

DEFENCE AND STRATEGIC GOODS LIST SELF ASSESSMENT GUIDE

DSGL Overview

The Defence and Strategic Goods List 2021 (DSGL) is a list of military and commercial goods, equipment, materials, software, and technologies that Australia has agreed to regulate in accordance with international non-proliferation and export control treaties and regimes. The items on the list have either a direct military use or both a military and non-military use (dual use).

The primary purpose of the DSGL is to identify items that are subject to controls over their export, supply, brokering and publishing (export controls). However, the DSGL is also used to determine if an item is arms or arms related materiel under Australian sanctions legislation ([Sanctions Regimes](#)).

It is recommended to staff, HDR applicants, supervisors, candidates and any staff interested in determining whether their goods, technology, or research activity are controlled or restricted by Defence Export Controls use the DSGL self-assessment guide that is available from the defence website ([DSGL self-assessment guide](#))

DSGL Structure

A broad overview of the DSGL structure is detailed below for guidance, however regular updates and changes are available from the DEC website ([Defence Export Controls](#)).

Part 1 Munitions list

The Munitions list has two broad categories:

- Military goods – goods or technology that are designed or adapted specifically for military purposes, including their parts and accessories
- Nonmilitary lethal goods – equipment that is not designed specifically for military use but is inherently lethal, incapacitating, or destructive, such as nonmilitary firearms, nonmilitary ammunition and commercial explosives and initiators

The Munitions list includes 22 items based on international agreements plus a further ten that Australia has decided to control outside international agreements. The list has the following broad groupings:

ML1-20	Items (systems, parts, and components) specifically designed or modified for military use
ML21	Software associated with items on the Munitions list
ML22	Technology associated with items on the Munitions list
ML901-910	Specific Australia-only controlled items (firearms and explosives not covered elsewhere)

Each item may contain many individual items. For example, item ML7: chemical agents, biological agents, riot control agents, radioactive materials, related equipment, components, and materials includes around 50 individual items, in this case different chemicals, materials and related equipment.

Part 2 Dual Use list

The dual use list covers finished goods, components, equipment, materials, software, and technology developed to meet commercial/civilian needs, but could also be used as military components or for the development or production of military systems or weapons of mass destruction (dual use).

Part 2 categories

Category 0	Nuclear Materials, Facilities and Equipment – Nuclear reactors, gas centrifuges, high-strength metals, equipment, and materials especially designed for nuclear use.
Category 1	Materials, Chemicals, Microorganisms and Toxins – Protective and detection equipment, body armour, precursor chemicals, toxins, casings, pump bodies, impellers and rotors, viruses, bacteria, protective and detection equipment, radiation shielding windows and metal powder production equipment.
Category 2	Materials Processing – Machine tools for milling, computer numerical controlled machines and components; reaction vessels or reactors, agitators, storage tanks, containers, distillation or absorption columns, valves, multi-walled piping, multiple seal or seal-less pumps, crucibles, robots, vibration test systems, vacuum pumps, chemical processing, and handling equipment.
Category 3	Electronics – Microwave components, acoustic wave devices, high-energy devices, switching devices, detonators, certain integrated circuits, spectrometers electronic detonators, integrated circuits, microwave power modules and mass spectrometers.
Category 4	Computers – High-performance computers, related electronic assemblies and other specially-designed components, radiation hardened computers, neural and optical computers, and related equipment.
Category 5	Telecommunications and Information Security – Part 1 – Telecommunications. Telecommunications systems, optical fibre cables, radio equipment, jamming equipment, and telemetry and telecontrol equipment. Part 2 – Information Security (Cryptography). Cryptographic equipment and communications cables systems.
Category 6	Sensors and Lasers – Marine acoustic systems, hydrophones, high-speed cameras, optical mirrors and lasers, imaging cameras and magnetometers.
Category 7	Navigation and Avionics – Gyros, accelerometers, inertial navigation systems, flight control systems, equipment used in oceanographic and hydrographic surveying, encrypted global positioning systems.
Category 8	Marine – Submersible vehicles, underwater vision systems, photographic still cameras, remotely controlled manipulators, noise reduction systems and air independent power systems.
Category 9	Aerospace and Propulsion – Aero and marine gas turbine engines, liquid rocket propulsion systems, unmanned aerial vehicles, hybrid rocket motors, missiles, re-entry vehicles, UAVs, rocket motors, ramjet engines, spacecraft, sounding rockets, acoustic vibration test equipment.

