

<b>E</b>	<b>DS.01.01</b>	<b>Have general knowledge of relevant regulations during search</b>	<b>Interpretation</b>
T	DS.01.01.01	Being able to reproduce what rules are included in the <i>Wet wapens en munitie</i> (Arms and Ammunition Act).	Rules on manufacture, trade, transport, possession and carrying of Arms and Ammunition.
T	DS.01.01.02	Being able to reproduce what is prohibited under the <i>Wet wapens en munitie</i> (Arms and Ammunition Act).	To possess and/or transport arms and ammunition without exemption.
T	DS.01.01.03	Being able to reproduce on which ground the Dutch Ministry of Justice and Security can give an exemption of the Law Weapons and Ammunition, during ERW-operations.	Without exemption, it is prohibited to approach and/or excavate ERW as well as temporary store (possess) ERW and therefore ERW salvage is than not possible.
T	DS.01.01.04	Being able to reproduce on which activities – related to ERW-operations – the Weapons and Ammunition Act has regulations	Approach/excavate and storage of ERW.
T	DS.01.01.05	Being able to reproduce that for executing an ERW-project, possible an environmental permit and/or other permits (exemptions) have to be obtained.	For example, permits or exemptions on the <i>Wet algemene bepalingen omgevingsrecht</i> , the <i>Wet milieubeheer</i> , the <i>Wet bodembescherming</i> , the <i>Waterwet</i> , the <i>Natuurbeschermingswet 1998</i> and/or the <i>Flora- en Faunawet</i> . (the Environmental General Provisions Act, the Environmental Management Act, the Soil Protection Act, the Water Act, the Nature Conservation Law, and/or the Flora and Fauna Act).
T	DS.01.01.06	Being able to reproduce, in which way the financial compensation from the Central Government for Municipal ERW-projects is regulated.	Through the <i>Gemeentefonds</i> (Municipal Fund from the Ministry of Internal Affairs).
T	DS.01.01.07	Being able to reproduce that the Defence Manual LAND-ENG EOD gives also regulations for (civil) ERW-projects.	No interpretation needed.
T	DS.01.01.08	Being able to reproduce, who is responsible for the actual salvage of crashed WW-II airplanes.	Stafofficier Vliegtuigberging (SVBO) Koninklijke Luchtmacht (Staff Officer for Aircraft Salvage from the Royal Airforce Netherlands)
T	DS.01.01.09	Being able to reproduce, which service is responsible for recovery and identification of human remains in crashed WW-II airplanes.	Bergings- en Identificatiedienst Koninklijke Landmacht (Recovery and Identification Unit Royal Netherlands Army).
<b>E</b>	<b>DS.01.02</b>	<b>Have general knowledge of the CS-000 (Certification Schedule ERW (CS-ERW)), and especially about the procedures and</b>	<b>Interpretation</b>
T	DS.01.02.01	Being able to reproduce the contents of par. 1.3 of the CS-000 (CS-ERW).	No interpretation needed.
T	DS.01.02.02	Being able to reproduce the contents of par. 3.2, 4.1, 4.9 and Appendix 1 of the CS-000 (CS-ERW).	No interpretation needed.

<b>E</b>	<b>DS.01.02</b>	<b>Have general knowledge of the <i>CS-000</i> (Certification Schedule ERW (CS-ERW)), and especially about the procedures and</b>	<b>Interpretation</b>
<b>E</b>	<b>DS.02.01</b>	<b>Have detailed knowledge about different ways of explosion.</b>	<b>Interpretation</b>
T	DS.02.01.01	Being able to reproduce and explain, what is meant with a “chemical explosion”.	An exothermic chemical reaction occurring in a substance or mixture of substances, which, after having started somewhere in that substance, is able to progress through that substance, without the need for additional oxygen and additional heat.
T	DS.02.01.02	Being able to reproduce and explain, what is meant with a “physical explosion”	A reaction in which energy is rapidly released, – not being a chemical or nuclear reaction– resulting in a fast expansion of matter, causing internal pressure to escape from a body that cannot withstand it.
T	DS.02.01.03	Being able to reproduce and explain, the main difference between a physical and a chemical explosion, regarding the end products of both explosions.	After a physical explosion, you can find the same substances, but with a chemical explosion, new substances occur.
T	DS.02.01.04	Being able to reproduce and explain, what is meant with an “exothermal” reaction.	A heat producing chemical reaction.
T	DS.02.01.05	Being able to reproduce and explain, what is meant with a “endothermal” reaction.	A heat consuming chemical reaction
T	DS.02.01.06	Being able to reproduce and explain, what is meant with a “homogeneous” explosion	An (almost) instantaneous chemical explosion throughout the whole explosive substance, with a constant reaction speed.
T	DS.02.01.07	Being able to reproduce and explain, what is meant with a “heterogeneous” explosion.	A chemical explosion which progresses layer for layer throughout the explosive substance.
T	DS.02.01.08	Being able to reproduce and explain, what is meant with “reaction speed” during a heterogeneous explosion.	The speed of movement from the reaction zone throughout the explosive substance
T	DS.02.01.09	Being able to reproduce and explain, how “heterogeneous” explosions are divided.	In “deflagration” and “detonation”, depending on the way energy transition takes place during the explosion.
T	DS.02.01.10	Being able to reproduce and explain, what is meant with a “deflagration” .	A chemical explosion, started with a flame or spark or igniting temperature. The reaction transmits throughout the explosive mixture by heat transversion, with a speed that is influenced by (starting) temperature and pressure.
T	DS.02.01.11	Being able to reproduce and explain, what is meant with a “detonation” .	A chemical explosion, started – mostly - with a shock and during which the reaction transmits throughout the explosive mixture by “shock wave” at supersonic speed, independent from temperature and pressure.

