

# The Advisory Council on Ethics for the Norwegian Government Petroleum Fund

Oslo, 16 June 2005

(Unofficial English translation)

## Recommendation on exclusion of cluster weapons from the Government Petroleum Fund

### Introduction

The Advisory Council on Ethics for the Government Petroleum Fund recommends that the companies General Dynamics Corp, L3 Communications Holdings Inc, Raytheon Co, Lockheed Martin Corp, Alliant Techsystems Inc, EADS Co (European Aeronautic Defense and Space Company) and Thales SA be excluded from the Petroleum Fund because they are presumed to be involved in production of cluster weapons.

In the Ethical Guidelines' point 4.4, first sentence, it is stated:

**“The Advisory Council shall issue recommendations on negative screening of one or several companies on the basis of production of weapons that through normal use may violate fundamental humanitarian principles.”**

In the Government whitepaper on ethical guidelines (NOU 22: 2003), and through the subsequent treatment of the guidelines in Parliament, it was decided that cluster weapons would be considered to be within this category of weapons/ammunition.

The reason for this was that although cluster weapons are not subject to specific restrictions under international law, it can nevertheless be seen as unethical to use such weapons as this may constitute a violation of “fundamental humanitarian principles”. The concept *fundamental humanitarian principles* encompasses the principle of *proportionality* - that the potential for humanitarian suffering must be weighed against the potential military advantage, and the principle of *distinction* between military and civilian goals.<sup>1</sup> Particularly the principle of distinction could be violated through use of cluster weapons for the following reasons: *During* an attack, explosive devices are scattered indiscriminately over a large area and it is difficult to avoid civilian casualties. *After* an attack, many types of cluster munitions remain unexploded and therefore continue to constitute a danger to the civilian population.

‘Cluster weapons’ is the common description for weapons which consists of a canister that contains bomblets or explosive devices. Size and type of canisters, as well as type and number of bomblets, varies. The weapons are being made with the intention of spreading the effect of bombing over a large area. They are therefore often labeled “area weapons”.

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<sup>1</sup> See NOU 2003: 22, pages 142-143 concerning the Graver Committee’s understanding of *fundamental humanitarian principles*.

One normally distinguishes between different “generations” of cluster weapons which have been developed since World War II. The first “generation” is normally referred to as “*Improved Conventional Munitions*” (ICM). These have mechanical detonating systems, and have a high percentage of duds. The next “generation” of cluster munitions is designed to both penetrate heavy armour while simultaneously injuring military personnel. These are therefore called “*Dual Purpose Improved Conventional Munitions*” (DPICM) or “*Combined Effects Munitions*” (CEM). Such cluster munitions have somewhat more advanced fuse mechanisms which increase the chances that the bomb will be detonated, but these weapons also have, on the whole, high percentages of duds. Even cluster ammunition that is fitted with self destruct or self neutralizing mechanisms will, for several reasons, in many instances fail, and thus remain as explosive remnants or duds.

The Advisory Council has recommended excluding companies which are involved in production of key components for such cluster weapons. Such components may typically be the bomb canister as well as the bomblets which constitute the ammunition, in addition to other parts which are essential for the functioning of the weapon.

The Advisory Council has examined the Petroleum Fund’s portfolio as well as the benchmark portfolio with a view to identifying companies which are involved in production of such cluster weapons that are mentioned above. It is emphasized that this recommendation does not contain an exhaustive list of possible producers of cluster weapons, and that new recommendations concerning the exclusion of companies on this basis may be given later.

### **Cluster weapons**

There is a range of delivery methods for cluster munitions. Air-delivered cluster munitions are normally contained in various bombs, but also missiles with cluster munitions can be delivered from aircraft. The air-dropped cluster bombs can be equipped with various types of steering mechanisms. The surface-delivered cluster munitions can be delivered by artillery shells, mortars and missiles.

Estimates concerning the dud rates for cluster munitions vary. Producers often refer to a failure percentage between 2 and 5. Military forces have, under some circumstances, accepted a failure rate of up to 10-12 percent. Mine clearers often report that the portion of cluster munitions duds is between 10 to 30 percent. A series of statistics exists concerning the failure rate connected to the use of cluster munitions, both from the users (for example from the Ministry of Defense in the United Kingdom and the US Department of Defense) and from various humanitarian organizations and mine clearers.

