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GOEWERMENSKENNISGEWING

DEPARTEMENT VAN VERDEDIGING

No. R. 888

13 Mei 1994

DIE WET OP KRYGSTUIGONTWIKKELING EN
-VERVAARDIGING, 1968

KENNISGEWING MET BETREKKING TOT
KRYGSTUIGBEHEER

1. Ek, Hendrik Jacobus Coetsee, Minister van Verdediging, handelende kragtens artikel 4C van die Wet op Krygstuigontwikkeling en -vervaardiging, 1968 (Wet No. 57 van 1968) —

- (a) skryf hierby, kragtens subartikel (1) (a), saamgelees met subartikel (2) van genoemde artikel, voor dat die krygstuig vermeld in **Bylaes 1 en 2** nie uit die Republiek uitgevoer, binne of buite die Republiek bemark, in die Republiek ingevoer of deur die Republiek van 'n plek buite die Republiek na 'n ander sodanige plek vervoer of binne die Republiek ontwikkel of vervaardig mag word nie, behalwe uit hoofde van en ooreenkomstig 'n permit soos beoog in subartikel (1) (a), saamgelees met subartikel (3) van genoemde artikel; en
- (b) trek hierby, kragtens subartikel (5) van genoemde artikel, die Goewermenskennisgewings vermeld in Bylae 3 in.
2. Die aansoekvorms vir permitte is verkrygbaar by—

Afdeling Krygstuigbeheer
Departement In- en Uitvoerregulering
KRYGKOR
Privaatsak X337
PRETORIA
0001.

Goedgekeur te Pretoria op hierdie 21ste dag van April 1994.

H. J. COETSEE,
Minister van Verdediging.

GOVERNMENT NOTICE

DEPARTMENT OF DEFENCE

No. R. 888

13 May 1994

THE ARMAMENTS DEVELOPMENT AND
PRODUCTION ACT, 1968

NOTICE IN RELATION TO ARMAMENTS CONTROL

1. I, Hendrik Jacobus Coetsee, Minister of Defence, acting under section 4C of the Armaments Development and Production Act, 1968 (Act No. 57 of 1968) —

- (a) hereby, under subsection (1) (a), read with subsection (2) of the said section, prescribe that the armaments mentioned in **Schedules 1 and 2** shall not be exported from the Republic, be marketed within or outside the Republic, or be conveyed through the Republic to any such place, be developed or be manufactured within the Republic, except under the authority of or in accordance with the conditions stated in a permit as contemplated in subsection (1) (a), read with subsection (3) of the said section; and
- (b) hereby, under subsection (5) of the said section, withdraw the Government Notices mentioned in Schedule 3.
2. The application forms for permits are obtainable from—

Armaments Control Division
Import and Export Control Department
ARMSCOR
Private Bag X337
PRETORIA
0001

Approved in Pretoria on this 21st day of April 1994.

H. J. COETSEE,
Minister of Defence.

BYLAE I**ALGEMENE KRYGSTUIGBEHEERSKEDULE****1. Alle—**

- (a) plofstowwe soos omskryf in artikel 1 van die Wet op Ontploffbare Stowwe, 1956 (Wet No. 26 van 1956);
- (b) ander ontplofbare stowwe en die elemente daarvan;
- (c) dryfmiddels en dryfmiddelbyvoegings vir aanwending in kleingeweerammunisie, bomme, snelvuurammunisie, artillerieammunisie, missiele, vuurpyle, mortiere, torpedo's of enige ander projektele;

bestem vir militêre doeleindes.

2. Alle vuurwapens, semi- en outomatiese wapens en doelgeboude sluipskuttersgewere van 'n kaliber nie groter as 12,7 mm (.50 duim) asook alle onderdele, dele en toebehore daarvoor.**3. Alle—**

- (a) wapens van 'n kaliber bo 12,7 mm (.50 duim), kanonne, houwitser, mortiere en terugslaglose kanonne;
- (b) projektiel- en granaatlanseerders;
- (c) vuurpyllanseerders;
- (d) vlamwerpers;

en soortgelyke toerusting bestem vir militêre doeleindes, en alle onderdele, dele, lanseerstelsels, montasies, affuite en visiere wat spesifiek vir aanwending in die items bedoel in subparagrafe (a), (b), (c) en (d) ontwerp en vervaardig is.

4. Alle—

- (a) ammunisie;
- (b) ammunisiebandvullers, skakelbandtoestelle;
- (c) vlamwerper- en brandbomvulstowwe, asook die ontstekers daarvoor;

bestem vir militêre doeleindes, en alle onderdele, dele, toebehore en hegstukke wat spesifiek vir aanwending in die items bedoel in subparagrafe (a), (b) en (c) ontwerp en vervaardig is.

5. Alle—

- (a) bomme, hand- en geweergranate, missiele, vuurpyle, torpedo's, land- en seemyne en alle ander soortgelyke ploftoestelle en -meganismes;
- (b) rook-, sein- en verligtingsfakkels en -vuurpyle, rookgenerators, plofboute, bomloslaattrone en uitskietpatrone;
- (c) apparaat, toerusting en toestelle vir die hantering, beheer, bewapening, opsporing, uitgraving, toetsing, opruiming, ontlooting of detonerings van enige van die items in hierdie paragraaf bedoel, asook mynbresslaanstelsels;

SCHEDULE I**GENERAL ARMAMENTS CONTROL SCHEDULE****1. All—**

- (a) explosives as defined in section 1 of the Explosives Act, 1956 (Act No. 26 of 1956);
- (b) other explosive substances and the elements thereof;
- (c) propellants and propellant additives for use in small-arms ammunition, bombs, rapid-fire ammunition, artillery ammunition, missiles, rockets, mortars, torpedoes or any other projectiles;

destined for military purposes.

2. All firearms, semi- and automatic weapons and purpose-built sniper's rifles of a calibre not exceeding 12,7 mm (.50 inch) as well as all components, parts and accessories thereof.**3. All—**

- (a) guns of a calibre larger than 12,7 mm (.50 inch), guns, howitzers, mortars and recoilless guns;
- (b) projectile and grenade launchers;
- (c) rocket launchers;
- (d) flame throwers;

and similar equipment intended for military purposes, and all spares, parts, launching systems, mountings, gun-carriages and sights designed and manufactured for the specific application in the items of subparagraphs (a), (b), (c) and (d).

