirety or in part, for WMD purposes commits an offence and may be arrested.

(4) A person guilty of an offence under paragraph (3) shall be liable—

(a) on summary conviction—

(i) in England and Wales or Scotland, to a fine not exceeding the statutory maximum or to imprisonment for a term not exceeding twelve months, or to both;

(ii) in Northern Ireland, to a fine not exceeding the statutory maximum or to imprisonment for a term not exceeding six months, or to both; **or**

(b) on conviction on indictment to a fine or to imprisonment for a term not exceeding two years, or to both.

Some Areas of Risk

Media driven focus on WMD End-Use – actually not the greatest risk and easily mitigated

Activities of UoW involving the export of controlled technology from the UK – higher probability and higher penalties

Extraterritorial (XT) application of laws, particularly the US but more recently China

Material subject to XT laws are still subject, even if received indirectly, e.g. from another UK party.

Compliance with XT laws can conflict with Equality Act 2010

Non-compliance with XT laws can incur significant costs and criminal penalties

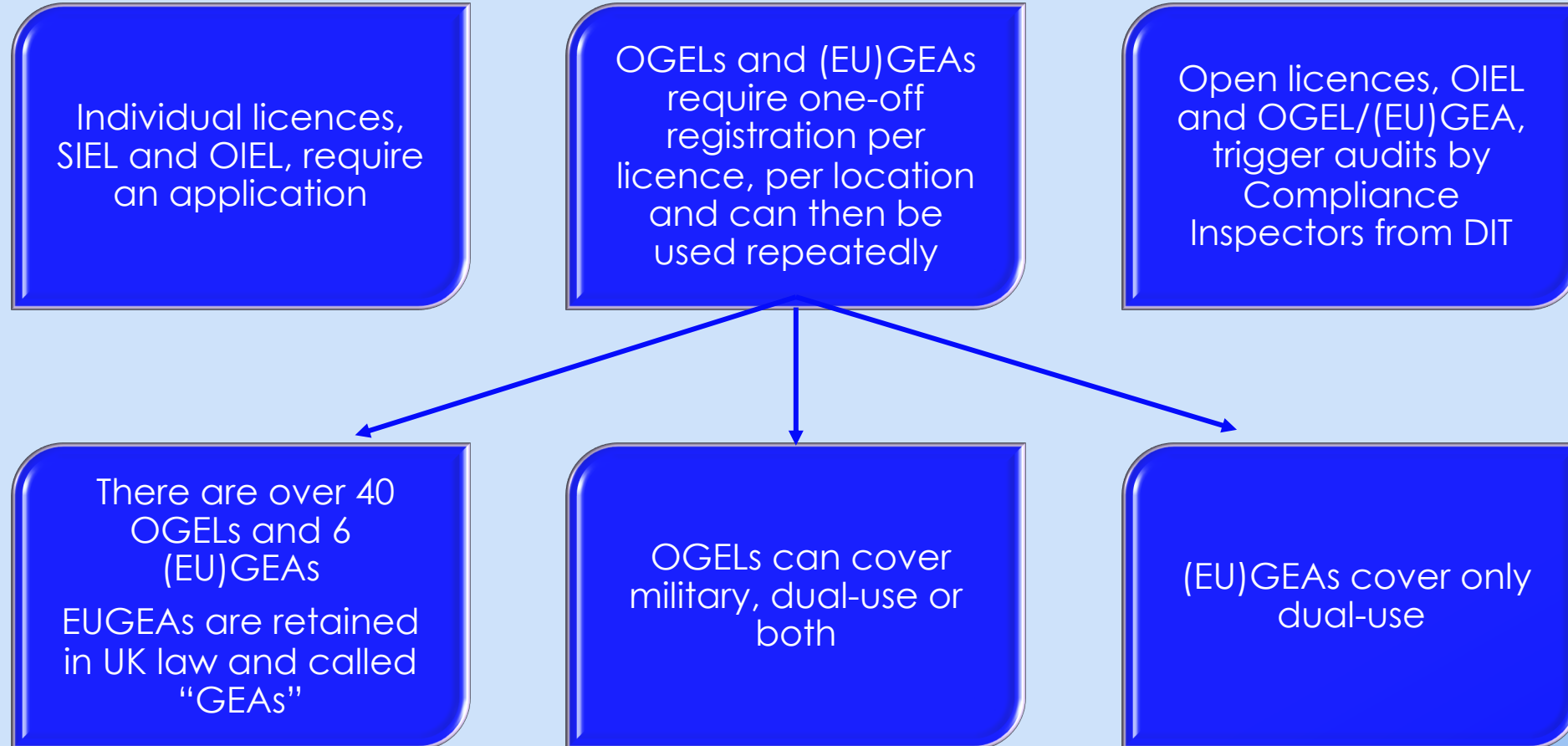
Compliance System – Considerations 1

Essential Elements	UoW Approach	Comments
Management Commitment	Establishment of Export Control: Policy & Training Working Group (ECPTWG)	Resourcing/developing/oversight of compliance activity
Risk Assessment	Currently developing better understanding of risk Controlled and WMD End-Use	Requires periodic reassessment and modification, in light of changes to risk profile