The failure rate depends on various factors such as what type of ammunition is used, the delivery method and the circumstances pertaining to where the ammunition lands. In recent years, cluster munitions have increasingly been used as rocket- or artillery-fired ammunition, while at the same time the use of air-dropped cluster munitions has diminished. The most common firing system of late is the so-called Multi Launch Rocket Systems (MLRS). Humanitarian organizations have alleged that cluster munitions fired by this method caused over 4,000 deaths after the Gulf War in 1991. Under this (“Desert Storm”) operation in Iraq, artillery-delivered cluster munitions (with a capacity for 7728 explosive devices dispersed by 12 rockets) had a failure rate of approximately 16 percent (the Pentagon’s estimate in a report

from 2000).<sup>2</sup> This implies that there would be approximately 1236 undetonated explosive devices in an area of 12 to 24 square kilometers. This type of cluster weapon has also been much used in the latest Iraq War.

The fact that an area has been exposed to cluster bombing often has the result that one cannot risk using the area for agriculture or other civilian purposes. Areas which have been exposed to cluster bombing often has to be cleared in a manner which is just as resource- and time-consuming as ordinary minefields.

### Key components

As mentioned above, a “cluster weapon” consists of a canister which contains smaller explosive devices. This will constitute main components. Both types these components are comprised, however, of a number of other components.

The small explosive devices or bomblets are certainly key components in a cluster weapon. These consist of components such as the explosives themselves, the surrounding canister and a detonation mechanism or fuse which make the explosive charge detonate. The canister which contains bomblets is, as a rule, specially designed for this purpose and must therefore be regarded as a key component in a cluster bomb. This also consists of several sub-components. All canisters will have a mechanism or a fuse which makes the canister open and drop the smaller explosive devices. Both the containers and bomblets will, in many instances, have guidance mechanisms which can make them steer toward the target, and make them strike at the correct angle. Such guidance mechanisms make it possible to drop cluster bombs from greater heights and therefore avoid anti-aircraft fire. They could therefore also be considered as key components.

Due to a very large variety of types and product specifications within the term cluster weapons, the Advisory Council will not attempt to establish an exhaustive list of what are “key components” in such weapons. The above section is therefore only meant to exemplify what could be key components in cluster weapons.

### **Cluster weapons which are not considered covered by the guidelines**

Production of certain types of cluster weapons is not considered to constitute a basis for disinvestment. These weapons are the so-called “Advanced Munitions” of the type CBU 97/CBU 105 with bomblets of the type BLU 108. The number of bomblets is very low, a maximum of 10 submunitions per bomb, and these are target-seeking and made to detonate only when they hit armored vehicles. This weapon is therefore not classified as an “area-weapon” designed to hit randomly within a larger area.

There seems to be a rather limited risk that civilians will be hit *during* an attack with this kind of ammunition because the number of bomblets is so low. A low number also yields greater reliability because there is then room for better fuse mechanisms, which again means that there is also not much danger that civilians are affected *after* an attack because the dud-percentage is extremely low. The Advisory Council does not consider these weapons to be in violation with fundamental humanitarian principles.

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<sup>2</sup> Human Rights Watch “A Global Overview of Explosive Sub-munitions”, May 21-24, 2002.

### **Companies which are involved in production of cluster weapons:**

The Advisory Council has based this recommendation on information which has been received and obtained from a number of different sources. In addition to our own research, we have obtained information through the database of *Jane's Information Group*, from the Norwegian People's Aid landmine division, the Human Rights Watch's Arms Division, the International Campaign to Ban Landmines (ICBL), the Norwegian Defence Research Establishment (FFI) and the British screening company EIRIS (Ethical Investment Research Service). The Advisory Council has processed this information with a view to identifying companies which are involved in production of cluster weapons.

In the middle of April 2005, the Advisory Council requested that Norges Bank contact a number of companies with a view to receiving confirmation on the information concerning the possible involvement in cluster weapons production. These companies were asked to answer the following questions:

*"In connection with the implementation of these Guidelines we have been asked by the Advisory Council on Ethics for the Government Petroleum Fund to enquire whether it is correct that your company, or subsidiaries of your company, are producing, assembling or planning to produce or assemble: key components to air delivered or surface delivered cluster dispensers such as aerial bomb dispensers, rockets or other containers, and/or sub-munitions for such dispensers, such as ICM (Improved Conventional Munitions) or DPICM (Dual Purpose Improved Conventional Munitions)/CEM (Combined Effects Munitions)."*

The below companies received this letter at the end of April 2005. The companies have, through this communication, been given the opportunity to comment on the recommendation to disinvest and the background for this in accordance with the guidelines' point 4.5.

### **Recommendation:**

The Advisory Council on Ethics recommends that the following companies be excluded from the Government Petroleum Fund according to the Guidelines' point 4.4, first sentence, which constitutes the basis for exclusion of companies that are involved in production of weapons that through normal usage may violate fundamental humanitarian principles:

**General Dynamics Corporation** acknowledged in a letter dated 2 May 2005 to Norges Bank that the company produces fuses for BLU-97 which are explosive devices in various cluster weapons, among others those that are included in JSOW-A (Joint Standoff Weapon). This is considered as a key component in cluster weapons.