Part 2 sub-categories

Each of the above 10 categories are further split into five sub-categories.

A	Systems, equipment, and components (finished items)
B	Test, inspection, and production equipment (to make the item)
C	Materials (to make the item)
D	Software (for the development, production, or use of the item)
E	Technology (for the development, production, or use of the item)

Part 2 item codes

Each individual item on Part 2 of the DSGL has its own code. The categories and sub-categories listed above form the first two characters of the item code. For example, the item code for a 'finished item' (A) in the electronics category (3) begins with 3A.

Each item is then given a three-digit number. The first number represents the international regime or treaty that gave rise to the item's inclusion on the DSGL.

The next two digits signify the item type. For example, 01 is used for 'electronic components', which is a type of item within the 'electronics' category (3).

If there are sub-types of the item, a letter is added to the code and, if there are sub-sub-types, another number.

For example, item 3A001.c.1 is as follows:

Category	3 – Electronics
Sub-category	A – Finished item, system, or component
Regime	0 – Wassenaar Arrangements
Item type	01 – Electronic components and specially designed components therefor
Item subtype	c – Acoustic wave devices
Item sub-sub-type	1 – Surface acoustic wave and surface skimming (shallow bulk) acoustic wave devices

Technical Thresholds

Most items contained in the DSGL have technical thresholds that need to be met for the item to be captured. These thresholds may be included in the item title or, where they are more complicated, may be spelled out in a further breakdown of the item.

For example, the item in the example above (3A001.c.1) includes a range of complicated technical specifications that are detailed in a further breakdown of the item. For the item to be captured by the DSGL, it must have one of the following:

- a. A carrier frequency exceeding 6 GHz;
- b. A carrier frequency exceeding 1 GHz, but not exceeding 6 GHz and having any of the following:
 1. A 'frequency side-lobe rejection' exceeding 65 dB;
 2. A product of the maximum delay time and the bandwidth (time in μs and bandwidth in MHz) of more than 100;
 3. A bandwidth greater than 250 MHz; or
 4. A dispersive delay of more than 10 μs ; or
- c. A carrier frequency of 1 GHz or less and having any of the following:

1. A product of the maximum delay time and the bandwidth (time in μs and bandwidth in MHz) of more than 100;
2. A dispersive delay of more than 10 μs ; or
3. A 'frequency side-lobe rejection' exceeding 65 dB and a bandwidth greater than 100 MHz;

Therefore, for example, a 'surface acoustic wave and surface skimming (shallow bulk) acoustic wave device' with a carrier frequency between 1-6 GHz and a bandwidth greater than 250 MHz would be captured by the DSGL at item 3A001.c.1.b.3.

KEY TERMS

This guide references several key terms that are defined in legislation. The two most important for understanding the DSGL are Software and Technology.

Software

Software is defined as 'a collection of one or more programs or microprograms fixed in any tangible medium of expression'.

Technology

Technology means specific information necessary for the development, production, or use of a product. This information takes the form of 'technical data' or 'technical assistance'.

'Technical data' may take forms such as blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions written or recorded on other media or devices such as disk, tape, read-only memories.

'Technical assistance' may take forms such as instruction, skills, training, working knowledge and consulting services and may involve the transfer of technical data.

A comprehensive list of terms appearing on the DSGL and a definition of each can be found on the Defence Export Controls website ([Defence Export Controls](#)).

Self-assessment guide for 'controlled' items.

The DSGL controls that may apply to certain goods, software, and technology can be complex. Following the steps outlined below will assist with referencing the latest version of the DSGL and help you identify the likely status of the goods, software, or technology in question.

Deciding which items to search for will depend on whether you are using the DSGL for a sanctions assessment or a potential export control permit application.

Searching for software and technology on the DSGL is not the same as searching for other items. While there are instances of specific software and technology directly listed on the DSGL, most software and technology are captured through general controls known as 'software controls' and 'technology controls'.

1. Access the DSGL legislation through the Federal Register of Legislation website (*Defence and Strategic Goods List 2021*). Ensure it is the latest version marked **In force - Latest Version**.
2. Become familiar with the structure of the DSGL - Part 1 and Part 2. Each part is further subdivided into categories. In the dual use list, each category is broken into 'systems, equipment and components', 'test, inspection and production equipment', 'Material', 'Software', 'technology' (where technology refers to specific information necessary for the development, production or use of an item which can take the form of blueprints, plans, engineering designs, models, specifications, drawings, manuals, and instructions).