<b>E</b>	<b>DS.02.01</b>	<b>Have detailed knowledge about different ways of explosion.</b>	<b>Interpretation</b>
T	DS.02.01.12	Being able to reproduce and explain, what is meant with “sensitivity” of an explosive.	The tendency for an explosive substance to react.
T	DS.02.01.13	Being able to reproduce and explain, what is meant with “an explosive train”.	The arrangement of a series of explosives beginning with a small amount of sensitive explosive (initiator or priming charge) than through a less sensitive explosive (booster or igniter charge) to the larger comparatively insensitive explosive (main charge)
T	DS.02.01.14	Being able to reproduce and explain, what is the main difference between a “deflagration and a detonation”.	Combustion speed versus detonation speed; energy transfer through heat versus shock; no brisance versus brisance; dependent on (starting) pressure and temperature versus not dependent pressure and temperature.
<b>E</b>	<b>DS.02.02</b>	<b>Have detailed knowledge about the explosive substance “Black</b>	<b>Interpretation</b>
T	DS.02.02.01	Being able to reproduce and explain, what the main components are of Black Powder.	Carbon (Charcoal), Potassium Nitrate (Salpetre) and Sulfer.
T	DS.02.02.02	Being able to reproduce and explain the main characteristics of Black Powder.	Black colour, irregular shape, heavily smoke producing, fast and irregular burning, extremely spark-sensitive (static electricity), moist-sensitive and lots of residue.
<b>E</b>	<b>DS.02.03</b>	<b>Have detailed knowledge about the explosive substance</b>	<b>Interpretation</b>
T	DS.02.03.01	Being able to reproduce and explain, what the main components are of Smokeless Powder.	Nitrated cotton (gun cotton) with several additives.
T	DS.02.03.02	Being able to reproduce and explain the main characteristics of Smokeless Powder.	Regular shaped, limited smoke producing, smooth burning, linear gas-production and chemically not stable.
T	DS.02.03.03	Being able to reproduce and explain that Smokeless Powder can be produced (extracted) in many different shapes.	For this reason, gas production can be considerably influenced. In this respect there is differentiation between progressive, neutral and regressive burning.
<b>E</b>	<b>DS.02.04</b>	<b>Have detailed knowledge about “Pyrotechnic” explosive</b>	<b>Interpretation</b>

<b>E</b>	<b>DS.02.04</b>	<b>Have detailed knowledge about “Pyrotechnic” explosive</b>	<b>Interpretation</b>
T	DS.02.04.01	Being able to reproduce and explain, what is meant with a “Pyrotechnic” explosive substance.	A mixture, consisting of an oxidiser, a reducing agent and usually additives, which composition do not detonate but deflagrates, during which mostly limited amounts of gas are produced.
T	DS.02.04.02	Being able to reproduce and explain, which additives are used often in “Pyrotechnic” explosive substances.	Mostly heavy metals like Copper, Zinck, Iron, Barium and Strontium.
T	DS.02.04.03	Being able to reproduce and explain, for which purposes pyrotechnics are used.	Smoke mixture, igniting mixture, incendiary mixture, illuminating mixture, sound mixture, signals mixture, teargas mixture and delay mixtures.
T	DS.02.04.04	Being able to reproduce and explain, from what the composition of a pyrotechnic mixture depends on.	Depending on the specific application
T	DS.02.04.05	Being able to reproduce and explain, the most important characteristics of pyrotechnics in general.	Deflagration with low/unwanted pressure, spark sensitive, sensitive for friction and sensitive for moist.
<b>E</b>	<b>DS.02.05</b>	<b>Have detailed knowledge about “High Explosives” (HE)</b>	<b>Interpretation</b>
T	DS.02.05.01	Being able to reproduce and explain, what is meant with “sympathetic detonation”.	That a HE is initiated by another HE, that is not in contact with it.
T	DS.02.05.02	Being able to reproduce and explain, what is meant with “brisance” during a detonation.	The capability of a HE to destroy material through an all-destructive shattering effect in the close surrounding of the HE. Brisance is based on 100.000 till 400.000 atm pressure, which occurs for a very short moment at a short distance till 1/3 of the radius of a spherical thought amount of the HE.
T	DS.02.05.03	Being able to reproduce and explain, what is meant with “gas pressure” during detonation.	The expanding effect of the hot gaseous reaction products of the HE, which gives speed to shrapnel which is created during brisance.
T	DS.02.05.04	Being able to reproduce and explain, what is meant with “shockwave” during detonation.	The effect that occurs when gas pressure from detonating HE, applies a force to surrounding soil and/or material, after which the shockwave itself propels through the soil/material. The wave expands in concentric circles away from the point of detonation.
T	DS.02.05.05	Being able to reproduce and explain, what is meant with “explosion heat” during detonation.	The heat that occurs when expanding gassed are released at the point of detonating. Temperature of those gasses can go up to 4.000 °C.
T	DS.02.05.06	Being able to reproduce and explain, what is meant with a “hollow charge”.	A cylindrical quantity of HE, in which a cone-shaped part of the explosive has been removed and which is introduced centrally from the rear to increase the penetrating effect on the target by centering forces.

<b>E</b>	<b>DS.02.05</b>	<b>Have detailed knowledge about “High Explosives” (HE)</b>	<b>Interpretation</b>
T	DS.02.05.07	Being able to reproduce and explain, what is meant with “a cutting charge i.e. linear shaped charge”.	An elongated amount of HE, in which a V-or U shaped groove has been removed and is ignited from behind to obtain a penetrating cutting effect on the target.
T	DS.02.05.08	Being able to reproduce and explain, what is meant with “directional fragmentation”.	Ammunition where the body is shaped in such a way that the fragmentation effect is concentrated in a specific direction.
T	DS.02.05.09	Being able to reproduce that on HE crystals can occur and what this can lead to.	Cracking or breaking a crystal can lead to initiation of the HE.
<b>E</b>	<b>DS.03.01</b>	<b>Have detailed knowledge about the main groups of ERW.</b>	<b>Interpretation</b>