4. All—

- (a) ammunition;
- (b) ammunition belting, link-belt appliances;
- (c) flame-thrower and incendiary-bomb filling substances, as well as the igniters therefor;

intended for military purposes, and all spares, parts, accessories and mountings designed and manufactured for the specific application in the items of subparagraphs (a), (b) and (c).

5. All—

- (a) bombs, hand and rifle grenades, missiles, rockets, torpedoes, land and sea mines and all other similar exploding devices and mechanisms;
- (b) smoke, signal and illuminating flares and rockets, smoke generators, explosive bolts, jettison and ejection cartridges;
- (c) apparatus, equipment and devices for the handling, control, arming, detection, excavating, testing, clearing, disarming or detonating of any of the items as covered by this paragraph, as well as mine bridging systems;

bestem vir militêre doeleindes, en alle onderdele, toebehore en soortgelyke toerusting wat spesifiek vir aanwending in die items bedoel in subparagrafe (a), (b) en (c) ontwerp en vervaardig is.

6. Alle—

- (a) teenoproerwapens of toestelle/uitrusting vir die aanwending van teenoproerprodukte;
- (b) teenoproeragense en/of alle produkte wat dit as 'n bestanddeel bevat; en
- (c) teenoproeruitrusting van 'n chemiese aard, asook die uitrusting vir die aanwending daarvan.

7. Alle—

- (a) elektroniese en elektriese uitrusting met 'n vermoë vir belemmering, onderskepping, spektrumontleding, monitering, rigtingpeiling, opsporing, teenmaatreëls, teenteenmaatreëls en teenradiasie;
- (b) kaf en katoerusting, of materiale en tegnieke om radaropsporing te belemmer;
- (c) onderwaterklank-, klankopsporings-, laser-, navigasie-, vlugstabilisasie-, vlugkontrole-, wapenelektroniese, mynvee- en mynopsporingsapparaat en -toestelle;
- (d) handhoubare elektroniese landmynopsporings-toestelle;
- (e) aktiewe en passiewe nagsig- en observasietoerusting, asook termiese beeldvormingstoerusting en -apparatuur;
- (f) sonartoerusting;
- (g) radar- en verwante toerusting;
- (h) elektroniese snelheidsmeetapparaat en afstandmetingsapparaat;
- (i) elektroniese navigasieapparatuur vir globale posisiebepaling;
- (j) laserapparaat, lasertoestelle en soortgelyke toerusting;

bestem vir militêre doeleindes, en alle onderdele, dele, toebehore en hegstukke wat spesifiek vir aanwending in die items bedoel in subparagrafe (a) tot en met (j) ontwerp en vervaardig is.

8. Alle—

- (a) radiokommunikasietoerusting;
- (b) radiotoerusting, hetsy senders, ontvangers of sendontvangers wat oor 'n inherente enkripsievermoë en/of oor die vermoë beskik om teen 'n tempo groter as vier (4) keer per sekonde van frekwensie te verander en daarop in te stem;
- (c) kriptografiese en spraakwartoerusting, insluitend radio- of lynverbindingstoerusting met 'n ingeboude vermoë om beskerming teen onderskepping, meeluistering of belemmering te verleen;

destined for military purposes, and all spares, accessories and related equipment designed and manufactured for the specific application in the items covered by subparagraphs (a), (b) and (c).

6. All—

- (a) anti-riot weapons or devices/equipment for the application of anti-riot products;
- (b) riot control agents and/or all products which contain it as an ingredient; and
- (c) anti-riot equipment of a chemical nature and also equipment for the application thereof.

7. All—

- (a) electronic and electrical equipment with a capability for jamming, interception, spectrum analysis, monitoring, direction finding, locating, countermeasures, countercountermeasures as well as anti-radiation;
- (b) chaff and chaff equipment or materials and techniques for jamming radar tracking;
- (c) underwater sound and sound locating, laser, navigation, flight stabilization, flight control, weapon electronic, minesweeping and mine-detection equipment and devices;
- (d) hand-held electronic landmine detecting devices;
- (e) active and passive night-vision and observation equipment, as well as thermal imaging equipment and apparatus;
- (f) sonar equipment;
- (g) radar and related equipment;
- (h) electronic velocity measuring and distance measuring apparatus;
- (i) electronic navigation apparatus for global positioning;
- (j) laser apparatus, laser devices and related equipment;

intended for military purposes, and all spares, parts, accessories and mountings designed and manufactured for specific application in the items covered by subparagraphs (a) up to (j).

8. All—

- (a) radio communications equipment;
- (b) radio equipment, whether transmitters, receivers or transceivers, possessing an inherent encryption capability and/or the capability to change and tune to frequencies at a rate greater than four (4) times per second;
- (c) cryptographic and speech encryption equipment, including radio or line equipment with a built-in capability of providing protection against interception, eavesdropping or jamming;

- (d) belemmeraars, dit wil sê apparaat wat spesiaal ontwerp is om radio-ontvangs of uitsendings te belemmer of andersins te steur;

bestem vir militêre doeleindes, en alle onderdele, dele, hegstukke, toebehore en verwante toerusting wat vir spesifieke aanwending in die items bedoel in subparagrafe (a), (b), (c) en (d) ontwerp en vervaardig is.

9. Alle—

- (a) vuurbeheer-, kanon- en missielopsporings- en missielgeleidingstoerusting, asook lasergeleide stelsels en meteorologiese en verwante toerusting;
- (b) aktiewe en passiewe nagsigvisiere en -rigtoerusting;
- (c) opsporingsinstrumente en volgoestelle;
- (d) kanon-, bom-, vuurpyl-, missiel-, vliegtuig-, of enige ander wapenvuurstelselvisiere;
- (e) inersiegeleestelsels, lanseerstelsels, lanseerbane en -platforms, asook die aandrywingstelsels daarvoor;

bestem vir militêre doeleindes, en onderdele, dele, hegstukke, toebehore en verwante toerusting wat spesifiek vir aanwending in die items bedoel in subparagrafe (a) tot en met (e) ontwerp en vervaardig is.