Internal Controls	Controls in place and promulgated via UoW website Clearly defined responsibilities in R&IS	Management of licences/audits to be discussed
Testing/Auditing	To be defined by ECPTWG	Use of UK open licensing incurs periodic government audits. Emphasises rather than removes internal audit need
Training	Both awareness level and R&IS training in train	Consider use of government resources for student body wide awareness, e.g. ECJU/You Tube video (c. 8 mins)

Compliance System – Considerations 2

Aspect	Description	Comments
The 4 “W”s of exporting	What; Where; Who; Why?	Classification; Destination; End-User; End-Use
Classification	What: Crucial dependency	The context in which the system operates
Destination	Where: Can include face-to-face teaching in UK in limited circumstances	NOT based on nationality. Based on WMD end-use outside UK
End-User	Who: End-User due diligence (“Red Flags”)	Proactive protection, often contractual
End-Use	Why: End-Use due diligence, particularly WMD end-use (“Red Flags”)	Proactive protection, often contractual

Licensing



Licence Conditions –All Licence Types

Ensure

the items to be exported are covered by the licence

Ensure

the destination is covered by the licence

Ensure

the licence reference is quoted on the shipping paperwork

Provide

written instructions to the forwarder (even if customer nominated) that the export is subject to licensing and the details of the licence to be used in the customs declaration

