ICBUW

The International Coalition to Ban Uranium Weapons

‘International Conference to Ban Uranium Weapons’

Conference Report

Brussels

June 2005

This conference was organised by the International Coalition to Ban Uranium Weapons. It was sponsored by the Intergroup for Peace Initiatives of the European Parliament.

It received, and would like to gratefully acknowledge, support from the Green Group/EFA and the Group of European United Left and Nordic Green Left (GUE/NGL).

Intergroup for Peace Initiatives of the European Parliament

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Introduction

International Conference for a Ban on Uranium Weapons
European Parliament, Brussels, 23rd and 24th June 2005

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ICBUW's aim in organising the conference was to cooperate with members of the European Parliament on the implementation of a ban on uranium weapons through a United Nations Treaty.

The Conference offered members of the European Parliament and other participants the opportunity to hear updates on the developments in the 'depleted' uranium issue and to take an active interest in further work.

Why stage a conference in the EU Parliament when it had already adopted a resolution in February 2003 calling for member states to implement a ban on the use of depleted uranium weapons?

Unfortunately there has been little movement to implement that ban on the part of member states. The conference wanted not only to put the issue of uranium weapons back on the Parliament's agenda, to increase pressure on member states to implement the ban, but also to get it to seek a global ban on the use of uranium weapons. The instrument for achieving this would be the draft treaty that ICBUW, the International Coalition to Ban Uranium Weapons, had prepared.

ICBUW wanted parliamentarians to take an active interest in supporting the aims of the campaign and to cooperate in setting up a feedback mechanism with national parliaments, because one of the most important aims of ICBUW is to gain the support of countries striving for a ban.

The conference was attended by representatives of groups from Japan, the US and Canada, as well as from many EU countries. They all shared the same burning commitment: to see the immoral, deadly weapon banned.

Conference Purpose

The purpose of the ICBUW conference in dialogue with the European Parliament

ICBUW wanted to prepare the ground to reintroduce and to update the European Parliament (EP) on the status of the depleted uranium ban campaign, and for the EP to take an active interest in supporting the aims of the campaign 'for a Ban on Uranium Weapons'.

The EP as a whole can encourage this process, by providing a forum and the resources for the necessary international debate between the national parliamentarians, NGOs, experts, victims' organisations, soldiers' trade unions etc. Such a forum function would encourage the vital initiatives at the national level. This process should not be restricted to EU countries, but also reach beyond them to all countries concerned with this issue.

The EP can stress the need for more independent medical and environmental impact research (both long-term and short-term) and can call on the Member States of the EU and NATO to propose that a moratorium be placed on this type of weaponry 'in accordance with the precautionary principle' as defined by Council and Parliament on several occasions. ICBUW expects that the EP has to handle this in accordance with its own Resolutions.

ICBUW was founded, because governments and many national politicians had deserted the victims of DU weapons. The fact that situations such as these exist has a profoundly negative effect on policy making, by corroding public trust in science and technology. This public trust can be only restored by more long-term and short-term independent medical and environmental impact research. ICBUW welcomes this attitude and is of the opinion that the EP can play a significant role in pushing the discussion on uranium weapons to a higher level.

Background

Because of the radiological and chemical properties of depleted uranium (DU), remnants of deployed uranium weapons cause long-term damage to living creatures and the environment. Uranium oxide dust particles can be carried for long distances by the wind and can enter the food chain. In 2002, scientific data at the *Armed Forces Radiobiology Research Institute* (Maryland, USA) demonstrated that DU at ph7 can induce oxidative DNA damage and that it can induce carcinogenic lesions, by means of its chemical toxicity alone. (1)

On 13 February 2003 the European Parliament adopted a Resolution (2) in which it stated that:

- "NATO has not banned uranium weapons;- credible efforts are needed to ensure that any use of such weapons is not in violation of the Additional Protocol I to the Convention on Conventional Weapons;

- international law does not currently provide for compensation for possible harmful effects of such weapons systems;

- EU citizens serving as civilian and military members of peacekeeping and peace enforcement operations could have been, and could yet become, victims of such weapons when engaged in humanitarian civilian and military missions and potentially under future ESDP missions."

In this Resolution, the EP: *"Requests the Member States to immediately implement a moratorium on the further use of depleted uranium ammunition (and other uranium warheads), pending the conclusions of a comprehensive study of the requirements of international humanitarian law."*

To the present day, European Member States have not established these recommendations, largely due to the fact that some Member States possess uranium weapons themselves. Membership of NATO has also increased the pressure on states not to disarm.

Financial support requested

Together with ICBUW, the Belgian Coalition Stop Uranium Weapons organised this international conference in the EP in Brussels on 23rd and 24th June 2005. We are still seeking sponsors for this important conference. Donations can be paid on Account 733-0261889-19 of *Belgian Coalition Stop Uranium Weapons*. Please mention '*conference 2005 donation'*. For international payments, use BIC-code KRED BEBB and IBAN-code BE397330 26188919.

References:

(1) Depleted uranium-catalysed oxidative DNA damage: absence of significant alpha particle decay, Alexandra C. Miller et al., Applied Cellular Radiobiology Department, AFRRI, in Journal of Inorganic Biochemistry, Vol. 91 (1), 25 July 2002, pp. 246-252

Unexploded ordnance and depleted uranium ammunition. P5_TA(2003)0062.

Conference Reader
Thursday 23rd June

On Thursday morning, 23rd June, the conference was opened with a welcome from Henk van der Keur, a member of LAKA, the Netherlands, and Nobuo Kazashi, Professor of Philosophy, Kobe University, Japan and Director of the NO DU Hiroshima Project. This was followed by country presentations from Belgium, the Netherlands, Germany and Iraq. Because of unforeseen circumstances, the UK presentation was made the following day.

During lunch time, there were photo calls and press interviews.

The open session on Thursday afternoon, 23rd June, took the form of a panel discussion :

Uranium Weapons – A Multi-faceted Problem

It was billed as a 'multi-faceted' conference as ICBUW wanted to look at all aspects of the problems that uranium weapons pose, and at the different campaigns that members of the Coalition had adopted to expose these dangers. There was even space for a representative of NATO to come and justify its clinging to the use of uranium weapons, an opportunity that NATO chose to refuse.

The session was introduced by Bart Horemans, and chaired by Vittorio Prodi, MEP (Italy), who also gave the opening talk.