10. Alle—

- (a) aktiewe en passiewe pantser- en koeëlbestande materiale en verwante produkte, uitgesonderd alle koeëlbestande onderbaadjies, baadjies, lyfpantserprodukte, en ballistiese helms;
- (b) materiale en stowwe van infrarooi en/of radarabsorberende of radarreflekerende aard, of toerusting met derglike vermoëns, asook hoëhittebestande en saamgestelde strukturele materiale, asook alle sluiptegnologies gevorderde produkte, materiale en stowwe;
- (c) gespesialiseerde militêre kamoefleernette, kamoefleertoerusting en -tegnieke, asook kamoefleeruitrustings;

bestem vir militêre doeleindes.

11. Alle—

- (a) lugneerlaatbare stelsels en die toerusting daarvoor en valskerms;
- (b) opleidingsimulators en rekenaars;
- (c) beskermende oorklere en verwante toerusting wat verband hou met chemiese en biologiese oorlogvoering;
- (d) behouerde, of ander ondersteuningstoerustingseenhede met betrekking tot mediese, tegniese, elektroniese en logistieke steunverlening, asook enige spesiale militêre hanteringstoerusting en/of vervoertoerusting daarvan;

- (d) jammers, i.e. apparatus specially designed to jam or otherwise interfere with radio reception or transmission;

intended for military purposes, and all spares, parts, mountings, accessories and related equipment designed and manufactured for the specific application in the items covered by subparagraphs (a), (b), (c) and (d).

9. All—

- (a) fire control, gun and missile detection, and missile guidance equipment, as well as laser guided and meteorological systems and related equipment;
- (b) active and passive night-vision sights and aiming equipment;
- (c) detection instruments and tracking devices;
- (d) gun, bomb, rocket, missile, aircraft or any other type of weapon-firing system sights;
- (e) inertial guidance and launching systems, launching ranges and platforms, as well as the propulsion systems thereto;

intended for military purposes, and spares, parts, mountings, accessories and related equipment, designed and manufactured for specific use in the items covered by subparagraphs (a) up to (e).

10. All—

- (a) active and passive armour and bullet-resistant materials and related products, excluding all bullet-resistant vests, jackets, body armour products and ballistic helmets;
- (b) materials and substances of an infra-red or radar absorbing or radar reflecting nature, or equipment with similar capabilities, as well as high-heat resistant and structural composite materials, as well as all stealth technologically advanced products, materials and substances;
- (c) specialized military camouflage nets, camouflage equipment and techniques, as well as camouflage outfits;

intended for military purposes.

11. All—

- (a) air droppable systems, the equipment therefor and parachutes;
- (b) training simulators and computers;
- (c) protective overwear and related equipment in connection with chemical and biological warfare;
- (d) containerized, or other support equipment units with regard to medical, technical, electronic and logistic support, as well as any special military handling and/or transport equipment thereof;

- (e) gespesialiseerde sluipskutterstoerusting en verwante apparatuur;
- (f) fotografiese uitrusting;
- (g) soekligte en soortgelyke stelsels;
- (h) krygspele en verwante toerusting;
- (i) nagmaakte misleidingsprodukte en verwante tegnieke;
- (j) windtonnels;
- (k) afstandsgestuurde of -beheerde apparatuur of toerusting;
- (l) mensgemaakte buitensteruimte-voorwerpe;
- (m) vervaardigingstoerusting, -aanlegte, fasiliteite en toetsbane;

wat vir militêre doeleindes bestem is.

12. Alle—

- (a) oorlogsvaartuie, watervaartuie, duikbote of duiktoestelle;
- (b) vaartuie wat vir meganiese sowel as elektroniese mynteenmaatreëls ontwerp of aangepas is;
- (c) vaartuie wat met wapenmontasies, wapenaffuite of wapenplatforms toegerus is of wat as vuurbeheer-, observasie- en bevelsposte gebruik kan word;
- (d) opblaasbare en semi-opblaasbare rubberbote;
- (e) asook ander vaartuie met amfibiese of lugkussingvermoë;

wat vir militêre doeleindes ontwerp, vervaardig of aangepas is, en alle onderdele, dele, hegstukke, toebehore en verwante toerusting wat vir spesifieke aanwending in items bedoel in subparagrafe (a) tot en met (e) ontwerp en vervaardig is.

13. Alle—

- (a) sagtevelvoertuie;
- (b) gepantserde voertuie;
- (c) tipes tenks en gepantserde infanteriegevegsvoertuie;
- (d) mynbeskermdes pantservoertuie;
- (e) voertuie wat vir meganiese sowel as elektroniese mynteenmaatreëls ontwerp of aangepas is;
- (f) voertuie wat met wapenmontasies, wapenaffuite of wapenplatforms toegerus is of wat as vuurbeheer-, observasie- en bevelsposte gebruik kan word;

wat vir militêre of sekuriteitsdoeleindes bestem is, asook alle onderdele, dele, hegstukke, toebehore en verwante toerusting wat vir spesifieke aanwending in die items bedoel in subparagrafe (a) tot en met (f) ontwerp en vervaardig is.

- (e) specialized sniper's equipment and related apparatus;
- (f) photographic equipment;
- (g) searchlights and related systems;
- (h) war games and related equipment;
- (i) artificial decoy products and related techniques;
- (j) wind tunnels;
- (k) remotely operated or controlled apparatus or equipment;
- (l) man-made outer space objects;
- (m) manufacturing equipment, plants, facilities and test ranges;

intended for military purposes.

12. All—

- (a) warships, water-going vessels, submarines or diving devices;
- (b) vessels designed or adapted for mechanical and electronic mine countermeasures;
- (c) vessels equipped with weapon mountings, gun-carriages or weapon platforms or that can be used as fire control, observation and command posts;
- (d) inflatable and semi-inflatable rubber boats;
- (e) as well as other vessels with amphibious or air-cushion capabilities;

designed, manufactured or adapted for military purposes and all spares, parts, mountings, accessories and related equipment designed and manufactured for the specific application in the items covered by subparagraphs (a) up to (e).

13. All—

- (a) soft-skin vehicles;
- (b) armoured vehicles;
- (c) types of tanks and armoured infantry fighting vehicles;
- (d) mine-protected armoured vehicles;
- (e) vehicles designed or adapted for mechanical as well as electronic mine countermeasures;
- (f) vehicles equipped with weapon mountings, gun-carriages or weapon platforms or that can be used as fire control, observation and command posts;

intended for military or security purposes, as well as all spares, parts, mountings, accessories and related equipment designed and manufactured for the specific application in items covered by subparagraphs (a) up to (f).