E	DS.03.01	<b>Have detailed knowledge about the main groups of ERW.</b>	<b>Interpretation</b>
T	DS.03.01.01	Being able to reproduce and explain the main characteristics of “the 16 main groups of ERW” as described in the CS_000 (CS-ERW).	<ul style="list-style-type: none"> <li>- Small Arms Ammunition (SAA); ammunition for firearms, up to a calibre of 20-mm.</li> <li>- Artillery Ammunition; munitions to be fired by guns, howitzers, recoilless rifles and mortars, with a calibre of 20mm and more.</li> <li>- Hand grenades; munitions to be thrown by hand.</li> <li>- Rifle grenades; munitions to be fired with a rifle also some grenades fired by pistols belongs to this main group.</li> <li>- Munitions for grenade launchers; munitions that are fired from a purpose build launcher.</li> <li>- Rockets; munitions that after firing will be propelled by a rocket motor</li> <li>- Aircraft bombs, munitions dropped from an aircraft.</li> <li>- Submunitions; munitions that are included in another piece of ammunition and are released at some point and continue their way independently.</li> <li>- Underwater munitions; munitions specially developed to be used below water level e.g. sea-mines, river-mines, torpedoes and depth charges.</li> <li>- Landmines; munitions which are placed on or under the soil-surface and will be activated by the target itself. Main types are Anti-tank and Anti-personnel mines.</li> <li>- Boobytraps; munitions which are used with the aim to be activated through an apparently innocent action.</li> <li>- Explosive substances; explosive substances found loose, without ignition devices and can not be classified under one of the other main groups.</li> <li>- Fireworks; explosive items provided with a pyrotechnic mixture, meant to produce special effects like smoke, light, teargas, sound and fire.</li> <li>- Demolition stores; explosives to be used for demolition and/or destruction.</li> <li>- Ignition devices; separate fuzes/igniters etc., produced to activate other munitions.</li> <li>- Munition accessories; non explosive items that were part of munitions and can not be categorised in one of the other main groups.</li> </ul>
E	DS.03.02	<b>Have detailed knowledge about “calibre of munitions” and the</b>	<b>Interpretation</b>
T	DS.03.02.01	Being able to reproduce and explain the term “calibre” related to munitions and the different ways the term is used.	The diameter of a projectile in millimetres, centimetres, inches; or the weight of the projectile in English pounds; the diameter of the projectile plus length of the barrel in calibres; the diameter of the projectile plus an abbreviation for the type of gun; the diameter from the projectile and the length of the chambre.

<b>E</b>	<b>DS.03.02</b>	<b>Have detailed knowledge about “calibre of munitions” and the</b>	<b>Interpretation</b>
<b>E</b>	<b>DS.03.03</b>	<b>Have general knowledge about general danger aspects of ERW.</b>	<b>Interpretation</b>
T	DS.03.03.01	Being able to reproduce and explain the term “influence factors” related to ERW.	All those external factors of influence mentioned below which can act as a trigger for an (uncontrolled) explosion of ERW.
T	DS.03.03.02	Being able to reproduce and explain which “influence factors” related to ERW can be applicable.	Acoustic disturbance, movement, fire/temperature, electromagnetic radiation- or induction, static electricity, vibration and magnetic disturbance.
T	DS.03.03.03	Being able to explain the term “danger aspects” related to ERW.	All aspects of the ERW itself, which can be of influence for an (uncontrolled) explosion of that ERW.
T	DS.03.03.04	Being able to reproduce the different “danger aspects” of ERW which can be applicable.	Cocked striker, delay acting device, anti withdrawal device, booby trap, explosives charge, piezoelectric element and self-igniting (WP).
T	DS.03.03.05	Being able to reproduce and explain what is meant with the term “explosion-effect” related to ERW.	All effects applicable when an ERW explode.
T	DS.03.03.06	Being able to reproduce and explain the different sorts of “explosion-effects” related to ERW.	Gas pressure, shock wave, shrapnel, jet/slug (shaped charge), heat/fire, illuminating/flash, teargas, expelling and smoke.
<b>E</b>	<b>DS.03.04</b>	<b>Have general knowledge about ERW-recognition.</b>	<b>Interpretation</b>
T	DS.03.04.01	Being able to reproduce and explain the external characteristics of different types of ERW.	Shape, size, colour, type of material, composing elements and markings.
T	DS.03.04.02	Being able to reproduce and explain how the main group of a suspected ERW can be established.	Through external characteristics.
T	DS.03.04.03	Being able to reproduce and explain why paint is applied on munitions.	To prevent rust, for camouflage and for identification purposes.
T	DS.03.04.04	Being able to reproduce and explain why colours and markings are applied to munitions.	The colour of the projectile and coloured bands and markings are applied to help identify the munition.
T	DS.03.04.05	Being able to reproduce and explain in which way markings are applied to munitions.	Painted, in relief or engraved.
T	DS.03.04.06	Being able to reproduce the country from munition, through their (international) markings.	Markings from the Netherlands, United Kingdom, United States of America and Germany. Excluded Small Arms Ammunition.
<b>E</b>	<b>DS.03.05</b>	<b>Have advanced knowledge about Small Arms Ammunition</b>	<b>Interpretation</b>