Vittorio Prodi MEP
Vittorio Prodi examined the way in which depleted uranium (DU) reacts when it hits a hard target. He described how the DU would turn into aerosolised toxic particles in the very high temperatures which result at the time of the explosion. He then went on to say that these 'nano-particles' might come together and lodge in the respiratory tracts. He also pointed out that the chemical and radiological toxicities may have a synergistic effect. He was convinced of the dangers of the toxicity of DU weapons when exploded in battle.[1]

Dr Jawad Kadhim Hassan Al-Ali, **Head of the Sadr Teaching Hospital in Basra, Iraq,**
Dr Al-Ali went on to expand the arguments given by Vittorio Prodi. He was concerned to emphasise the effects of uranium on children where the rate of absorption is much greater than in adults. He described how the uranium could so easily be spread around in Iraq.

1. Uranium which was in the soil could be spread by re-suspension and carried for long distances.
2. Uranium could be spread by moving vehicles.
3. People collect partially-destroyed vehicle and gun scrap to sell for money or to return them to the government for money.
4. Direct hits on his hospital mean that the doctors in the hospital are affected by cancer – at least eight when he spoke, and eight other para-medical staff.

Dr Al Ali then showed a series of slides showing the spread of cancers in his city of Basra where the DU bombing has been extensive. Further slides showed the rise in the incidence of cancers and birth defects and the mortality levels. He also showed deeply moving slides showing horrendous tumours (malignant fibrous histiocytoma and non-Hodgkin lymphoma) in children, and a man with triple cancers. The prevelance of multiple cancers has increased markedly following both Gulf Wars.

As he said, in Basra they had all the cancer risk factors before the war, but they did not have a large number of cancer cases. The only risk factor which was different after 1991 was the radiation from DU.

He gave compelling evidence of the devastating increases in the incidence of cancers and other virulent diseases and birth malformations in areas where DU had been used. No full epidemiological survey has been done in Iraq yet, although all the evidence indicates a direct link with DU, and Dr. Al-Ali issued a moving appeal for funding to enable him to conduct such a survey. [2]

Dr Caroline Lucas MEP

Caroline Lucas welcomed the group to the EP and congratulated ICBUW on calling the conference on such an important issue. She said that her interest in the issue arose when she visited Iraq at the beginning of 2003. She had been to Basra and heard from the staff at the teaching hospital there about how the number of cases of leukaemia had risen and also the number of birth deformities and abortions since the first Gulf War. The doctors had told her that they sincerely believed that these illnesses and birth malformations were connected with the use by the US and the UK of DU weapons in the first attack on Iraq.

Dr Lucas assured the audience of her determination to continue working on the issue by offering a forum for an international debate between national parliamentarians, non-governmental organisations, trade unions, soldiers and victims'organisations. She also hoped that the EP would be able to help with challenging some of the existing methodologies on low level radiation which are being used by the ICRP (International Commission on Radiological Protection). She also saw the Parliament as being a forum for gathering alternative evidence and suggested that they should invite UNEP (United Nations Environment Programme) to come to talk about the concerns and risk of DU weaponry. She pledged support for working with ICBUW**.**[3]

Manfred Mohr (ICBUW Board member)

Manfred Mohr spoke not only as an ICBUW Board member, but as an active member of IALANA (the International Association of Lawyers Against Nuclear Arms). He said that the international law perspective, even though the subject is complicated, might give clarity. He pointed out that international law does not just depend on articles and treaties, but basic principles. A very important principle is the 'precautionary principle,' which is closely aligned with environmental law and international humanitarian law. As he stated: 'If something might be dangerous, or has a great risk with regard to civilians, soldiers or any kind of human being, then it is better to stop it'. He was looking forward to the publication of a book, carried out with a colleague, Avril McDonald from the Asser Institute in the Hague, which would comprise a collection of authoritative legal articles on the legality of the DU issue. He welcomed the links with the European Parliament, but also looked to making links with NATO. He suggested too, that it would be worthwhile to follow up a Council of Europe Resolution made in 2001 which called for a ban but which has never been implemented. He added that we could all learn from other movements, for example, the Land Mines Campaign.[4]

Dr Keith Baverstock, former Head of the Radiation Protection Division of the World Health Organisation,

Dr. Baverstock, discussed the way DU was able to cause genetic damage to the body. The damage was due not only to the radiation that DU particles emit when lodged in tissue, but also to the chemically toxic nature of DU with a potential for synergy between the two. A third route to health risk comes from the 'bystander' effect, when cells contiguous to one hit by radiation behave as if they too had been irradiated.

He suggested that the International Commission on Radiation Protection (ICRP) and the IAEA, the International Atomic Energy Agency, were irresponsible in deliberately ignoring the scientifically proven damaging health effects of DU and called on them to use the precautionary principle. He made an impassioned plea for truly independent scientific research, which had been sacrificed for political expediency. This had led to a lack of public trust, without which democracy cannot work. Science should provide the evidence, untainted by political considerations, upon which the politicians should decide the risk that is acceptable.

Els de Groen MEP
Els de Groen told the meeting about difficulties she had heard of within the ICRP in establishing danger levels of radiation doses. Many sincere scientists felt they had been ignored. She gave detailed scientific reasoning on the dangers of low level radiation and particularly where uranium particles can be inhaled or ingested. She also added that the dangers were much higher for children when they were growing.

She was most concerned about what she saw as a deliberate cover up of the dangers of radiation by official bodies, such as the ICRP. As she said: 'the danger of radiation is immense and people who know this and who use uranium in weapons – they are criminals'.

Emmanuel Jacob Board member of EUROMIL
Emmanuel Jacob explained about EUROMIL, which is an organisation of 34 military associations from 22 countries, from Ireland to Russia, from Finland to Greece, Spain and Italy. Some members are military trade unions; some are professional associations. The mission of EUROMIL is to represent human rights, fundamental freedoms and professional interests of military personnel. These aims explain how the question of DU, which had been used in the Balkans and Iraq, came up in a discussion at a praesidium meeting of EUROMIL in Sofia. While he said he regretted that no earlier action had been taken, he said there was now a EUROMIL position document.on DU. He promised that EUROMIL would draw up a report on the conference and send it to all their member organisations. He would ask member organisations to contact ICBUW because, 'The use of these kind of weapons must stop'.

There followed an open discussion detailed below:

Ernst Guelcher (Assistant to the Green Parties, European Parliament) called for debate on the right for the military to establish their own bodies or unions to defend their human rights. He spoke of the need for any research into the effects of DU to be carried out properly and reminded people of the Pekka Haavisto study of the effect of NATO bombing in Kosovo where timely access had been denied. Forces sent from EU countries are part of the European Security Policy and therefore the Parliament needs to recognise that it is irresponsible to send troops into certain areas. When court cases in relation to DU take place, he urged people to bring them to the MEP's attention and for the evidence to be heard in Europe.

Emmanuel Jacob (EUROMIL) spoke of the need to change the perception that defence, including DU problems, is a national issue not a European one. Attitudes are gradually changing in the military, with more soldiers prepared to speak out, but laws change quicker than the military mindset. Even so, change is happening: the deployment of troops to the Balkans was accepted unquestioningly, whereas there has been huge debate over sending troops to Iraq.