14. Alle—

- (a) bemande, asook onbemande en afstand-beheerde vliegtuie en lugvaartuie met vaste of roterende vlerke, insluitende ruimtetuie en satelliete;
- (b) hoë-energie soliede of vloeibare brandstowwe, ingesluit vliegtuigbrandstof spesiaal geformuleer;

bestem vir militêre doeleindes, asook alle onderdele, dele, hegstukke, toebehore en verwante toerusting wat vir spesifieke aanwending in die items bedoel in subparagrafe (a) en (b) ontwerp en vervaardig is.

15. Alle tegnieke van watter vorm of aard ook al wat by die ontwikkeling, vervaardiging of instandhouding van krygstuig soos in Bylaes 1 en 2 bedoel, of vir militêre doeleindes gebruik word.

BYLAE 2

MISSIELTEGNOLOGIEBEHEERSKEDULE

Alle items gelys in hierdie Bylae 2 wat dalk ook binne die beperkings van die internasionale Missieltegnologiebeheerregime (MTBR) val, **moet te alle tye** ook gedek word deur 'n **permit** soos voorgeskryf in **artikel 13** van die **Wet op die Nie-proliferasie van Wapens van Grootsekaalse Vernietiging, 1993 (Wet No. 87 van 1993)**.

1. Alle—

- (a) vuurpylstelsels;
- (b) ballistiese missielstelsels;
- (c) ruimtelanseertuie;
- (d) sondeer-vuurpyle;
- (e) onbemande lugtuigstelsels;
- (f) kruisermisielstelsels;
- (g) robotvliegtuie;

wat oor die vermoë beskik om 'n loonvrag van minstens 500 kg oor 'n afstand van minstens 300 km te dra, met inbegrip van die spesiaal ontwerpte produksiefasiliteite vir hierdie stelsels.

2. Alle—

- (a) individuele vuurpylstadiums;
- (b) terugkeertuie, en toerusting daarvoor ontwerp of aangepas—
 - (i) hittediskerms, met hulle komponente, wat van keramiek of ablasiemateriaal vervaardig is;
 - (ii) hittedissipeerders, met hulle komponente, wat van liggewig- en hoëhitte-kapasiteitsmateriaal vervaardig is;
 - (iii) elektroniese toerusting wat spesiaal vir terugkeertuie ontwerp is;
- (c) vuurpylenjins wat 'n vaste of vloeibare dryfmiddel gebruik;
- (d) leistelle;
- (e) stukragvektorbeheerde substelsels;
- (f) wapen- of plofkopveiligmaking, -bewapening, -buising en -vuurmeganismes;

14. All—

- (a) manned, as well as unmanned and remote-control aircraft and aeronautical craft with fixed or rotating wings, including space craft and satellites;
- (b) high-energy solid or liquid fuels, including aircraft fuels specially formulated;

intended for military purposes, as well as all spares, parts, mountings, accessories and related equipment designed and manufactured for the specific application in items covered by subparagraphs (a) and (b).

15. All techniques, of whatever form or nature, which can be used in the development, manufacture or maintenance of armaments as covered in Schedules 1 and 2, or for military purposes.

SCHEDULE 2

MISSILE TECHNOLOGY CONTROL SCHEDULE

All items listed in this Schedule 2 which may also fall within the limitations of the international Missile Technology Control Regime (MTCR), **must at all times** also be covered by a **permit** as prescribed by **section 13** of the **Non-proliferation of Weapons of Mass Destruction Act, 1993 (Act No. 87 of 1993)**.

1. All—

- (a) rocket systems;
- (b) ballistic missile systems;
- (c) space launch vehicles;
- (d) sounding rockets;
- (e) unmanned air vehicle systems;
- (f) cruise missile systems;
- (g) target drones;

capable of delivering at least a 500 kg payload to a range of at least 300 km as well as the specially designed production facilities for these systems.

2. All—

- (a) individual rocket stages;
- (b) reentry vehicles, and equipment designed or modified therefor—
 - (i) heat shields and components thereof fabricated of ceramic or ablative materials;
 - (ii) heat sinks and components thereof fabricated of light-weight, high-heat capacity materials;
 - (iii) electronic equipment specially designed for reentry vehicles;
- (c) solid or liquid propellant rocket engines;
- (d) guidance sets;
- (e) thrust vector control subsystems;
- (f) weapon or warhead safing, arming, fuzing, and firing mechanisms;

wat in die stelsels in paragraaf 1 of in enige ander vuurpyl-, missiel- of verwante wapenstelsel gebruik kan word, insluitend die produksiefasiliteite en produksietoerusting wat spesiaal hiervoor ontwerp is.

3. Alle—

- (a) liggewig-turbostraal- en turbowaaierenjins (insluitend turbosaamgestelde enjins) wat klein en brandstofeffektief is;
- (b) stustraal-/blusstraal-/pulsstraal-/gekombineerde-siklus-enjins, insluitend toestelle om ontbranding te reguleer, en komponente wat spesiaal hiervoor ontwerp is;
- (c) vuurpylmotoromhulsels, binnevoering, isolering en spuitstukke hiervoor;
- (d) stadiummeganismes, skeidingsmeganismes en tussenstadia hiervoor;
- (e) beheerstelsels met vloeibare en flodderdryfmiddels (insluitend oksideerders), met inbegrip van spesiaal ontwerpte komponente (soos bv. servokleppe en pompe) hiervoor;
- (f) hibriedvuurpylmotors en komponente spesiaal hiervoor ontwerp;

wat in die stelsels in paragraaf 1 of in enige ander vuurpyl-, missiel- of verwante wapenstelsel gebruik kan word, insluitend die produksiefasiliteite en produksietoerusting wat spesiaal hiervoor ontwerp is.

4. Alle—

- (a) dryfmiddels;
- (b) aandryfstowwe;
- (c) polimeriese stowwe;
- (d) dryfmiddelbyvoegings en -agense;
- (e) asook chemiese bestanddele vir voormelde; wat bestem is vir aandrywingstelsels vermeld in hierdie Bylae 2.