<b>E</b>	<b>DS.03.05</b>	<b>Have advanced knowledge about Small Arms Ammunition</b>	<b>Interpretation</b>
T	DS.03.05.01	Being able to reproduce and explain the sub-types of Small Arms Ammunition.	HE, Ball, Armor Piercing, Tracer, Smoke Tracer, Incendiary, Armour Piercing-Tracer, Spotter-Tracer, Blank, Drill and Practice.
T	DS.03.05.02	Being able to reproduce and explain the working principles of Fuzes for Small Arms Ammunition.	Compression and percussion.
T	DS.03.05.03	Being able to reproduce and explain the special terms used with Small Arms Ammunition.	Jacket, Core, Pin-fire, Rim-fire, Central-fire, self-igniting, percussion cap, rotation-stabilized, points of identification (markings, dimensions, colour codes, of bullet-tips) cartridge case bottom.
T	DS.03.05.04	Being able to reproduce and explain the specific dangers when encountering Small Arms Ammunition.	Pin-fire, Rim-fire, HE-projectiles, Incendiary (WP) projectiles plus encountering other ERW between SAA.
T	DS.03.05.05	Being able to identify and explain the Small Arms Ammunition mentioned in the ERW-schedule for the <i>Deskundige</i> 000 (Specialist ERW Search).	Construction, composition and working principles of the SAA mentioned.
<b>E</b>	<b>DS.03.06</b>	<b>Have advanced knowledge about Artillery Ammunition.</b>	<b>Interpretation</b>
T	DS.03.06.01	Being able to reproduce and explain the types of weapon systems used to fire Artillery Ammunition.	Mortars, Recoilless Rifles, Guns and Howitzers.
T	DS.03.06.02	Being able to reproduce and explain the general composition of Artillery Ammunition.	Fixed Ammunition, Semifixed Ammunition, Separate-loading Ammunition and Ammunition for mortars.
T	DS.03.06.03	Being able to reproduce and explain the technical terms used in relation with Artillery Ammunition.	Projectile, grooves and lands, rotating band, bourrelet, obturating ring, crimping groove, a round, propelling charge, supplementary bursting charge, increment charge, primer-percussion, incremental charge, ignition cartridge, percussion cap, boat tail, ogive, self-destructor and fuze.
T	DS.03.06.04	Being able to reproduce and explain the different ways of projectile stabilisation of Artillery Ammunition.	Spin stabilized, fin stabilized and shape stabilized
T	DS.03.06.05	Being able to identify and explain the Artillery Ammunition, as mentioned in the ERW-schedule for the <i>Deskundige</i> 000 (Expert ERW Search).	Construction, composition and working principles of the Artillery Ammunition mentioned.
T	DS.03.06.06	Being able to reproduce and explain the construction and working principles from the sub-types of Artillery Ammunition mentioned in the schedule for the Expert ERW Search.	Shell HE, Shell HEAT, Shell AP-HE, Shell HE-Incendiary, Cannister, Shell Shrapnel, Shell Shrapnel-HE, Shell Smoke, Shell Smoke Bursting (WP), Shot Armour Piercing (AP), Shot APDS, Shell AP-Incendiary, Shell Illuminating, Shell Flare TR, Shell Incendiary and Shell propaganda.
<b>E</b>	<b>DS.03.07</b>	<b>Have advanced knowledge about Artillery Fuzes.</b>	<b>Interpretation</b>



<b>E</b>	<b>DS.03.07</b>	<b>Have advanced knowledge about Artillery Fuzes.</b>	<b>Interpretation</b>
T	DS.03.07.01	Being able to reproduce and explain the different types of Artillery Fuzes and their boosters.	Fuze Percussion, Fuze Percussion Base, Fuze Time, Fuze Mechanical Time, Fuze Time and Percussion, Fuze Mechanical Time and Percussion, and Proximity Fuze.
T	DS.03.07.02	Being able to identify and explain the Artillery Fuzes and Boosters, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Artillery Fuzes and boosters mentioned.
<b>E</b>	<b>DS.03.08</b>	<b>Have advanced knowledge about Hand Grenades.</b>	<b>Interpretation</b>
T	DS.03.08.01	Being able to reproduce and explain the different types of Hand Grenades.	Types: antitank, offensive, defensive, practice, fragmentation, smoke, illuminating, smoke WP, teargas and incendiary.
T	DS.03.08.02	Being able to reproduce and explain the specific technical terms which are used, related to Hand Grenades.	Fragmentation sleeve, emission hole, safety lever, safety pin and safety cap.
T	DS.03.08.03	Being able to reproduce and explain the specific technical terms which are used, related to Fuzes of Hand Grenades.	Friction/pull, impact, time, strike, always, cocked striker, (duplex) primer-detonator (delay), (duplex) primer-flash (delay).
T	DS.03.08.04	Being able to identify and explain the Hand Grenades, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Hand Grenades mentioned.
<b>E</b>	<b>DS.03.09</b>	<b>Have advanced knowledge about Rifle Grenades.</b>	<b>Interpretation</b>
T	DS.03.09.01	Being able to reproduce and explain the different types of Rifle Grenades.	Types: HE, HEAT, smoke, signal, propaganda, smoke WP and practice.
T	DS.03.09.02	Being able to reproduce and explain the specific technical terms which are used, related to Rifle Grenades.	Fragmentation sleeve, cup-discharger, grenade launcher, launching, spigot, propelling cartridge, stabilisation method.
T	DS.03.09.03	Being able to reproduce and explain the specific technical terms which are used with Fuzes from Rifle Grenades.	Impact, time, always, cocked striker, (duplex) primer-detonator (delay) and (duplex) primer-flash (delay).
T	DS.03.09.04	Being able to identify and explain the construction and working principles from the types of Rifle Grenades as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Rifle Grenades mentioned.
<b>E</b>	<b>DS.03.10</b>	<b>Have advanced knowledge about Ammunition for Grenade</b>	<b>Interpretation</b>
T	DS.03.10.01	Being able to reproduce and explain the different types of Ammunition for Grenade Launchers	Types: HE, HEAT, and practice