Karel Koster (ICBUW Board) asked for clarification on whether Euromil supported a ban on DU weapons and if so, how it affected organisations from the UK.

Emmanuel Jacob replied that Euromil had indeed urged governments to ban the use of DU weapons. There was no problem with the UK, because the UK military are not allowed to have unions.

Rashad Salim (IXDU London) thought people should be moving away from discussing the science behind DU. We should concentrate on gathering the facts so that we can use the evidence to work for a ban.

Bart Horemans asked if one of the UN institutions or the European Commission could undertake such research and publish it..

Ernst Guelcher replied that political interference could hamper such research, as seen in Kosovo. He spoke of the importance of ensuring politicians became aware of the real facts around DU use, as seen in the film shown earlier or as heard in the evidence to the courts in Italy about military victims of DU. He had heard that UK and NATO troops were under pressure to remove DU from their arsenals and hoped that with continued pressure from the EU Parliament the US would be isolated.

Dr Baverstock spoke of the possibility of science establishing DU as a poison. Firstly, as its toxicity is both chemical and from radiation, and as it is a public health issue, the World Health Organisation is the most appropriate body to study the science. Another route is via the courts because suing means there has to be an investigation of the science. This publicises the science and successful cases create legal precedents that could lead to multiple - and costly - compensation claims. The third way is through peer-reviewed literature. He had recently reviewed the latest evidence and would be submitting a paper for review shortly.

Avril McDonald (Asser Institute) disagreed that there was already a watertight case against DU because of the lack of epidemiological research. We cannot say that DU is already illegal, it is how a weapon is used that determines legality. She supported warmly a ban, which will make questions of legality superfluous, but pointed out that it will not solve the problems of DU remnants or existing exposure to DU. The issues of clean up, testing and long-term problems must also be addressed. All legal issues should be considered: human rights and disarmament laws are as relevant as those relating to armed conflict. It is hugely important to get the military on our side. Two issues that could involve them were the military necessity, or even effectiveness, of DU weapons, disproved by her research, and the issue of superfluous injury or unnecessary suffering. She asked Mr. Jacob, given the huge incidence of illness related to the Gulf War and the high costs for the US military, what strategy EUROMIL had for some sort of concerted campaign with US military colleagues.

Emmanuel Jacob did not think DU was militarily necessary , but thought this was irrelevant. The military is changing, new investments tend to be for peace support operations, not weapons. It has taken 30 years to reach the current stage of EUROMIL with 34 associations from 22 countries. They are interested in contact with the US but, as with the UK, they are hampered by the fact that military trades unions are not allowed. Their only contacts are through veterans' associations, which they will visit next year. He looked forward one day to forming WORLDMIL.

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Manfred Mohr, responding to Avril, thought that despite differences of opinion on detail there was broad consensus. A watertight case against DU was possible. And research could perhaps be done by UNIDIR, currently investigating small arms and explosive remnants of war from a political as well as medical, scientific and developmental perspective. He suggested raising the DU issue in respect to the equipping of EU military units being formed.

Dr.Baverstock said epidemiological evidence was not essential to demonstrate DU was a poison and many chemicals had been banned without such evidence. With radiation, except for the atomic bombing of Japan and experience with radon, the ICRP had decided on the safety levels of exposure largely through models.

Tana de Zulueta, (a member of the Italian Senate), said that the Senate had set up a committee of inquiry into the effects of DU weapons not because Italian forces are equipped with these weapons but because they are exposed to them in joint operations within Nato. Their troops were only warned of the dangers in 1999, after six years of exposure in Somalia and the Balkans. Lobbying from the military prompted the government into setting up the committee but its main concern is protecting itself from legal action and ensuring no link is made to that exposure. She suggested that Dr Baverstock and others he might recommend, could appear before the committee to make the case for a ban. The Italian government had said it would not use DU weapons and this might be a good starting point for getting other countries to make the same commitment. Her committee is due to report at the end of the year, or the beginning of the next.

Manfred Mohr announced the renunciation of the use of DU by the German government, coupled with moves towards a ban and international action.

Manfred Mohr The Bundeswehr is also renouncing the use of DU, a renunciation of own use, coming to a ban, becoming active on an international level.

Rae Street (CADU, UK) said interest in the UK focused on the health effects of DU weapons. She thought few scientists would agree any watertight cases were possible, so it was very important to establish the chemical as well as the radiological toxicity of DU. Scientists are faced with political pressure on this issue because of the connections of low level radiation to nuclear power, especially at a time when some are calling for new nuclear power stations. The UK has no foreign policy independent of Nato and the US and so must retain uranium weapons. She decried the nonsense of a recent government denial that DU weapons were radiological because Nato's own definition of a radiological weapon is one that kills radiologically and DU weapons are designed to penetrate. There is some opposition to DU weapons in smaller UK political parties.

Dr. Baverstock to Tana de Zulueta:
Yes, I would be happy to cooperate in anything that caused a change in the current position, so if that were an invitation to give evidence I would be happy to do that.

Els de Groen:
Economic pressure, economical short term interest, produces political lies. But lies do not exist without a truth. There are honest scientists too. Destroying a whole country forever however, who is going to take that responsibility?

Friday 24TH June

Manfred Mohr introduced the day's programme.

The morning was chaired by Freda

Inez Louwagie opened with a presentation on 'Banks Investing in Arms and Uranium Weapons' from Network Flanders.

Inez outlined the progress and achievements of the banks disinvestment campaigns. She hoped that members would be able to use the model of this campaigning at national level and further exchange ideas. Her group had started by publishing a report, which revealed the links between bank investments and arms manufacturers. But although there was some press and public attention there was no real change. The group then moved forward by focussing on investments in companies involved with controversial weapons, including DU weapons. After one year's campaigning, all the banks developed policies on investments in the arms companies. Some were better than others and two banks mentioned DU in their exclusion policies. She outlined the different policies of the banks and said that in one case lobbying by ICBUW had achieved getting the bank to list DU weapons manufacturers in their exclusion list.

She listed what could be done by local and national groups.

1. Research is needed into which companies produce DU weapons.
2. Banks all have different criteria, but groups could push for those with not very strong policies to go further – and for example include DU weapons.
3. Groups could use the survey already produced on some banks to raise the issue with banks not in the survey. They could ask what policies banks had and turn this into a public awareness campaign.
4. Emphasise the legal aspect. Banks are of course concerned about ethical policies, but they are much more likely to be influenced by the fact that DU might be illegal. Tell them that ICBUW is lobbying strongly for a UN negotiated ban on uranium weapons.
5. Lobby for more transparency by banks on their policies on investment in the arms and defence industry.
6. Go to talk to the heads of banks and get them to write to companies to see if those companies produce DU weapons.
7. Buy shares in the banks which will allow you to go to shareholders' meetings and ask pertinent questions.