5. Alle produksietegnologie en produksietoerusting, insluitend spesiaal ontwerpte komponente vir vuurpyle, missiele of verwante wapenstelsels, met betrekking tot—

- (a) die produksie, hantering of aanvaardings-toetsing van vloeibare dryfmiddels of dryfmiddelbestanddele wat in paragraaf 4 beskryf is;
- (b) die produksie, hantering, meng, verryping, giet, pers, masjinerie, ekstrusie of aanvaardingstoetsing van vaste dryfmiddels of dryfmiddelbestanddele soos beskryf in paragraaf 4.

6. Alle—

- (a) filamentwikkelingsmasjiene waarvan die bewegings vir die posisionering, omwikkeling en opwen van vesels in drie of meer asse gekoördineer en geprogrammeer kan word, ontwerp om saamgestelde strukture of lamelle van vesel- of filamentmateriaal te vervaardig, asook koördineer- en programmeer-kontroles;

usable in the systems in paragraph 1 or in any other rocket, missile or related weapon system, as well as the specially designed production facilities and production equipment therefor.

3. All—

- (a) lightweight turbojet and turbofan engines (including turbocompound engines) that are small and fuel efficient;
- (b) ramjet/scramjet/pulsejet/combined cycle engines, including devices to regulate combustion, and specially designed components therefor;
- (c) rocket motor cases, interior lining, insulation and nozzles therefor;
- (d) staging mechanisms, separation mechanisms, and interstages therefor;
- (e) liquid and slurry propellant (including oxidizers) control systems, and specially designed components (for e.g. servo valves and pumps) therefor;
- (f) hybrid rocket motors and specially designed components therefor;

usable in the systems in paragraph 1 or in any other rocket, missile, or related weapon system, as well as the specially designed production facilities and production equipment therefor.

4. All—

- (a) propellants;
- (b) propulsive substances;
- (c) polymeric substances;
- (d) propellant additives and agents;
- (e) as well as constituent chemicals for the aforementioned;

destined for propulsion systems mentioned in this Schedule 2.

5. All production technology and production equipment, including specially designed components for rockets, missiles or related weapon systems with regard to—

- (a) the production, handling or acceptance testing of liquid propellants or propellant constituents described in paragraph 4;
- (b) the production, handling, mixing, curing, casting, pressing, machining, extruding or acceptance testing of solid propellants or propellant constituents described in paragraph 4.

6. All—

- (a) filament winding machines of which the motions for positioning, wrapping and winding fibers can be coordinated and programmed in three or more axes, designed to fabricate composite structures or laminates from fibrous or filamentary materials, as well as coordinating and programming controls;

- (b) bandlêmasjiene waarvan die bewegings vir die posisionering en neerlê van bande en plate in twee of meer asse gekoördineer en geprogrammeer kan word, ontwerp om saamgestelde lugrame en missielstrukture te vervaardig;
- (c) multirigting-, multidimensieweefmasjiene of vervlegtingsmasjiene, insluitend passtukke en modifiseringstelle vir die weef, vervlegting of omvlegting van vesels met die oog op die vervaardiging van saamgestelde strukture, met die uitsondering van tekstielmasjinerie wat nie vir bostaande eindgebruik gemodifiseer is nie;
- (d) toerusting ontwerp of gemodifiseer vir die produksie van vesel- of filamentmateriaal, soos volg:
 - (i) toerusting vir die omskepping van poli-meerveesels (soos poliakriel-onitriel, rayon of polikarbosilaan), insluitend spesiale voorsiening om die vesel te span tydens verhitting;
 - (ii) toerusting vir die dampneerslaan van elemente of samestellings op verhitte filamentsubstrate; en
 - (iii) toerusting vir die natspin van vuurvaste keramiek;
- (e) toerusting ontwerp of gemodifiseer vir spesiale veseloppervlakbehandeling of vir die vervaardiging van vooraf geïmpregneerde materiaal en voorvorms;
- (f) tegniese data (insluitend prosesseringstoestande) en prosedures vir die regulering van temperatuur, druk of atmosfeer in outoklawe of hidroklawe wanneer dit vir die produksie van samestellings of gedeeltelik geprosesseerde samestellings gebruik word;

wat in die stelsels in paragraaf 1 of in enige ander vuurpyl-, missiel- of verwante wapenstelsel gebruik kan word, insluitend spesiaal ontwerpte komponente, asook bybehore en programmatuur wat spesiaal hiervoor ontwerp is.

7. (a) Tegnologie vir die produksie van pirolities afgeleide materiaal gevorm op 'n vorm, drel of ander substraat van voorlopergasse, insluitend tegnologie vir die samestelling van voorlopergasse, vloeitempo's en prosesbeheerskediules en -parameters;
- (b) spesiaal ontwerpte spuitstukke vir voornoemde prosesse;
 - (c) toerusting en prosesbeheer, insluitend programmatuur spesiaal hiervoor ontwerp, wat ontwerp of gemodifiseer is vir die verdigting en pirolise van strukturele saamgestelde vuurpylspuitstukke en die neuspunte van terugkeertuie.

- (b) tape-laying machines of which the motions for positioning and laying tape and sheets can be coordinated and programmed in two or more axes, designed for the manufacture of composite airframes and missile structures;
- (c) multi-directional, multi-dimensional weaving machines or interlacing machines, including adapters and modification kits for weaving, interlacing or braiding fibres to manufacture composite structures, except textile machinery not modified for the above end uses;
- (d) equipment designed or modified for the production of fibrous or filamentary materials as follows:
 - (i) equipment for converting polymeric fibres (such as polyacrylonitrile, rayon or polycarbosilane) including special provision to strain the fibre during heating;
 - (ii) equipment for the vapour deposition of elements or compounds on heated filament substrates; and
 - (iii) equipment for the wet-spinning of refractory ceramics;
- (e) equipment designed or modified for special fibre surface treatment or for producing prepregged material and preforms;
- (f) technical data (including processing conditions) and procedures for the regulation of temperature, pressures or atmosphere in autoclaves or hydroclaves when used for the production of composites or partially processed composites;

usable in the systems in paragraph 1 or in any other rockets, missiles or related weapon systems and specially designed components, and accessories and specially designed software therefor.