<b>E</b>	<b>DS.03.10</b>	<b>Have advanced knowledge about Ammunition for Grenade</b>	<b>Interpretation</b>
T	DS.03.10.02	Being able to reproduce and explain the specific technical terms which are used, related to Ammunition for Grenade Launchers.	Expelling charge, Firing device, spigot, stabilisation method, rear danger zone from Grenade Launcher.
T	DS.03.10.03	Being able to reproduce and explain the specific technical terms which are used with fuzes for Ammunition for Grenade Launcher.	Impact and Point Initiated Base Detonating (PIBD)
T	DS.03.10.04	Being able to identify and explain the construction and working principles from the types of Ammunition for Grenade Launcher as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Ammunition for Grenade Launchers mentioned.
<b>E</b>	<b>DS.03.11</b>	<b>Have advanced knowledge about rockets.</b>	<b>Interpretation</b>
T	DS.03.11.01	Being able to reproduce and explain the different types of Rockets.	Types: HE, HEAT, (Semi) Armour Piercing, smoke, bursting smoke (WP), illuminating, leaflet/propaganda, incendiary and practice.
T	DS.03.11.02	Being able to reproduce and explain the specific technical terms which are used, related to Rockets.	Warhead, rocket-motor, fuzes and igniters for warhead & rocket-motor, stabilisation method, nozzle, rocket-launcher.
T	DS.03.11.03	Being able to identify and explain the construction and working principles from the types of Rockets as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Rockets mentioned.
<b>E</b>	<b>DS.03.12</b>	<b>Have advanced knowledge about Aircraft Bombs.</b>	<b>Interpretation</b>
T	DS.03.12.01	Being able to reproduce and explain the main groups of Aircraft Bombs.	Main groups: Aircraft bombs, Cluster bombs, Cluster adapters, Small Bomb Containers.
T	DS.03.12.02	Being able to reproduce and explain the different types of Aircraft Bombs.	General Purpose, Fragmentation, High Capacity/Light Case, (Semi) Armour Piercing, Deep Penetration, Anti-Submarine, Incendiary, Target Identification/Target Indicator, Photoflash, Smoke, Marker, Practice and Flare.
T	DS.03.12.03	Being able to reproduce and explain the specific terms which are used, related to Aircraft Bombs.	Charge/weight ratio, stabilisation device, arming device, pistol, fuze, bomb body, suspension, ignition device, nose rings, nose (extension) rods, nose plates, nose pins.
T	DS.03.12.04	Being able to identify and explain the technical composition from the Aircraft Bombs, as mentioned in the ERW-schedule for the Expert ERW Search.	Construction, composition and working principles of the Aircraft Bombs mentioned.
<b>E</b>	<b>DS.03.13</b>	<b>Have advanced knowledge about Sub-Munitions.</b>	<b>Interpretation</b>

<b>E</b>	<b>DS.03.13</b>	<b>Have advanced knowledge about Sub-Munitions.</b>	<b>Interpretation</b>
T	DS.03.13.01	Being able to reproduce and explain the different types of Submunitions.	Fragmentation, HE, HEAT, Incendiary and Practice.
T	DS.03.13.02	Being able to reproduce and explain the specific technical terms which are used, related to Submunitions.	Sensitivity, stabilisation device, arming device, ignition device, appearances.
T	DS.03.13.03	Being able to identify and explain the technical composition from Submunitions, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Submunitions mentioned.
<b>E</b>	<b>DS.03.14</b>	<b>Have advanced knowledge about Ignition Devices for Aircraft</b>	<b>Interpretation</b>
T	DS.03.14.01	Being able to reproduce and explain the different parts of Ignition Devices for Aircraft Bombs.	Impeller, arming wire, arming fork, arming cap, transport safety, arming delay, anti-withdrawal device.
T	DS.03.14.02	Being able to reproduce and explain the different main types of fuzes and/or pistols for Aircraft Bombs.	Direct action impact, short delay, long delay, airburst, anti-disturbance, hydrostatic and electric fuzes for Aircraft Bombs.
T	DS.03.14.03	Being able to reproduce and explain which different electric power sources are used in electric fuzes for Aircraft Bombs.	Battery, condenser, generator, electro-static generation and electro-magnetic generation.
T	DS.03.14.04	Being able to reproduce and explain that electric, and chemical long delay fuzes, stay potential dangerous for a long time after the bombs has dropped.	No interpretation needed.
T	DS.03.14.05	Being able to identify and explain the technical composition from Ignition Devices for Aircraft Bombs, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the bomb fuzes and/or pistols mentioned.
<b>E</b>	<b>DS.03.15</b>	<b>Have advanced knowledge about Underwater Munitions.</b>	<b>Interpretation</b>
T	DS.03.15.01	Being able to reproduce and explain the different main types of Underwater Munitions.	River Mines, Sea Mines, Torpedoes, Depth Charges.
T	DS.03.15.02	Being able to reproduce and explain the specific technical terms which are used, related to Depth Charges and Torpedoes.	Hydrostatic ignition, Impact ignition, Pistol and Propelling.
T	DS.03.15.03	Being able to reproduce and explain the specific technical terms which are used, related to River Mines and Sea-Mines.	Floating body, anchor, switch-horn, chemical-horn, pendulum ignition, magnetic ignition, acoustic ignition, galvanic ignition, Ship Counter function, Day Counter function (delay activated or delay self destruct).

<b>E</b>	<b>DS.03.15</b>	<b>Have advanced knowledge about Underwater Munitions.</b>	<b>Interpretation</b>
T	DS.03.15.04	Being able to identify and explain the technical composition from Underwater Munitions, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Underwater Munitions mentioned.
<b>E</b>	<b>DS.03.16</b>	<b>Have advanced knowledge about Landmines.</b>	<b>Interpretation</b>
T	DS.03.16.01	Being able to reproduce and explain the different main types of Landmines.	Anti-Tank (AT) and Anti-Personnel (AP).
T	DS.03.16.02	Being able to reproduce and explain the specific technical terms which are used, related to Landmines.	Minefield, blast, fragmentation and bouncing AP-mine
T	DS.03.16.03	Being able to reproduce and explain the specific technical terms which are used, related to Ignition Devices for Landmines.	Pressure, pull, tension-release, pressure-release and induction.
T	DS.03.16.04	Being able to reproduce and explain the specific dangers when encountering Landmines.	Instability, booby trapped and expelling by bounding AP-mines.
T	DS.03.16.05	Being able to identify and explain the technical composition from Landmines, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Landmines mentioned.
<b>E</b>	<b>DS.03.17</b>	<b>Have advanced knowledge about Booby Traps.</b>	<b>Interpretation</b>
T	DS.03.17.01	Being able to reproduce and explain the main differences between Booby Traps and IED's.	A Booby Trap is a special build device made of factory-produced items for concealed use. An IED is an improvised explosive device, which is <u>not</u> factory produced and is often composed of parts which cannot be qualified as regular explosive or ammunition items.
T	DS.03.17.02	Being able to reproduce and explain where Booby Traps can be expected.	With items at a strange place, in the vicinity from pieces of rope, wire and electric wire, at munitions storage or dump, with landmines and with demolition stores.
T	DS.03.17.03	Being able to reproduce and explain the specific working principles of Booby Traps.	Pressure, Pull, Release, Pressure release and Time
T	DS.03.17.04	Being able to identify and explain the technical composition from Booby Traps, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Booby Traps mentioned.
<b>E</b>	<b>DS.03.18</b>	<b>Have advanced knowledge about Pyrotechnics Devices.</b>	<b>Interpretation</b>