There followed a question and answer session:

Many of the campaigns to rid the world of DU weapons focus on health effects and the victims of the use of DU weapons. During the lunch time, Dr Toshi Inoshita, a Japanese haematologist, gave a presentation on the epidemiology of the illnesses in Iraq, with a talk on the work of his charitable organisation, the Japanese Medical Network.

Gretel Munroe from Grassroots Actions for Peace and **Dr Katsumi Furitsu** of the Campaign against Radiation Exposure gave comprehensive reports into the evidence they had amassed on damage to both Iraqi civilians and US veterans exposed to DU dust. Their activities are not limited to research however, and the groups are variously active in campaigning on the issue, educating people about the dangers of DU with lectures, exhibitions, petitions, political lobbying and seeking to provide medical aid for Iraqis.

In the afternoon there was a session devoted to the Legal Aspects of DU weapons:

Avril McDonald from the **Asser Institute** gave an excellent paper on why, with the wealth of international humanitarian law (IHL) that would seem to make DU already illegal, we should be seeking a treaty to ban uranium weapons.

The body of international humanitarian law was useful, she thought, for looking at the circumstances where DU is used, but is only relevant whilst conflict is on-going and therefore cannot be used in a pre- or post-conflict situations, when we would want to look at issues of remediation or rehabilitation. There were existing laws that could provide some redress, such as the law on States' Responsibility, the law on Armed Conflict, the Disarmament legislation, even the International Labour law for affected troops, but their usefulness was often undermined by the clause of 'military necessity'. She dismissed the arguments for military necessity with regard to past use of DU, showing that DU had been an advantage, but not a necessity so far.

Some principles of IHL, such as the obligation to discriminate between civil and military targets, could never be justified by military necessity, but this principle concerns only the primary effects of a weapon. Although it is clear DU violates the principle limiting conflict in time and space, we do not have the scientific evidence to prove it.

She went on to show the problems of using the precautionary, environmental and proportionality principles. Even the disarmament laws cannot help as they affect weapons designed to have nuclear, chemical or radiological effects, whereas DU weapons are not designed to have chemical or radiological toxicity as their prime purpose.

She advocated the precautionary approach as a way of moving forward. This would begin with precaution in targeting, so that DU would not be used where it would breach principles of IHL, (as it did when used against buildings in Baghdad). This would extend to the aftermath, when users would have legal responsibility for remedial matters. There should be precaution in testing, with environmental monitoring and life-long testing of exposed individuals. DU should be examined in the Legal Review of Weapons and these reviews should be ongoing as more information becomes available.

A moratorium should be sought as a precursor to a complete ban. This sends a signal that something is wrong with that weapon. Finally a ban* is a total necessity, as lawyers can always find a way round a set of principles, such as those contained in the body of international humanitarian law. A ban creates a legal consensus and isolates those who oppose it.

* A draft convention was circulated and is available

We were also shown a new campaigning video from Japan, from the NODU Hiroshima Project. The film was in English and would be made available for groups.

The conference closed with a reception in the European Parliament.

Conference Transcripts

What follows are transcripts from the full presentations by the conference speakers.

1. Vittorio Prodi MEP

Vittorio Prodi's full presentation

'I thank you for your kind invitation and of course I am very happy to be here, because this is a very serious problem which has similarities to other problems of acute toxicity. I shall try just to give an idea of how DU as it is used in weapons could actually present a very acute problem of toxicity. The mechanism is, of course, tied in with the way it is used in a warhead with high explosive; and also the specific properties of weapons grade uranium with its high density. And there are very few applications for depleted uranium.

The conditions of use then determine the very high concentration of material around an explosive charge that is then dissipated by the impact of the projectile on the target. The addition of kinetic energy and of the chemical energy of the explosive gives a very high temperature to the uranium mass. One can say that all the uranium is vaporised under these conditions, and then subsequently dispersed under the action of the explosion. So there is a combination of a very high amount of material that is vaporised and then quickly condensed into very fine particles. So this is the probable explanation.

We have to consider the behaviour of particles from two points of view. The first would be how the particles behave while airborne, and then how they enter the airways and exert their action once they have landed in the airways. What matters in the behaviour of the particles when they are airborne, is the so-called aerodynamic size because these are very fine particles, nano-particles. That means particles of the size of nano-metres, that is a billionth of a metre, that means a few millionths of a millimetre. Practically speaking this means that if the particles, while airborne, were alone they would act like large molecules. But in the very high density environment in which they are formed they quickly agglomerate with one another. So, while they are airborne, they behave as with the properties of an agglomerate. That is, there may be a high probability of their entering the airways.

Once they have entered into the airways then there is the problem of regional deposition because the mechanisms of lung cleaning are very active in the upper airways, in trachea and bronchi. So what lands there generally is cleaned away in a matter of hours. What matters specifically for uranium is what lands in the respiratory region. That is the epithelium region where the gas exchange takes place, and particles can reside in for an extremely long time. That means that of the inhaled uranium aerosol, a substantial part enters into the respiratory region of the airways.

Once it has arrived there, the behaviour of uranium is as single nano-particles, with the body fluids that line the lung alveoli acting as a chemical leach in a way that is characteristic of these fluids on nano-particles. That means that these very small particles have a very big charged surface and that explains the acute toxicity in conditions when one might expect a much more chronic behaviour. That is because with nano-particles having such a big surface, the solubilisation of uranium is relatively much quicker that when there are bigger particles. This might be a very specific toxicology problem for all the instances in which we have a very high concentration of very small particles. Even if the behaviour in air might be that of larger particles, once they have landed into the alveoli, they behave specifically as very small particles with a very big charged surface. So the leaching of uranium into the body might be extremely rapid, with respect to other conditions.

There is evidence that in very high acute toxicity conditions, the behaviour is the same and there is some speculation that even the high toxicity in the 9/11 event when the twin towers collapsed, is connected with toxicological mechanisms to which I have referred. These are the actual conditions of, and the starting of the problem of uranium weapons.

Of course, chemical toxicity is connected to the other property of uranium, the radioactivity of alpha particles. Alpha particles deliver a very high deposition of energy on the tissue and they are specifically of a much higher toxicity with respect to x-radiation or beta-radiation, which have a much more loose way of depositing energy. The combination of these could actually put a further emphasis on the importance of the combined effect of chemical toxicity and radiological toxicity of a very high dose to single cell elements'.