7. (a) Technology for producing pyrolytically derived materials formed on a mould, mandrel or other substrate from precursor gases, including technology for the composition of precursor gases, flow-rates and process control schedules and parameters;
- (b) specially designed nozzles for the above processes;
 - (c) equipment and process controls, and specially designed software therefor, designed or modified for densification and pyrolysis of structural composite rocket nozzles and reentry vehicle nose tips.

8. Alle—

- (a) spesiaal ontwerpte en vervaardigde saamgestelde strukture, lamelle, en dit wat daarvan vervaardig is, asook vooraf met hars geïmpregneerde veselmateriaal en metaalbestrykte veselvoorvorms hiervoor, gemaak uit óf organiese matriks- óf metaalmatriks-vesel- of -filamentversterkings;
- (b) herversadigde gepiroliseerde (d.w.s. koolstof-koolstof) materiaal;
- (c) fyngegreinde hergekristalliseerde massagrafiet, pirolitiese, of veselversterkte grafiet wat vir vuurpylsputstukke en neuspunte van terugkeertuie gebruik kan word;
- (d) saamgestelde keramiek materiaal vir gebruik in missielradome, en massamasjineerbare silikon-karbidversterkte ongebakte keramiek wat vir neuspunte gebruik kan word;
- (e) wolfram, molibdeen en allooie van hierdie metale vir die vervaardiging van vuurpylmotorkomponente, d.w.s. hittedekers, spuitstuksubstrate, spuitstukkele en drukvektor-beheeroppervlakke;
- (f) marouderstaal (staal meestal gekenmerk deur 'n hoë nikkel- en baie lae koolstofinhoud en die gebruik van substitusie-elemente of presipitate om ouderdomsverharding te veroorsaak);

wat in die stelsels in paragraaf 1 of in enige ander vuurpyl-, missiel- of verwante wapenstelsel gebruik kan word.

9. Alle—

- (a) geïntegreerde vluginstrumentstelsels, insluitend girostabiliseerders of stuuroutomate en geïntegreerde programmatuur daarvoor;
- (b) giro-astro-kompasse en ander toestelle wat hulle posisie of oriëntasie verkry deur die outomatiese volging van hemelliggame of satelliete;
- (c) versnellingsmeters of giro's, wat ontwerp is vir gebruik in inersienavigasiestelsels of in alle soorte leistelsels;
- (d) alle soorte giro's;
- (e) alle soorte versnellingsmeters of giro's met aaneenlopende uitset;
- (f) inersie- of ander toerusting wat gebruik maak van versnellingsmeters of giro's, sowel as stelsels wat hierdie toerusting inkorporeer, en integrasieprogrammatuur wat spesiaal hiervoor ontwerp is;
- (g) spesiaal ontwerpte toets-, kalibreer- en instellingstoerusting, sowel as produksietoerusting daarvoor;

wat spesiaal hiervoor ontwerp is vir vuurpyl-, missiel- en verwante wapenstelsels.

8. All—

- (a) specially designed and manufactured composite structures, laminates, and manufactures thereof, and resin impregnated fibre preregs and metal coated fibre preforms therefor, made either with organic matrix or metal matrix utilizing fibrous or filamentary reinforcements;
- (b) resaturates pyrolyzed (i.e. carbon-carbon) materials;
- (c) fine grain recrystallized bulk graphites, pyrolytic, or fibrous reinforced graphites usable for rocket nozzles and reentry vehicle nose tips;
- (d) ceramic composite materials for use in missile radomes, and bulk machinable silicon-carbide reinforced unfired ceramic usable for nose tips;
- (e) tungsten, molybdenum and alloys of these metals for fabrication of rocket motor components; i.e. heat shields, nozzle substrates, nozzle throats and thrust vector control surfaces;
- (f) maraging steels (steels generally characterized by high nickel, very low carbon content and the use of substitutional elements or precipitates to produce age-hardening);

usable in the system in paragraph 1 or in any other rocket, missile or related weapon system.

9. All—

- (a) integrated flight instrument systems, which include gyrostabilizers or automatic pilots and integration software therefor;
- (b) gyro-astro compasses and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites;
- (c) accelerometers, which are designed for use in inertial navigation systems or in guidance systems of all types;
- (d) all types of gyros;
- (e) continuous output accelerometers or gyros of any type;
- (f) inertial or other equipment using accelerometers or gyros, and systems incorporating such equipment, and specially designed integration software therefor;
- (g) specially designed test, calibration, and alignment equipment, and production equipment therefor;

specially designed for rockets, missiles and related weapon systems.

10. Alle—

- (a) hidrouliese, meganiese, elektro-optiese, of elektro-meganiese vlugbeheerstelsels (insluitend elektriese vlugbeheerstelsels);
- (b) standbeheertoerusting;
- (c) ontwerp tegnologie vir die integrering van die lugtuigromp, aandrywingstelsel en hefbeeroppervlakke ten einde die aërodinamiese werkverrigting oor die hele vlugregime van 'n onbemande lugtuig te optimaliseer;
- (d) ontwerp tegnologie vir die integrering van die vlugbeheer-, lei- en aandrywingsdata in 'n vlugbestuurstelsel vir die optimalisering van die vuurpylstelselbaan;

vir die stelsels in paragraaf 1 en vir enige ander vuurpyl-, missiel- of verwante wapenstelsel.

11. Alle—

- (a) radar- en laserradarstelsel, insluitend hoogtemeters;
- (b) passiewe sensors om die ligging te bepaal ten opsigte van spesifieke elektro-magnetiese bronne (rigtingsbepalingstoerusting) of terreinkenmerke;
- (c) globale-posisioneringstelsels (GPS) of soortgelyke satellietontvangers;
- (d) elektroniese samestels en komponente spesiaal ontwerp vir militêre gebruik;
- (e) alle verwante ontwerp tegnologie vir die beskerming van avionika en elektriese substelsels teen die gevaar van elektromagnetiese puls (EMP) en elektromagnetiese steuring (EMS) van eksterne bronne;

vir gebruik in die stelsels in paragraaf 1 of in enige ander vuurpyl-, missiele of verwante wapenstelsels, insluitend programmatuur wat spesiaal hiervoor ontwerp is.