<b>E</b>	<b>DS.03.18</b>	<b>Have advanced knowledge about Pyrotechnics Devices.</b>	<b>Interpretation</b>
T	DS.03.18.01	Being able to reproduce and explain the two main different groups of Fireworks/pyrotechnics.	Consumer fireworks and professional pyrotechnics
T	DS.03.18.02	Being able to reproduce and explain the terminology used in relation to Pyrotechnics.	Smoke generator, simulator, flare tripwire, signal cartridge, illuminating cartridge, marker, teargas.
T	DS.03.18.03	Being able to reproduce and explain the specific dangers from Pyrotechnics.	Often difficult to recognise, minimum safety features, corrosive, instable and the ability to start working when in contact with water.
T	DS.03.18.04	Being able to identify and explain the technical composition from Pyrotechnics, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Pyrotechnics mentioned.
<b>E</b>	<b>DS.03.19</b>	<b>Have advanced knowledge about Demolition Stores.</b>	<b>Interpretation</b>
T	DS.03.19.01	Being able to reproduce and explain the terminology used in relation to Demolition Stores.	Match fuze, barrel destructor, demolition charge (blocks, cartridge, etc.), detonating cord, safety fuse, safety fuze- igniter, shaped charge, cratering charge, bangalore torpedo, detonator and flash tube (electric and non-electric, duplex and delay).
T	DS.03.19.02	Being able to reproduce and explain the technical composition from Demolition Stores, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Demolition Stores mentioned.
<b>E</b>	<b>DS.03.20</b>	<b>Have advanced knowledge about Igniting Devices/Fuzes.</b>	<b>Interpretation</b>
T	DS.03.20.01	Being able to reproduce and explain the forces and factors, responsible for proper functioning of Fuzes.	Setback, Centrifugal Force, Creep Forward, Impact, Time and Gas Pressure.
T	DS.03.20.02	Being able to reproduce and explain the (three main) principles for functioning of Fuzes.	Impact, time, influence/proximity.
T	DS.03.20.03	Being able to reproduce and explain the different types of Fuzes and Igniting Devices.	Mechanical, Electric/Electronic, Pyrotechnic, Pneumatic, Chemical and Hydrostatic,
T	DS.03.20.04	Being able to reproduce and explain the general working principles of Fuzes.	Percussion, Concussion, Direct Action and Graze, Separated Direct Action and Graze, Compression.
T	DS.03.20.05	Being able to reproduce and explain the possible safety systems which can be incorporated in Fuzes.	Storage/transport safety, bore safety, masking safety, flight safety, parachute safety

<b>E</b>	<b>DS.03.20</b>	<b>Have advanced knowledge about Igniting Devices/Fuzes.</b>	<b>Interpretation</b>
T	DS.03.20.06	Being able to reproduce and explain the safety features which can be present in/on Fuzes.	Safety pin, safety lever, safety cap, electric shortage, adjustable setting.
T	DS.03.20.07	Being able to reproduce and explain, what is meant with a Safety and Arming (SA) device of a Fuze.	By means of build in features, making the fuze “ready for functioning”.
T	DS.03.20.08	Being able to reproduce and explain, the specific dangers of Igniting Devices/Fuzes.	Sensibility and absence of safety features.
T	DS.03.20.09	Being able to reproduce and explain the terminology which is used relating to Igniting Devices/Fuzes.	Inertia pellet, shutter, percussion cap, (percussion) detonator, igniferous fuze, point ignition base detonating (PIBD), crush detonator, cocked striker, pull friction.
T	DS.03.20.10	Being able to reproduce and explain the technical composition from Igniting Devices/Fuzes, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Construction, composition and working principles of the Fuzes and other igniting devices mentioned.
<b>E</b>	<b>DS.03.21</b>	<b>Have general knowledge about Accessories from Munitions.</b>	<b>Interpretation</b>
T	DS.03.21.01	Being able to reproduce and explain the actual use from Accessories from Munitions, as mentioned in the ERW-schedule for the <i>Deskundige 000</i> (Expert ERW Search).	Lifting lug, Plug, Grommet, Safety Clamp, Protective Cap.
<b>E</b>	<b>DS.04.01</b>	<b>Have advanced knowledge of Process Requirements, Responsibilities and Powers from the <i>Deskundige 000</i> (Expert</b>	<b>Interpretation</b>
T	DS.04.01.01	Being able to reproduce, explain and apply the content of chapter 4 of the CS-000 (Certification Schedule ERW).	No interpretation needed.
<b>E</b>	<b>DS.04.02</b>	<b>Have general knowledge about the working principles of Metal</b>	<b>Interpretation</b>
T	DS.04.02.01	Being able to reproduce and explain, what determines the measuring range of a Magnetometer.	The magnetic permeability of the object, combined with disturbing environmental factors in the vicinity.
T	DS.04.02.02	Being able to indicate when detection equipment has reached its measuring limits	Depending on type detector, type of soil and object involved. See the detector manual.