2. Dr. Al-Ali

Dr Al-Ali's full presentation

"I would like to add a few words about the absorption of uranium, which is faster in children than in adults. Also it could pass through the lung, the alveoli, the lymphatic system of the lungs and reach the lymph nodes and cause lymphoma. In the lung it might stay for a year, two years and then at least make its effect on the lung, to cause cancer of the lung. That is why we concentrate on leukaemia's in children, because the uranium is absorbed much more in children than in adults. Lymphoma because it passes through the mucus membranes, through the alveoli in the lungs, to the lymph nodes, to cause lymphoma. And also it might be excreted through the kidneys. That is why renal cell carcinoma is one of the cancers due to uranium.

There are factors which increase the contamination and I am speaking about the factors which 1 saw in Iraq. First is the re-suspension of uranium. Uranium which is found in the soil could be re-suspended and could be carried far distances by winds. And this contaminates very wide areas. Second, is the spreading of uranium by moving vehicles. What we saw in Basra, in our city, is that when we found a vehicle or tank which was contaminated and we went to the coalition forces and we tell them that this vehicle is contaminated and we should take care of this vehicle. On the second day, when we went to the place we saw no vehicle at all. They carried it away to put it in another place. So, they spread contamination from place to place. And than the other factor is the collection of non-destroyed vehicles or guns from the desert, where the battlefields are. Many people were motivated by money from the government of that time, and they went to the desert and they collected these guns and they brought them to their houses to be stored until they return them to the government. And this makes the condition worse. So as a result of all this, we've got a lot of things as a consequence of this contamination.

In our hospital, the Sadr Teaching hospital, we have been hit by 12 missiles around the hospital. Two of them have fallen inside the hospital, in the garden, which led to this destruction (slide) to the hospital. And as result, I have now got sixteen people affected by cancer. Eight of them are doctors. The last one is an ENT specialist, and now he has got cancer of the lungs. And the others are from the para-medical staff. All of them were working in this hospital at that time. Myself, I was working there, and I did an operation two weeks ago for tumour in my thigh. Fortunately it was pre-malignant. I removed it before it changed to malignant. So, the issue of DU is something debatable in view of the increased rates of cancers and the congenital birth defects and other diseases.

On the map of the city of Basra (slide), you can see the dots, (black) are the sites where DU was used in 1991, green dots, is where DU is used inside the city, during the 2003 war. In this map you can see, there are 21 green dots. Now it has risen to 57 dots after a few months. We

localised and confirmed other spots (areas with radiation). The background radiation in Basra is 0.008 (millirad per hour). And this has increased on these sites to 1.5 to even 5. This means that it is raised 200 times more than the normal level. (slide) Someone working in the environmental department is checking this vehicle which is contaminated, and he checked the house next to this vehicle.

(slide) This house is heavily contaminated, and about eleven people are living in this house, so they are under observation now, we will see. Now it is two years after the war and they might have cancer at any time. (slides of contaminated tanks) People cut parts off these vehicles, which are contaminated, and sell the iron to iron factories.

(slides) Trees and villages contaminated. (slide) Another type of contamination. This is after the war; there is no municipality and no services to remove the worst of the contamination.

The health consequences

After 1991, we noticed that a large number of patients were admitted to our hospital, and I was surprised at that time why we had that many cancer patients. It was something surprising; we had not had that many cancer patients before that. And every doctor had one cancer patient under his care at that time and that was four or five years after the war.

We tried to investigate. We did not know what was going on, until 1996 when one of the delegations, accompanied by security officers, whispered in my ear and they told me, Dr. Jawad, we have radiation, contamination. And they have found it even in the rivers, where we take water for drinking. So from that time we were aware about cancers and we started to study our cases. The birth defects also increased, we have familial cancer clustering and we have diseases of unknown etiology, like myopathy, neuropathy or renal disease. And we think that these are due to chemical toxicity of uranium.

(slide) In 1988 we had only 116 patients with cancer while in 2004 we had 800. And this is only 40% of the cases. We reported only 40% of the cases in our centre. We started a project with the help of a German university, on the bottom of the slide, and we have started now to record about 90% of the cases.

(slide) This is cancer in children, and you see the first line that shows leukaemia increased from 15 patients to 49 patients. And lymphoma also increased 10 times, And again neuroblastoma; all these are related to radiation.

(slide) This is the distribution according to age of leukaemia in children. You see under five years we have the highest number of leukaemia patients, and it starts to increase from 1995, that is four years after the war. Which is the incubation period for leukaemia after exposure to radiation.

(slide) These are the birth defects, and you see that there has been a great increase in the multiple congenital defect rate, up to a very high number, and then we have the phocomelia, which was zero in our records, now increased to 70 or 75 patients.

(slide) This shows the congenital birth defect rate in 1990, a rate of 3.04 per thousand births has increased to 22: a seven fold increase within 10 years.

(slide) This is leukaemias in adults - chronic myeloid and chronic lymphatic - and you see there is a peak in 1996 and again in 2002 and now we have many cases also of chronic

myeloid leukaemia and this is consistent with radiation effects: after five years you will have a peak and then 10 years later you will have another peak.

(slide) This is the mortality: the number of patients who died from cancer in 1988, we have 34 patients only, while in 2001 we have 603 patients that have died, as doctors we know that cancer mortality equals around one third of the expected new cases. So we expect that we have at least 2000 new cases of cancer in Basra every year. And according to our new records, I calculated the number; it will be more than 2000 per year.

(slide) Again a graph of mortality, and 2003 is added, there is still an increase.
(slide) These are the victims, we will pass quickly, these are lymphomas, which are non-Hodgkin lymphomas, which are very rare under in people under 10 years of age. Non-Hodgkin lymphoma is usually seen after 10 years. So this patient is nine months old. (slide) two-years-old. (slide) six-years-old. (slide) three-years-old.

(slide) This is an important tumour, we call it malignant fibrous histiocytorna. This is a child not yet 10-years-old, a girl, and this is related to radiation, there are very few cases in the world of this tumour, but after the war I recorded about 13 patients.

(slide) Non-Hodgkin lymphoma, 13-years-old. (slide) This is muscle tumour, six-years-old. This is a new patient and I think that it is newly contaminated from the war in 2003, this is acute leukaemia, he is still alive and you can see has bleeding in his eyes. And this is a problem because we have no blood bank to prepare the blood components, we have no separators, so it is very difficult to rescue these patients.

(slide) Leukaemia, three times, bone cancer and positive for uranium in his urine, he and his father and mother. Again bone cancer, next bone cancer. All of these cases are seen now.

(slide) This man has three cancers at the same time. He has got a cancer of the stomach, he was complaining about his digestion, and we did an endoscopy on him. We found a cancer in his stomach and we tried to operate, and during the operation found the left kidney, big, very big, and we took it and it was renal cell carcinoma, and just six or seven months ago he got pain on the other kidney. We could not remove the kidney. We took a biopsy by a needle and it was another type of tumour in the kidney. So he got three tumours, triple cancer.