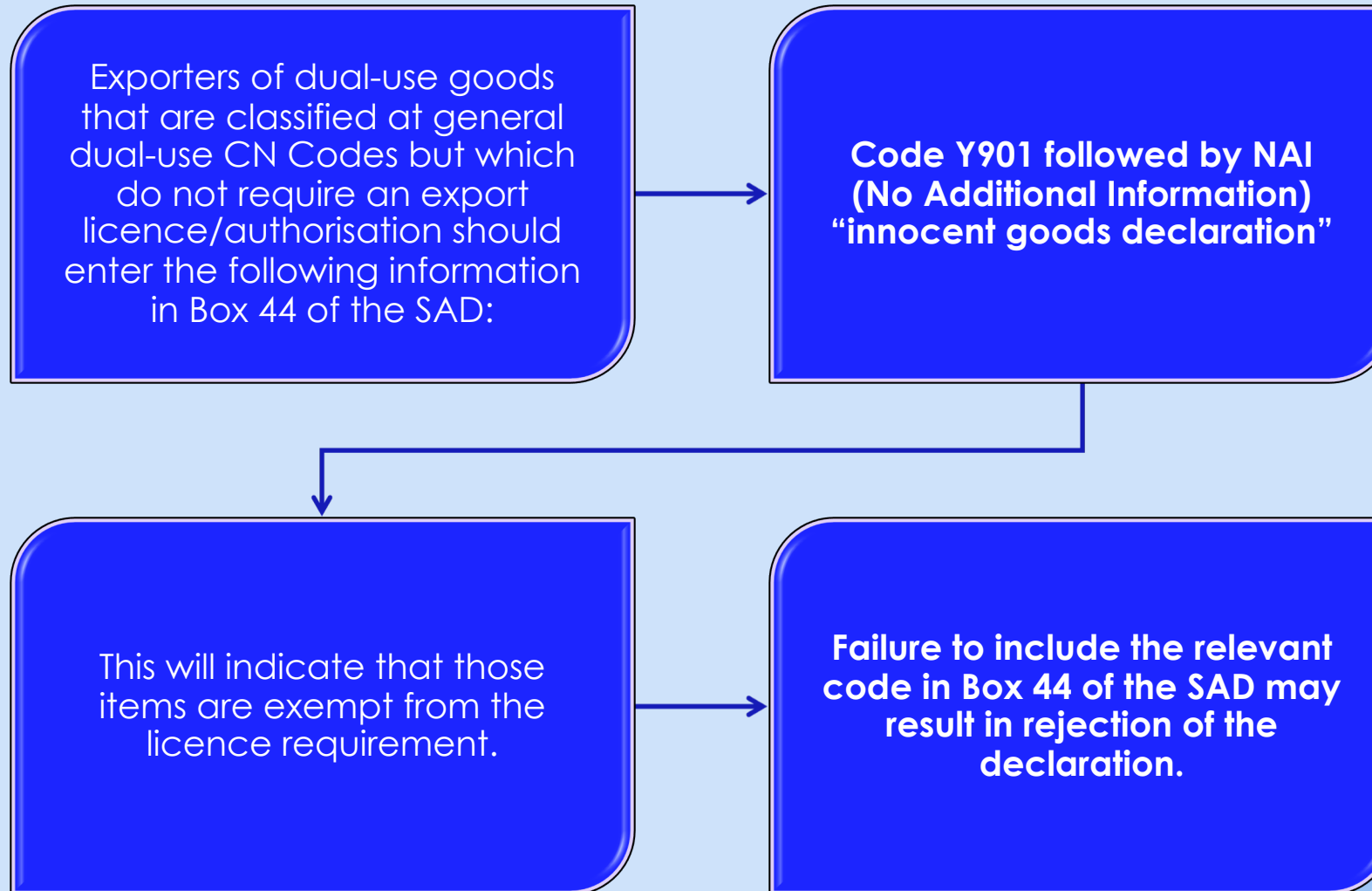
Obtain

a copy of the customs declaration from the forwarder (can be difficult with nominated forwarders)

Retain

All licence conditions met and records kept for four years to demonstrate compliance

So, No Licence Required (NLR) - Now What?



Penalties and Problems?

Penalties for breaching export controls range from loss of open licence privileges through fines to imprisonment.

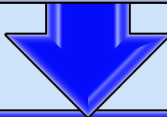
DIT is the licensing authority but HM Revenue & Customs (HMRC) are responsible for enforcement

If you have any concerns regarding a possible breach of controls you must contact your compliance staff

UK Penalties

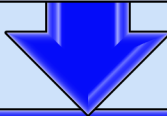
Criminal Violation – Intentional (Section 68(2) Customs & Excise Management Act (CEMA) 1979)

10 years imprisonment and unlimited fine



Criminal Violation – Strict Liability (Section 68(1) CEMA)

The greater of 3x the value of the goods or £1000, plus forfeiture of the goods



Other sanctions:		
Compound penalty (CEMA) - (£575k technology to US)	Removal of the authority to use open licences	Company director disqualification (CDDA 1986)

Enforcement/Compliance

In 2018 there were 3 prosecutions under the Export Control Order 2008,
All were successful.

HMRC evidence to Parliament that prosecution figures can vary, depending on the maturity of investigations:

A similar uplift is evident in compound penalty figures.

2017 – 1 compound penalty totalling £5,360.00

2018 – 3 compound penalties totalling £111,312.50

2019 – 6 compound penalties totalling £146,786.59

2020 – (Mar-Sep) - 19 compound penalties totalling £700,368.01



UK HELP

- SPIRE www.spire.trade.gov.uk
- Checker tools
https://www.ecochecker.trade.gov.uk/spirefox5live/fox/spire/OGEL_GOODS_CHECKER_LANDING_PAGE/new
- ECJU on gov.uk:
<https://www.gov.uk/government/organisations/export-control-organisation>
- Tariff Correlation 2019:
trade.ec.europa.eu/doclib/cfm/doclib_section.cfm?sec=192

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