<b>E</b>	<b>DS.04.02</b>	<b>Have general knowledge about the working principles of Metal</b>	<b>Interpretation</b>
T	DS.04.02.03	Being able to indicate when a change in the project plan is required, related to the use of detection equipment.	When detection equipment has reached its measuring limits
T	DS.04.02.04	Being able to reproduce and explain, what is meant with “remanent and induced” magnetism.	Remanent magnetism is magnetism that is already present in a metal object. These objects can be magnetized by processing metals (drilling, grinding, turning, etc.). Due to the influence of the earth's magnetic field, a ferrous metal object in the soil will have built up a low magnetic polarity in the direction of the earth's magnetic field lines. This is called induced magnetism.
<b>E</b>	<b>DS.04.03</b>	<b>Have general knowledge about real-time detection and non-</b>	<b>Interpretation</b>
T	DS.04.03.01	Being able to reproduce how a project area preferably should be detected.	Preferably non-real-time detection.
T	DS.04.03.02	Being able to reproduce how measuring data can be evaluated with non-real-time detection.	With different criteria and by different people.
T	DS.04.03.03	Being able to reproduce how it's decided if measuring data from real-time detection gives enough reason to approach a detected object.	By one person, without possibility of direct evaluation afterwards.
T	DS.04.03.04	Being able to reproduce and explain when real-time detection is also used for localisation.	During non-real-time detection, to precisely pin-point the location of a measured object.
<b>E</b>	<b>DS.04.04</b>	<b>Have general knowledge about the differences between</b>	<b>Interpretation</b>
T	DS.04.04.01	Being able to reproduce which aspects are relevant in deciding which detection method will be used during an ERW-project.	Is decided by validation of the search equipment, in combination with already available data from a preliminary investigation.
T	DS.04.04.02	Being able to reproduce which aspects have to be covered in a project plan for borehole detection during an ERW-project.	Positioning, depth and inclination angle of bore holes or probing cone from a probing installation.
T	DS.04.04.03	Being able to reproduce and explain how – during borehole or probing cone detection – it's prevented that in the first borehole an ERW-object is hit.	By placing the bore hole/probing cone outside the suspected area.
T	DS.04.04.04	Being able to reproduce and explain how – during borehole or probing cone detection – the exact location from an object - in a safe way - more and more precise can be established.	Measuring in different bore holes/probing cones around the object with the first significant measuring.

# INTERPRETATION DOCUMENT THEORY EXAM

## EXPERT 000



<b>E</b>	<b>DS.04.04</b>	<b>Have general knowledge about the differences between</b>	<b>Interpretation</b>
<b>E</b>	<b>DS.04.05</b>	<b>Have advanced knowledge about practical ERW-detection.</b>	<b>Interpretation</b>
T	DS.04.05.01	This enabling objective will be covered during the practical exam <i>Deskundige 000</i> (Expert ERW-search).	Practical element
<b>E</b>	<b>DS.04.06</b>	<b>Have advanced knowledge about interpretation of data from</b>	<b>Interpretation</b>
T	DS.04.06.01	Being able to reproduce and explain that detection data can be evaluated by using a computer software/computer evaluation program.	No interpretation needed.
T	DS.04.06.02	Being able to reproduce and explain that a computer evaluation program can compensate data after measuring.	No interpretation needed
T	DS.04.06.03	Being able to reproduce and explain that a computer evaluation program can evaluate the whole measuring data, or only a part of the data.	No interpretation needed
T	DS.04.06.04	Being able to reproduce and explain that calculated data can be manual evaluated and adjusted.	No interpretation needed
T	DS.04.06.05	Being able to reproduce and explain that calculated data can be changed by changing the settings from the computer evaluation program.	No interpretation needed
T	DS.04.06.06	Being able to reproduce and explain that a computer evaluation program for interpretation of measured data is able to produce an “objects list”.	No interpretation needed
T	DS.04.06.07	Being able to reproduce and explain, that a computer evaluation program can apply filters to manipulate the objects list.	No interpretation needed
T	DS.04.06.08	Being able to reproduce and explain, that the Senior <i>Deskundige 000</i> (Senior ERW search) is responsible for interpretation of measured data, which has to be legally reproducible.	No interpretation needed
<b>E</b>	<b>DS.04.07</b>	<b>Have advanced knowledge about the terminology used with</b>	<b>Interpretation</b>
T	DS.04.07.01	Being able to reproduce and explain, the terminology which is used during interpretation of measured search data from ERW-search operations.	Dipole moment, magnetic moment, magnetic volume, inclination and declination, data-filter, original data, interpolation, single lane compensation and whole field compensation.



<b>E</b>	<b>DS.04.07</b>	<b>Have advanced knowledge about the terminology used with</b>	<b>Interpretation</b>
<b>E</b>	<b>DS.04.08</b>	<b>Have advanced knowledge about interpretation of data from</b>	<b>Interpretation</b>
T	DS.04.08.01	Being able to carry out interpretation of measured data from a non-real-time detection.	Practical element
T	DS.04.08.02	Being able to produce an “objects list” after measuring significant data after detection.	Practice element as detailed in practical exam assignments and assessment schemes <i>Deskundige 000</i> (Expert ERW-search) with minimal the X, Y- and Z coordinates.
<b>E</b>	<b>DS.04.09</b>	<b>Have advanced knowledge about different methods for exact</b>	<b>Interpretation</b>
T	DS.04.09.01	Being able to reproduce and explain different methods for exact localisation of a measured object during detection.	Practice element as detailed in practical exam assignments and assessment schemes <i>Deskundige 000</i> (Expert ERW-search).
<b>E</b>	<b>DS.04.10</b>	<b>Have advanced knowledge about 3-dimentional localisation of</b>	<b>Interpretation</b>
T	DS.04.10.01	Being able to carry out different methods for exact localisation of measured object from an “objects list”	Practice element as detailed in practical exam assignments and assessment schemes <i>Deskundige 000</i> (Expert ERW-search).
<b>E</b>	<b>DS.04.11</b>	<b>Have advanced knowledge about safe methods for approaching</b>	<b>Interpretation</b>
T	DS.04.11.01	Being able to reproduce and explain the intend, rules and regulations in the “excavation regulation”.	<i>Wet informatie-uitwisseling ondergrondse netten (WION)</i> (Act on information exchange about below surface pipelines, electric power cables, sewers and other underground distribution facilities). The Act regulates information exchange between excavators and operators of underground services, including “notice of excavation” ( <i>KLIC-melding</i> ).
T	DS.04.11.02	Being able to reproduce who manage the Information Counter of the “excavation regulation”.	The <i>Kadaster</i> (Land Registry Office)
T	DS.04.11.03	Being able to reproduce that in “security areas” another method for “notice of excavation” is applied.	Security Areas as Airports, Nuclear Powerplants and several areas of the Ministry of Defence.