3. Is the item specially designed or modified for military use? For more general guidance as to what Defence Export Controls (DEC) considers 'military use' see the [FAQ page](#).
 - Yes: the items are likely DSGL controlled, and this will require a permit. Items specially designed or modified for military use are controlled under Part 1 of the DSGL. To identify the most relevant control that may apply to the item use the Part 1 'Munition list' summary table.
 - No: items that have both military and dual use may be controlled under Part 2 of the DSGL 'dual use' list. Continue to step 4.
4. Does the item fit into any of the broad categories listed in Part 2 of the DSGL 'dual use' list?
 - Yes: item(s) may be controlled under the relevant section of Part 2 of the DSGL. Search the relevant DSGL category to see if the item(s) meet the applicable control threshold for that category. Continue to step 6 for more help searching the DSGL.
 - No: item(s) may still be controlled under the DSGL. For example, items may contain controlled subcomponents, such as non-controlled Unmanned Aerial Vehicle that includes a controlled thermal camera. These items will require a permit for export.
5. Ask, are item(s) manufactured in a country on the [Foreign Countries List](#)?
 - Yes: the manufacturer should be able to provide the Export Controls Classification Number (example, ECN, ECCN, USML), or if known check import documentation. This classification number should have an equivalent DSGL control number under a similar category.
 - No: continue to step 6.
6. Search the DSGL for the specific item(s). Use the [control-F function](#) in the [legislation](#) (pdf file) to search for key words. When searching the DSGL consider the following:
 - Keep key word searches short and simple. (searching for the term 'neural network' will yield no results but searching for 'neural' will go to 'neural computer').
 - Do not look for brand names, items in the DSGL will be referred by generic names.
 - Search for relevant synonyms for the item(s), not all synonyms are included; (example, Unmanned Aerial Vehicles, Uncrewed Aerial Systems).
 - Look at the relevant control categories in the DSGL, and make note of the terminology and acronyms used in the DSGL (e.g. instead of searching for the term 'cubesat' search for the term 'spacecraft')
 - Use the export classification number (if available) to narrow the search results further.
 - Remember to search at the 'system' level of the item, and search for parts and subcomponents for the system where they have high enough functionality that they might reach a control threshold.

The DSGL does not list all items that could have possible [military or WMD utility](#). If there are concerns the export activity could be related to a WMD program or a military end use, please contact the Export Control manager to determine if a DEC export control permit is required.

DSGL exemptions for technology.

The DSGL contains several exemptions that can apply to technology that may otherwise be controlled.

1. The technology is already in the public domain, for example, in publications, product brochures, public blogs, websites, podcasts, or databases, in which case it is not controlled. This exemption applies to all software and technology listed in the DSGL.
2. Basic scientific research, any technology which extends only to the 'fundamental principles of phenomena or observable facts' and is 'not primarily directed towards a specific practical aim or objective', is defined as basic scientific research, and would therefore not be controlled.
3. Minimum necessary information for patent applications. This exemption applies to the supply of DSGL technology where it is done for the purpose of 'seeking a patent' in Australia or overseas. 'Seeking a patent' includes lodging a patent application and the supply of DSGL technology to a

person or organisation (i.e., Patent Office, Patent attorney, research collaborator or a patent review panel) that is directly associated with the lodging of a patent application, or because of the patent examination process.

Supply for a purpose that is not directly related to seeking a patent will generally require a permit.

4. Medical equipment that is specifically designed only for medical end use, which may incorporate an item that is controlled in the dual use list of the DSGL. This exemption does not include equipment that simply has a medical end use.

Software and technology directly captured by the DSGL.

In several places the DSGL contains specific software and technology as standalone items. That is, the software and technology is a discreet item unrelated to any other item on the DSGL.

Part 1 of the DSGL (the Munitions list) includes a list of six types of 'specific software' at item ML21.b. For example, item ML21.b.5 is 'Software specially designed or modified for the conduct of military offensive cyber operations'.

Similarly, subcategory D (Software) of each category (0-9) of Part 2 of the DSGL may include instances of specific software. For example, item 1D002 is 'software specially designed for analysis of reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures'. This is a standalone item that is not related to any other item on the DSGL.

Likewise, subcategory E (Technology) of each category (0-9) of Part 2 of the DSGL may include instances of specific technology that are not related to any other item. For example, item 1E002.a. is 'technology for the development or production of polybenzothiazoles or polybenzoxazoles', which are two materials not elsewhere listed on the DSGL.