12. Alle—

- (a) apparaat en toestel ontwerp of gemodifiseer vir die hantering, beheer, aktivering en lansering van stelsels;
- (b) tuie ontwerp of gemodifiseer vir die vervoer, hantering, beheer, aktivering en lansering van die stelsels;
- (c) gravitasimeters (gravimeters), swaarte-graviometers, en komponente spesiaal hiervoor ontwerp, of wat ontwerp of gemodifiseer is vir lugboord- of marinegebruik;
- (d) telemeter- en telebeheertoerusting;
- (e) presisie-volgstelsels:
 - (i) volgstelsels wat 'n kodeherleier gebruik wat op die vuurpyl of onbemande lugtuig geïnstalleer is, saam met óf oppervlak- óf lugboordverwysings of navigasiesatellietstelsels, ten einde reële-tydmetings of invlugposisie en snelheid te verskaf;

10. All—

- (a) hydraulic, mechanical, electro-optical, or electro-mechanical flight control systems (including fly-by-wire systems);
- (b) attitude control equipment;
- (c) design technology for integration of air vehicle fuselage, propulsion system and lifting control surfaces to optimize aerodynamic performance throughout the flight regime of an unmanned air vehicle;
- (d) design technology for integration of the flight control, guidance, and propulsion data into a flight management system for optimization of rocket system trajectory;

for the systems in paragraph 1 and for any other rocket, missile and related weapon system.

11. All—

- (a) radar and laser radar systems, including altimeters;
- (b) passive sensors for determining bearings to specific electromagnetic sources (direction finding equipment) or terrain characteristics;
- (c) global positioning system (GPS) or similar satellite receivers;
- (d) electronic assemblies and components specially designed for military use;
- (e) all related design technology for protection of avionics and electrical subsystems against electromagnetic pulse (EMP) and electromagnetic interference (EMI) hazards from external sources;

for use in the systems in paragraph 1 or in any other rockets, missiles or related weapon systems, and specially designed software therefor.

12. All—

- (a) apparatus and devices designed or modified for the handling, control, activation and launching of systems;
- (b) vehicles designed or modified for the transport, handling, control, activation and launching of systems;
- (c) gravity meters (gravimeters), gravity gradiometers, and specially designed components therefor, designed or modified for airborne or marine use;
- (d) telemetering and telecontrol equipment;
- (e) precision tracking systems:
 - (i) tracking systems which use a code translator installed on the rocket or unmanned air vehicle in conjunction with either surface or airborne references or navigation satellite systems to provide real-time measurements of in-flight position and velocity;

(ii) afstandsinstrumentasieradars, insluitend bybehorende optiese/infrarooi volgers en die programmatuur wat spesiaal hiervoor ontwerp is;

(iii) programmatuur wat na-vlug geregistreerde data prosesseer waardeur tuigposisie tydens die hele vlugbaan bepaal kan word;

bestem vir die stelsels in paragraaf 1 of vir enige ander vuurpyl-, missiel-, wapenstelsel, of onbemande lugtuie.

13. Alle—

- (a) analoogrekenaars;
- (b) digitale rekenaars;
- (c) digitale differensiaalanaliseerders;

ontwerp of gemodifiseer vir gebruik in die stelsels in paragraaf 1 of in enige ander vuurpyl-, missiel- of verwante wapenstelsel.

14. Alle analoog-na-digitaal-omsetters wat in die stelsels in paragraaf 1 of in enige ander vuurpyl-, missiel- of verwante wapenstelsel gebruik kan word.

15. Alle—

(a) vibrasietoetsstelsels en komponente:

- (i) vibrasietoetsstelsels wat terugvoer- of geslotelustegnieke gebruik en wat 'n digitale reguleerder inkorporeer;
- (ii) digitale reguleerders, gekombineer met spesiaal ontwerpte vibrasietoetsprogrammatuur;
- (iii) vibrasiedrukkers (skudeenhede), met of sonder bybehorende versterkers;
- (iv) toetsstuk-steunstrukture en elektroniese eenhede ontwerp om multi-skudeenhede te kombineer in 'n volledige skudstelsel;

(b) windtonnels spesiaal vir dié doel ontwerp;

(c) toetsbanke/standers vir vaste- of vloeibare dryfmiddelaangedrewe vuurpyle of vuurpylmotors;

(d) omgewingskamers en eggovrye kamers wat doelontwerp en -gebou is om spesiale vlugtoestande te kan simuleer;

(e) versnellers wat elektromagnetiese straling kan oplewer afkomstig van "remstraling" van versnelde elektrone van 2 MeV of meer, en stelsels wat hierdie versnellers bevat, maar **uitgesluit** dié wat spesiaal vir mediese doeleindes ontwerp is;

wat vir die stelsels in paragrawe 1 en 2 of in enige ander vuurpyl-, missiel- of wapenstelsel gebruik kan word, en programmatuur wat spesiaal hiervoor ontwerp is.

(ii) range instrumentation radars including associated optical/infrared trackers and the specially designed software therefor;

(iii) software which processes post-flight, recorded data, enabling determination of vehicle position throughout its flight path;

destined for the systems in paragraph 1 or for any other rocket, missile, weapon system, or unmanned air vehicles.

13. All—

- (a) analogue computers;
- (b) digital computers;
- (c) digital differential analyzers;

designed or modified for use in the systems in paragraph 1 or in any other rocket, missile or related weapon system.

14. All analogue-to-digital converters, usable in the systems in paragraph 1 or in any other rocket, missile or related weapon system.

15. All—

(a) vibration test systems and components:

- (i) vibration test systems employing feedback or closed loop techniques and incorporating a digital controller;
- (ii) digital controllers, combined with specially designed vibration test software;
- (iii) vibration thrusters (shaker units), with or without associated amplifiers;
- (iv) test piece support structures and electronic units designed to combine multiple shaker units into a complete shaker system;

(b) wind-tunnels specially designed for this purpose;

(c) test benches/stands for solid or liquid propellant propelled rockets or rocket motors;

(d) environmental chambers and anechoic chambers purposely designed and built for special simulating flight conditions;

(e) accelerators capable of delivering electromagnetic radiation produced by "bremsstrahlung" from accelerated electrons of 2 MeV or greater, and systems containing those accelerators, but **excluding** those specially designed for medical purposes;

usable for the systems in paragraphs 1 and 2 or in any other rocket, missile or weapon system, and specially designed software therefor.