<b>E</b>	<b>DS.04.11</b>	<b>Have advanced knowledge about safe methods for approaching</b>	<b>Interpretation</b>
T	DS.04.11.04	Being able to reproduce and explain the exact location where excavation for approach and identification has to start.	Practical Element.
T	DS.04.11.05	Being able to execute – safe- final excavation, whereby “full identification” can take place without disturbing the object.	Practical Element.
T	DS.04.11.06	Being able to communicate clearly with the operator of an excavator during mechanized excavation.	No interpretation needed.
T	DS.04.11.07	Being able to reproduce and explain that excavation by hand has to be proceed during approach of possible ERW.	Depending on type, position and appearance of the object.
T	DS.04.11.08	Being able to reproduce and explain which factors of influence are important during excavation of ERW.	Aerial Markers (gas), Placards with signs (like <b>Z</b> for culvert) = “zinker” in Dutch, Drainage Outlet, Power lines, Pipelines, Foundations and Groundwater.
T	DS.04.11.09	Being able to physically excavate ERW, according to the applicable rules and regulations.	Practical Element.
<b>E</b>	<b>DS.04.12</b>	<b>Have advanced knowledge about ERW-identification of objects</b>	<b>Interpretation</b>
T	DS.04.12.01	Being able to reproduce and explain how safe identification can take place by taking measures into account.	Minimum personnel, use available documentation, assume the most dangerous type of ERW and most dangerous fuze(s), assume fully armed fuze(s).
T	DS.04.12.02	Being able to reproduce and explain the possible dangers, related to the appearance of encountered ERW.	Oxidation/rust, damage, (partly) armed, wrongly used, improvised use, partly destroyed.
T	DS.04.12.03	Being able to execute – safe- “full identification” of encountered possible ERW.	Practical element as detailed in practical exam assignments and assessment schemes <i>Deskundige 000</i> (Expert ERW-search).
<b>E</b>	<b>DS.04.13</b>	<b>Have advanced knowledge about temporary safe storage of</b>	<b>Interpretation</b>
T	DS.04.13.01	Being able to reproduce and explain what is meant with “Safety Measures”	Measures taken to avoid that ERW will (uncontrolled) explode or come to effect
T	DS.04.13.02	Being able to reproduce and explain what is meant with “Protective Measures”	Measures taken to mitigate effects of an (uncontrolled) explosion on people, livestock, infrastructure, and other goods, to an acceptable level
T	DS.04.13.03	Being able to reproduce and explain par. 5.7 till 5.9 of the Dutch Defence Manual VS-968.	No interpretation needed.

<b>E</b>	<b>DS.04.13</b>	<b>Have advanced knowledge about temporary safe storage of</b>	<b>Interpretation</b>
T	DS.04.13.04	Being able to reproduce and explain the function of the VTVS (Installation for Temporary Storing) during an ERW-operation.	Temporary storage of encountered ERW.
T	DS.04.13.05	Being able to reproduce, explain and apply when ERW cannot be stored in the VTVS.	See CS-000 (CS-ERW), Appendix 1 par. A4.
T	DS.04.13.06	Being able to reproduce, explain and apply how much Netto Explosive Quantity (NEQ) may be stored in the VTVS.	See CS-000 (CS-ERW), Appendix 1 par. A7.
T	DS.04.13.07	Being able to reproduce and explain the requirements for placing the VTVS at an ERW-project.	See CS-000 (CS-ERW), Appendix 1 par. B.
T	DS.04.13.08	Being able to reproduce, explain and apply the mandatory requirements when placing ERW in the VTVS.	See CS-000 (CS-ERW), Appendix 1 par. C.
T	DS.04.13.09	Being able to reproduce and explain the requirements for the construction of a VTVS.	See CS-000 (CS-ERW), Appendix 1 par. D.
T	DS.04.13.10	Being able to reproduce and explain in relation to the keyholder VTVS, entering the VTVS, permit for a VTVS, and noticing the Municipality about the amount NEQ present.	See CS-000 (CS-ERW), Appendix 1 par. E.
T	DS.04.13.11	Being able to reproduce, explain and apply the mandatory registration of ERW in the VTVS.	See CS-000 (CS-ERW), Appendix 1 par. E..
<b>E</b>	<b>DS.05.01</b>	<b>Have basic knowledge about destruction of ERW.</b>	<b>Interpretation</b>
T	DS.05.01.01	Being able to reproduce and explain what is meant with “disposal” of ERW.	To destroy and/or making explosively safe from ERW or parts from ERW.
T	DS.05.01.02	Being able to reproduce and explain the difference between “single item” and “bulk” destruction.	No interpretation needed
T	DS.05.01.03	Being able to reproduce and explain the methods for destruction.	Detonation, (explosive) incineration and scrapping.
T	DS.05.01.04	Being able to reproduce and explain the different ways for destruction, in regards to the surface.	Underwater, on the surface (open or covered), under the surface (open or covered).
T	DS.05.01.05	Being able to reproduce and explain for which items the destruction site has to be checked after destruction.	Residue of weapons, ERW items, pyrophore substances (special WP) and explosive- or flammable substances.
T	DS.05.01.06	Being able to reproduce which Health Risks are present at the demolition site.	Toxic substances released immediately after destruction or ERW.