To search for specific software and technology on the DSGL, it is recommended that you use search terms related to the purpose of the software or technology. For example, using one of the examples above, if you are searching for technology that is for the development or production of polybenzothiazoles or polybenzoxazoles, it is recommended that you search for 'polybenzothiazoles' and 'polybenzoxazoles' and see if there is any related technology listed.

Software and technology controls

Unlike specific software and technology that is listed as a standalone item (see above), software and technology controls apply generally in relation to other items listed on the DSGL.

Software and technology controls may broadly capture:

- *any* software designed or modified for the development, production, or use of an item on the DSGL, and
 - *any* technology required for the development, production, or use of an item on the DSGL.
- Not all items listed on the DSGL have an associated software or technology control. If an item has an associated software or technology control, it will be indicated at either:
- ML21 (Software) and ML22 (Technology) for Part 1 items (Munitions list)
 - Sub-categories D (Software) and E (Technology) of each Category (0 to 9) for Part 2 items (Dual use list)

Note that software and technology designed for or required for an item on the DSGL may be controlled even if you are using it for a purpose unrelated to the item listed on the DSGL.

Follow these steps to determine if software or technology is captured through general software or technology controls.

Step 1 – Determine if the software or technology is designed for an item that is listed on the DSGL.

Questions to ask regarding software and technology:

Software

1. Is the software designed or modified for the development, production or use of an item that was specifically designed or modified for military use? If you think it is, or you are unsure, you should check Part 1 of the DSGL (the Munitions List) to see if the item that the software was designed for is listed.
2. Is the software designed or modified for the development, production or use of an item that may have both a civilian and a military application? If you think it is, or you are unsure, you should check Part 2 of the DSGL (the dual use list) to see if the item that the software was designed for is listed.

Technology

1. Is the technology required for the development, production, operation, installation, maintenance, repair, overhaul or refurbishing of an item that was specifically designed or modified for military use? If you think it is, or you are unsure, you should check Part 1 of the DSGL (the Munitions List) to see if the item that the software was designed for is listed.
2. Is the technology required for the development, production or use of an item that may have both a commercial and a military application (i.e., the item is on Part 2 of the DSGL)? If you think it is, or you are unsure, you should check Part 2 of the DSGL (the dual use list) to see if the item the technology is required for is listed.

If the item that the software or technology is designed or required for is not listed on the DSGL, no further assessment is required.

If the item is listed, go to Step 2.

Step 2 – Determine if the item has a related software or technology control.

Not all items listed on the DSGL have an associated software or technology control. If an item has a software or technology control, it will appear in the results returned by the DSGL search.

Searching the DSGL directly, software and technology controls are included in the following locations:

- Items ML21 (Software) and ML22 (Technology) in Part 1 of the DSGL (Munitions list)
- Sub-categories D (Software) and E (Technology) of each Category (0 to 9) in Part 2 of the DSGL (dual use list)

If the item does not have a software or technology control, any software or technology related to the item is not captured by the DSGL and no further assessment is required.

If the item has a software or technology control, go to Step 3.

Step 3 – Determine if there are technical thresholds that need to be met for the item to be controlled.

Technical thresholds are included in the title or headline descriptor for the software or technology control item or, if they are complicated, in a further breakdown of the control item.

Note that not all software and technology controls include technical thresholds. Many controls simply capture all software and technology related to an item on the DSGL without further definition.

If the software or technology does not meet the technical thresholds, no further assessment is required.

If the software or technology meets the technical thresholds, go to Step 4.

Step 4 – Determine if the software or technology is in the public domain.

Software or technology is in the public domain if it has been made available to the public without restriction upon its access or further dissemination. This may mean that it is available to be purchased or downloaded (software) without restriction or has been published or otherwise made publicly available (technology). Note that copyright restrictions do not remove material from being 'in the public domain'.

For export controls, if the software or technology is in the public domain, a permit is not required, and no further assessment is required.

For sanctions assessments, software or technology in the public domain may still be of concern and you should include this in the Sanctions Compliance Risk Assessment Form (SCRAF: used for the assessment of HDRs).

Further Assistance

The Export Control and Security Manager can provide advice and guidance on searching the DSG. Where clarification is required on whether an item meets certain technical thresholds, the Export Control and Security Manager will liaise with the relevant Government Department.