16. Alle spesiaal ontwerpte sagteware, of spesiaal ontwerpte sagteware met verwante spesiaal ontwerpte hibriede (gekombineerde analoog/digitaal) rekenaars, vir die modellering, simulering of ontwerpintegrering van die stelsels in paragrawe 1 en 2 of vir enige ander vuurpyl-, missiel- en verwante wapenstelsel.

17. Alle—

- (a) strukturele materiaal en bestrykings spesiaal ontwerp vir verminderde radarreflektiwiteit;
- (b) bestrykings, insluitend verf, spesiaal ontwerp vir verminderde of aangepaste reflektiwiteit of emissiwiteit in die mikrogolf-, infrarooi of ultraviolet spectra, behalwe wanneer dit spesiaal vir die termiese beheer van satelliete gebruik word;
- (c) spesiaal ontwerpte programmatuur of databasisse vir die ontleding van tekenmerkevermindering;
- (d) spesiaal ontwerpte radardwarsdeursnee-meetstelsels;

vir toepassings wat in die stelsels in paragrawe 1 en 2 of in enige ander vuurpyl-, missiel- of wapenstelsel gebruik kan word.

18. Alle—

- (a) stralingsverharde mikrokringe en opspoorers;
- (b) tegniese skokbestande radome;
- (c) en ander toestelle;

wat gebruik word om vuurpyl- en missielstelsels en onbemande lugtuie te beskerm teen die uitwerking van kernkrag, of wat vir die stelsels in paragraaf 1 gebruik kan word.

19. Alle—

- (a) volledige vuurpylstelsels;
 - (b) ballistiese missielstelsels;
 - (c) ruimtelanseertuie;
 - (d) sondeer-vuurpyle;
 - (e) onbemande lugtuie;
 - (f) kruisermisielstelsels;
 - (g) robotvliegtuie;
 - (h) robotverkenningsvliegtuie;
 - (i) sweefbomme;
 - (j) bomme wat vuurpylondersteun is;
- wat nie in paragraaf 1 gedek is nie.

20. Alle—

- (a) volledige substelsels;
 - (b) spesiaal ontwerpte produksiefasiliteite en produksietoerusting;
 - (c) individuele vuurpylstadiums;
 - (d) vaste- of vloeibare dryfmiddelvuurpylenjins;
- wat bestem is vir items vermeld in hierdie Bylae 2.

16. All specially designed software, or specially designed software with related specially designed hybrid (combined analogue/digital) computers, for modelling, simulation, or design integration of the systems in paragraphs 1 and 2 or for any other rocket, missile and related weapon system.

17. All—

- (a) structural materials and coatings specially designed for reduced radar reflectivity;
- (b) coatings, including paints, specially designed for reduced or tailored reflectivity or emissivity in the microwave, infrared or ultraviolet spectra, except when specially used for thermal control of satellites;
- (c) specially designed software or databases for analysis of signature reduction;
- (d) specially designed radar cross-section measurement systems;

for applications usable in the systems of paragraphs 1 and 2 or in any other rocket, missile or weapon system.

18. All—

- (a) radiation hardened microcircuits and detectors;
- (b) technical shock-resistant radomes;
- (c) other devices;

for use in protecting rocket and missile systems and unmanned air vehicles against nuclear effects, or usable for the systems in paragraph 1.

19. All—

- (a) complete rocket systems;
 - (b) ballistic missile systems;
 - (c) space launch vehicles;
 - (d) sounding rockets;
 - (e) unmanned air vehicles;
 - (f) cruise missile systems;
 - (g) target drones;
 - (i) reconnaissance drones;
 - (j) glide bombs;
 - (k) bombs which are rocket assisted;
- not covered by paragraph 1.

20. All—

- (a) complete subsystems;
 - (b) specially designed production facilities and production equipment therefor;
 - (c) individual rocket stages;
 - (d) solid or liquid propellant rocket engines;
- destined for items covered by this Schedule 2.

BYLAE 3

Goewermentskennisgewing No. R. 2665 van
4 Desember 1981
Goewermentskennisgewing No. R. 2807 van
31 Desember 1982
Goewermentskennisgewing No. R. 664 van 25 Maart
1983
Goewermentskennisgewing No. R. 665 van 25 Maart
1983
Goewermentskennisgewing No. R. 2193 van
28 Oktober 1988
Goewermentskennisgewing No. R. 2194 van
28 Oktober 1988

SCHEDULE 3

Government Notice No. R. 2665 of 4 December
1981
Government Notice No. R. 2807 of 31 December
1982
Government Notice No. R. 664 of 25 March 1983
Government Notice No. R. 665 of 25 March 1983
Government Notice No. R. 2193 of 28 October 1988
Government Notice No. R. 2194 of 28 October 1988

BELANGRIK!!

Plasing van tale:

Staatskoerante

1. Hiermee word bekendgemaak dat die omruil van tale in die *Staatskoerant* jaarliks geskied met die eerste uitgawe in Oktober.
2. Vir die tydperk 1 Oktober 1993 tot 30 September 1994 word Afrikaans EERSTE geplaas.
3. Hierdie reëling is in ooreenstemming met dié van die Parlement waarby koerante met Wette ens. die taalvolgorde deurgaans behou vir die duur van die sitting.
4. *Dit word dus van u, as adverteerder, verwag om u kopie met bogenoemde reëling te laat strook om onnodige omskakeling en stylredigering in ooreenstemming te bring.*



IMPORTANT!!

Placing of languages:

Government Gazettes

1. Notice is hereby given that the interchange of languages in the *Government Gazette* will be effected annually from the first issue in October.
2. For the period 1 October 1993 to 30 September 1994, Afrikaans is to be placed FIRST.
3. This arrangement is in conformity with Gazettes containing Act of Parliament etc. where the language sequence remains constant throughout the sitting of Parliament.
4. *It is therefore expected of you, the advertiser, to see that your copy is in accordance with the above-mentioned arrangement in order to avoid unnecessary style changes and editing to correspond with the correct style.*



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Department of Environment Affairs

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No.		Bladsy No.	Koerant No.
	GOEWERMENSKENNISGEWING		
	Verdediging, Departement van		
	<i>Goewermenskennisgewing</i>		
R. 888	Wet op Krygstuigontwikkeling en -vervaardiging (57/1968): Krystuigbeheer.....	1	15720

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