(slide) This is a family, husband and wife, the man has malignant fibrous histiocytoma in his right shoulder and she has acute myeloid leukaemia and both are related to radiation.
(slide) This is malignant fibrous histiocytoma again in the husband, the wife has renal cell carcinoma. They are living in the same house, and probably they are contaminated by the same risk factor.

(slide) This is a man who is living at the border between Iraq and Kuwait. And he got a wound on his skull and the area is very dusty there and contaminated. So he got contamination of his wound, and he got this cancer.

(slide) bone cancer twice, all of them are children of the age of 12, 13. This is the youngest child, six- years-old and she has got a very huge ovarian cancer. (slide) These are the congenital birth defects, the major congenital birth effects. This a phocomelia which we recorded in 17 patients. And these are the children who are likely to be affected by cancers, they were born in 1991. Their mothers were pregnant at the time of the war. And most of the children you saw there, they were born during this year.

(slide) So why radiation and not other risk factors? Why do we blame DU and not other factors? First fact, that we have all the cancer risk factors before the war but we have no large number of cancer cases. And the only risk factor which is different after 1991 is the DU and it is radiation. The third fact is that the cancers which we record in our department have a special incubation period, which is consistent with a radiation effect. The leukaemia starts to appear after four or five years, while the bone cancer, now we have it, soft tissue cancer we have it 10 years after. So this is consistent with radiation effect.

(slide) We just need to confirm that these patients are radiologically contaminated by chromosomal study, by gene study, by chemical analysis of their bones or tumour tissue or checking for the DU in their urine.

(slide) So this is what we need in Iraq, we need scientific studies, well designed and these studies might help us to confirm the raised cancer rate and birth defects. These studies could be followed by chromosomal and gene studies on these patients, so in that case we could confirm that radiation is the key risk factor. There are specific changes in the chromosomes, typical of radiation. If we could find them in these patients, we could say a 100%, these are radiologically affected and their tumours are due to radiation.
Thank you.

3 Dr Caroline Lucas MEP
Caroline Lucas' full presentation

Thank you, my name is Caroline Lucas, I'm a Member of the European Parliament for the Green Party from Britain. And I just wanted to say a few words of welcome to you this afternoon. I'm very sorry, we could not be with you this morning, and I can not be with you tomorrow either, but I'm very glad to be with you now, and I'm very glad that you are here because I think it is enormously important to have this discussion, and so I would congratulate the International Coalition to Ban Uranium Weapons for organising this conference. I very much welcome the opportunity that it gives us to explore ways of working together to achieve a ban on the use of depleted uranium weapons.

I wanted to start in a way where the doctor has just left off, because many people in the Parliament have been very committed to this issue for years, but certainly speaking for myself, I think what really reaffirmed that commitment to work for a ban on these weapons, is when we visited Iraq. It was just before the start of the most recent conflict, in the beginning of 2003. And along with fellow colleagues, there were around the twenty of us, we visited a hospital in Basra and we were shown the similar kinds of pictures that we have seen here today. We were given the same kind of discussion about how the numbers of leukaemia's had been increasing since 1991. A physician told us that before 1991 there were hardly any leukaemia's in the hospital, now they have 4 or 5 a week. He said that in that city women are afraid to become pregnant because so many of the births are aborted or die in the womb or are born with malformations. And I just wish so much that Tony Blair and George Bush and all the others, could either have been in Basra or could be here with us today, to see what we have seen, to hear what we have heard, because I defy anybody to hear and see that, and still believe that these weapons have a place in any kind of civilised society, because they clearly do not.

One thing that that makes me think is that maybe one of the ways we can think about working together is to try to find more opportunities for more Members, both of the European Parliament, but crucially also of National Parliaments, to get exposed to what you are saying here, to get exposed to the real situation on the ground, in hospitals, I guess not just in Iraq, but across

Afghanistan and many other countries as well where this same problem is growing. Because, I think, when you have that first hand experience, than it really does make you want to act. And I think the European Parliament does have an important role to play, and we have a strong track record of work on this issue, a resolution of February 2003 very clearly calls on member states to immediately implement a moratorium on the use of DU ammunition, pending the conclusions of a comprehensive study of the requirements of international humanitarian law. And I think that does send a very clear signal about the position of this Parliament. The resolution also calls on the Council to support independent investigations into the harmful effects of depleted uranium ammunition in military operations in areas like the Balkans and Afghanistan, and we would obviously add Iraq. Including considerations, not just on the effects of military personnel serving in those areas, but also clearly on the effects of civilians on their land and on their future.

Many of us have also put down written questions and oral questions to the commission and to the Council, to the member states, trying to follow up that resolution of February 2003, because clearly it is not enough that it just exists on paper. We have got to make it actually into action. And so following that resolution, I submitted a written question to the Council in April 2003, just a few months after the resolution, asking them to give an update on its response to the resolution, and in particular, to ask the Council if they had any plans to conduct an investigation into the use of depleted uranium as the Parliament had asked. So I wrote that question in April 2003. Five months later I got a completely inadequate reply, telling me that the Council had not even discussed the issue of depleted uranium since April 2001 and that it stood by its position that, and I quote: “There exists no scientific evidence to link the use of DU with various illnesses, suffered in the population, or among those who served in conflict areas, but that it would”, you will be pleased to know, “re-examine the issue if appropriate at a future stage”.

Well I think that is a most extraordinarily irresponsible response. And so I started to try to put pressure on our own government in the UK, and started a very lengthy and detailed correspondence with Dr. Lewis Mooney MP in particular, who is from the Ministry of Defence, and if anyone is interested in following up a very, very lengthy set of correspondence, it is on my website. But sadly, that correspondence too concluded, with Dr. Lewis Mooney, on behalf of the British government, saying, and I quote: “The use of DU based ammunition remains an important option in military operations conducted by the armed forces of this country and the government does not support calls for a ban or a moratorium in its use”. So I think it is very clear that the real block that we face is at the national level. How do we build up pressure with the member states? I think that maybe one thing that the European Parliament can help to do is to build links with National Parliaments on this issue. And maybe to offer a forum for the international debate between national parliamentarians, between NGOs, between trade unions, between soldiers, victim’s organisations and so on.

I would hope as well that maybe the Parliament could help challenge some of the existing methodologies which are used to evaluate the risk from low-level radiation. Because as long as we have flawed methodologies, as I believe they are, being used by the existing authorities like the ICRP, then our case that low-level radiation poses a severe risk is not going to get taken seriously. And a number of us, from the Green Group, some years ago commissioned a group called the European Committee on Radiation Risk, headed by Dr. Chris Busby, who some I’m sure will know, to demonstrate the weaknesses in the existing model of risk analysis from low-level radiation, and to put forward alternative ways of measuring risk from low-level radiation. And I think, those kinds of initiatives need to be repeated. They need to be scaled up and they certainly need to get into the national media’s, so that people know that the existing models are very flawed.