The Advisory Council recommends that **General Dynamics Corporation** should be excluded from the Government Petroleum Fund.

**L3 Communications Holdings Inc.** acknowledged in a letter dated 2 June 2005 to Norges Bank the following: *"... Norges Bank requested information regarding Y L-3 Communications' involvement in the development and/or production of components for cluster munition dispensers or the sub-munition contained therein. Two companies within L3 Communications Corporation manufacture and design such products."* This concerns "safety and arming devices", which is to say fuses and percussion caps to various types of air- and ground-delivered cluster weapons. This is considered as key components in cluster weapons.

The Advisory Council recommends that **L3 Communications** should be excluded from the Government Petroleum Fund.

**Raytheon Company** produces, according to its own web-site,<sup>3</sup> JSOW (Joint Stand Off Weapon), and cluster munitions to these: “*JSOW integrates the BLU-97 combined effects bomblets and the BLU-108 sensor fused weapon submunitions for area targets or armoured vehicles*”. These are considered as cluster weapons. This information is confirmed by Jane’s Information Group. The company has not replied to the communication from Norges Bank.

The Advisory Council recommends that **Raytheon Company** should be excluded from the Government Petroleum Fund.

**Lockheed Martin Corporation** produces, according to its own web-site,<sup>4</sup> various missiles which can be categorized as cluster weapons. One of these is the MLRS M 26-S. This is a surface-to-surface missile which is fired from artillery systems of the type MLRS. M 26 contains 644 bomblets of the type M77 DPICM cluster ammunition. The company also produces other types of weapons within this category. This information is confirmed by Jane’s Information Group. The company has not replied to the communication from Norges Bank.

The Advisory Council recommends that **Lockheed Martin Corporation** should be excluded from the Government Petroleum Fund.

**Alliant Techsystems Inc.** produces cluster bombs of the type CBU-87/B, which contain 202 pieces of BLU-97 explosive devices. This is one of the most commonly used air-delivered cluster weapons. This information is verified by Jane’s Information Group. The company has not replied to the communication from Norges Bank.

The Advisory Council recommends that **Alliant Techsystems Inc.** should be excluded from the Government Petroleum Fund.

**EADS (European Aeronautic Defense and Space Company)** has confirmed in a letter to Norges Bank, dated 8 June 2005, that the company is part of a 50%/50% joint venture with Thales SA (see below), in the company TDA. According to the letter TDA produces, among other things, the artillery grenade PR Cargo, which is described as follows in the above mentioned letter: “*This is a submunition projectile for 120 mm rifled mortars. Equipped with dual effect-submunitions, it engages dismounted troops and light armored vehicles.*” According to Janes Information Group’s database Infantry Weapons, PR Cargo contains 16 bomblets each. This type of weapon is an “area-weapon” and is primarily used against personnel. The Mine Section in Norwegian Peoples Aid confirms that the use of artillery delivered cluster munitions constitutes a substantial humanitarian problem.

The Advisory Council recommends that **EADS (European Aeronautic Defense and Space Company)** should be excluded from the Government Petroleum Fund.

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<sup>3</sup> [http://www.raytheon.com/products/stellent/groups/public/documents/content/cms01\\_055754.pdf](http://www.raytheon.com/products/stellent/groups/public/documents/content/cms01_055754.pdf)

<sup>4</sup> [http://www.missilesandfirecontrol.com/our\\_products/firesupport/MLRS-M26\\_Rocket/product-MLRS-M26\\_Rocket.html](http://www.missilesandfirecontrol.com/our_products/firesupport/MLRS-M26_Rocket/product-MLRS-M26_Rocket.html)

**Thales SA** confirms on its own web-site<sup>5</sup> that the company, together with EADS, constitutes 50% of the company TDA, and it is thus recommended that this company be excluded on the same basis as EADS. Thales has not answered a letter from Norges Bank.

The Advisory Council recommends that **Thales SA** should be excluded from the Government Petroleum Fund.

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This recommendation was given to the Ministry of Finance on 16 June 2005 by the Advisory Council on Ethics for the Government Petroleum Fund.

Gro Nystuen    Andreas Føllesdal    Anne-Lill Gade    Ola Mestad    Bjørn Østbø  
(Chair)

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<sup>5</sup> [http://www.thalesgroup.com/ga/business\\_zone/defence/air\\_defence.htm](http://www.thalesgroup.com/ga/business_zone/defence/air_defence.htm)