I think also that the Parliament could be a forum for the gathering of alternative evidence. I think, we should be inviting United Nations Environment Programme, for example, to come and talk to us about its concerns about risks from DU weaponry. Because Pekka Haavisto, the chair of UNEP's DU project has already voiced his very real worries and the UNEP's post-conflict assessment unit has called for an immediate assessment and clean up of areas where DU has been used. The UK's Royal Society has also warned about the potential risks for human health and called for immediate assessments and clean ups. And so I think the way forward is partly certainly at least to be forging new alliances, perhaps unusual alliances, but different kinds of alliances of people who share our concerns. And perhaps to use this Parliament as a forum for pushing that forward.

Because as I say I think that, if we could put this kind of evidence in front of the general public, they would be outraged that in their name those sorts of weapons are being used. But because not many people know about it, it does not get into the media. Certainly the kind of presentation that we just had is not something that most people have access to. And then the continued use of these weapons is allowed to go on. And so I just close by saying that I think that the European Parliament is certainly ready to be a partner with you, to keep working for this ban on DU weapons. I believe they are illegal, they leave a deadly legacy for years to come, they are indiscriminate in the damage that they inflict and I think this is very clearly in breach of international law. So I wish you very well with your very important conference. I'm sorry that there are not more Members of the Parliament with you. Thursday afternoons are never a good time, which we explained early on, but it was the time it had to be, but it is not representative, let me assure you of that. It is not representative for the level of interest and concern about this issue in this Parliament. And as I say, we certainly stand ready to work with you, to do all we can to help you achieve the ban that we desperately need'.

4. Manfred Mohr

Manfred Mohr's full presentation

'This is just a follow-up on what Ms. Lucas just explained to us on the political dimension and the EU dimension of the topic which I would just throw into the discussion. A few ideas, in a brief manner; just to be opened for dialogue and questions. I prepared a few slides, I hope you can see them, to make things more clear. In fact, the issue of DU weapons is a multi-dimensional, multi-faceted problem. So it is not possible to deal with it from one side only, and this also relates to the legal and political aspects of it, that is my starting point. I'm speaking here on behalf of ICBUW, the board, and also on behalf of IALANA, which is the International Association of Lawyers Against Nuclear Arms, which is one of the member organisations of ICBUW, as is IPPNW. About the law perspective; working for the international lawyers' association, it is my personal experience that you have an advantage if you look at things as a lawyer. Some think it is more complicated then, and lawyers always have different opinions, and as they say, it may be this way, it may be the other way around, but just from the international law perspective, it makes things clearer.

The DU issue, as we discussed this morning, is a highly politically sensitive one. And if you have a lawyer's perspective, it may neutralise things. You get a more objective view on it, so it has advantages. And if you look at the DU topic from the international law perspective, you have various branches. You have international humanitarian law, human rights law, you have environmental law, you have so many resources for legal arguing, we do not even know them all ourselves, so there is a lot of potential in it still. And international law is based on principles; that is another thing. It is not only articles, treaties and detailed norms, but it is basic principles.

One is the precautionary principle, which is very much related to environmental law, both international and national, and is also based in the EU normative system. But it is a general concept. It is also in international humanitarian law, saying: if something might be dangerous, or has a great risk with regard to civilian people, soldiers, any kind of human being, so the better to stop it. Take precautions, take precautions in attack and everywhere. So this is a philosophy we can very much use, and of course all issues have to be implemented, that is important, they can not be only on paper, and what I would very much like to have, maybe with the help of the Asser Institute in The Hague, a colleague there, Avril McDonald will be joining the conference tomorrow, is a legal workshop, a discussion among legal experts on the issue. And to refer to the book, there will be a collection of articles, a really authoritative statement on the legal dimension of this DU topic.

The illegality of use: that is the starting point for ICBUW. Parties to a conflict do not have an unlimited choice of means of warfare. Though DU is so cheap, is so effective, in terms of military ways of thinking, they cannot just take it and say: 'it's effective, it is fine, we can use it'. There is a principle under international humanitarian law of no unlimited choice. You can not use poison. That is really a very old prohibitive rule you will find in all laws of warfare for hundreds of years already. But then we should also work together as legal experts with scientific experts on the notion of poison. On the notion of toxic substances, so let's get into it.

Then of course there is the rule that indiscriminate effects of warfare have to be prevented, so you cannot attack military and civilians at once. Then next, you have the rule that unnecessary suffering is forbidden, so soldiers should not die under very cruel circumstances, and the environment should not be devastated. This environmental rule is somewhat complicated, but devastation of course is prohibited. You cannot pollute air, ground, water for many years through warfare. And there is a very interesting procedure under this additional protocol 1 to the Geneva Conventions, which says, before you introduce a new weapon technology, you have to check whether this weapon technology is in line with international humanitarian law or not, and this review procedure should be used much more with regard to DU. This then is the cornerstone of ICBUW. This is our philosophy.

Our main text is the Draft Convention, that I wrote together with a Polish colleague. I would like to discuss it in more detail in another setting but it is our main goal to have this Draft Convention negotiated, so that it is a real Draft, open for signature and ratification. But that is quite a long way off. The Convention has other models like the Ottawa Treaty, like the Chemical Weapons Convention. And what is important, which is the third point, is that all these things have to be worked out in parallel. They are not exclusive to each other. And also we have to stress: 'ban' means, in our terms, in our perspective, not to create the prohibition of the use of DU weaponry, which is already there, but to abolish the weapon. And for this, you need to have a treaty, otherwise it is not possible to get rid of certain weapons.

Francis Boyle, a US colleague, has the idea that the Geneva protocol of 1925 could be extended to DU by a simple signature. I think it is maybe too easy an idea. Anyway, it can be discussed. While the UN position is disappointing, the DU topic failed in the disarmament area, the first committee of the UN General Assembly, twice. Indeed the sub-commission of human rights commission of the UN is the only UN body that ever declared DU weaponry to be illegal in resolutions, non - binding unfortunately. Then UNEP has already been mentioned. Importantly, we have a body called UNIDIR, which is United Nations Institute for Disarmament Research; maybe we could invite them to have a study on DU. It would make good sense. There is our International Action Day November 6th. Also this year it is the United Nations Day Against Environmental Pollution because of Warfare. So it fits very much with the Coalition initiatives. The European setting has been explained already by Miss Lucas. It is mainly this

2003 resolution with a call for a moratorium, other demands, and there is just the idea, the proposal to Parliamentarians sitting in this room and outside, to get Committees activated on the issue. There are various Committees that can relate to the DU issue, like the Environmental Committee, or the Foreign Policy Committee, or the Development Committee. So we have prepared something where we show the link between the various topics. The Commissions are saying that they are not competent, but they are competent, they are directed under this resolution to do something, to inform.

The NATO seat is vacant over there, so no reaction yet, but there is a link between the EU and NATO that can be used as well. **There is even a Council of Europe resolution of 2001 that calls for a ban but has never been implemented or followed up on yet**. This is a very interesting thing, it is more a low-level approach, which is also in the Red Cross world, where I am a member, as a professional worker. It means not to forbid the weapon as such, but just look after the consequences of using a certain weapon. And to wipe out remnants of war that are negative, and now we have protocol number 5, to this Conventional Weapons Convention, which deals with explosive remnants of war. Our problem is, DU is not explosive. So maybe there can be another protocol on DU, which is a more pragmatic solution to the problem, more, as I said, a low-level approach. And finally we have the cluster bombs movement. We can learn a lot of these movements and work much more closely together.

Finally, what really counts, is the domestic setting. To help victims, to get progress there, link the European Parliament to National Parliaments. And there have been successes, like in Belgium, where certain banks no longer invest into illegal weaponry. We have the first cases in Italy, in Scotland, and in some other places where victims have been compensated. We have used draft legislation, and have had legislation adopted. So there is a way ahead. What we need also in this movement is to have some more support in terms also of resources, but I think we are on the right track.

4. Dr Keith Baverstock

Keith Baverstock's full presentation

"Thank you Mr. chairman. I would like to take up where Prof. Mohr stated that it would be illegal to use depleted uranium if it was a poison. There is a wide range of international opinion which seems to support the position that it is not a poison. According to the International Commission on Radiological Protection, the ICRP, inhaled depleted uranium oxide would pose a hazard to the lung from radiation if it were totally insoluble, and a chemical toxicity risk to the kidney, causing malfunctioning of the kidney, if it were soluble. That position is upheld by a number of other international organisations, and I would like to challenge that. It is true that nano-particles are formed when depleted uranium impacts a target. But that is only part of the problem, and one which I think is much more important to military personnel who were present at the time of the impact, or close by at the time of the impact.

My concern has been with the public health implications, where this material would be in the environment after the event and may become re-suspended, and particularly inhaled, although ingestion might also be a route, by the resident population. Even some time after the action. In fact depleted uranium oxide is partly insoluble, and partly sparingly soluble, it is a mixture of two oxides, in fact. Since 1998, there has been increasing evidence that human cells, when exposed to this oxide or this soluble depleted uranium, are damaged in a way which is consistent with them leading to malignancy. And indeed, in some experiments, such cells have been implanted into host animals and developed actual malignancies. However depleted uranium is rather what we might call, mildly radioactive. It has got a very low specific activity. And that is

one of the bases why the ICRP can say that it is not an extremely dangerous compound in any case, even from the direct irradiation point of view.

The kind of experiments that have been done since 1998, have also been carried out on a completely non-radioactive element nickel - and produced the same results. Nickel, like many other heavy metals, is an established carcinogen. So by 2001, this evidence, which has been accumulating since 1998 as I say, leads me to the position that this depleted uranium oxide did in fact pose a risk in addition to direct irradiation risk. It posed also a chemical geno-toxicity risk. By that I mean, it had the potential to convert cells that came into contact with it into malignant cells. There was also, because this has been observed in other instances, the possibility of a synergy between this chemical risk and the radio-toxicity risk. So there were two routes, which have not been examined by any of the international bodies, up to 2001, and that still remains the case.

Now, we may think that being mildly radioactive actually makes depleted uranium somewhat safer than other more highly active nuclides, but that is not necessarily the case either. Very recently, in 1995, it was established that there is a 'bystander effect'. The bystander effect means that a cell that is actually hit by radiation sends out signals which may affect several cells in its vicinity and cause them to behave as if they had been irradiated. So in fact, for low-specific activity nuclides, and particularly alpha-emitters, where there are many, many more bystanders than there are cells that are hit. The effect of that bystander effect could be to amplify the radiation effect, so making it worse. So that is a third route, in addition to the direct irradiation, and those have not been considered by the ICRP or the other organisations.

So in my view it is now highly irresponsible to ignore this evidence. It has in fact been, since 2001-2002 when I last looked at it, I have just reviewed the evidence again, and it has strengthened considerably, including evidence in human beings. A number of American soldiers have depleted uranium embedded in their bodies from "friendly fire" accidents, or incidents I would say. Those of that group, which have been studied for more than ten years, they have high urine uranium concentrations. It takes a long time for uranium to clear from the body and in their case it is being continually recharged, as the pieces of uranium dissolve. They are showing mutagenic effects in their peripheral blood cells, which means over the body as a whole. In other words this uranium concentration is very low. Its average over the body as a whole, is leading to damage to their bone marrow stem cells, which is being reflected in damage to their peripheral blood cells. Now in the case of inhalation, the organ primarily affected is going to be the lung, but as the depleted uranium dissolves, it is transferred to the bone, it enters bone through the bone marrow cavities and therefore provides a risk of leukaemia, also bone cancer. When it is excreted from the body through the kidney, as Dr. Al Ali said, it poses a risk to the kidney. So a number of organs and tissues in the body are at risk just from this simple dissolution, partial dissolution process of particles.

Now as I said, the World Health Organisation, the International Atomic Energy Agency, the Royal Society in the UK, the International Commission on Radiation Protection, and the European Commission Article 31 Group have all published largely, advice suggesting that there is not much of a problem, let's put it that way. None of them have really, except the Royal Society, suggested that clean up should be obligatory. And you may wonder, as I do, how such a thing could have happened if all this evidence, and I could quote you about twenty references to serious work in the peer review literature, how these so-called independent organisations and authoritative organisations have come to ignore this evidence.

Well it is worth noting that in fact in terms of the way they are working these organisations are not necessarily that independent. There is much cross-membership between organisations and

several bodies, for example the National Radiological Protection Board in the UK, which has been involved in the preparation of many of these assessments. So in fact, they are not as independent as they look. When the WHO says something, and the IAEA says something, well it would be very interesting to see when those actually are different. So for me as a scientist, it is the fact that this evidence is ignored, as opposed as being addressed through appropriate scientific debate and if appropriate, discredited. That is the thing that is worrying for me, because science is about a reality that overrides political expediency. Ignoring the evidence does not mitigate the health consequences of exposure to DU. And not looking for the health consequences does not mean they do not exist.

Mark Danner, an American correspondent, writing in the New York Review of Books, about two weeks ago, detects a currently resurgent belief that power, specifically political power, can shape truth. He says "power in the end can determine reality, or at least the reality that most people will accept". He further notes that "this philosophy was staged rather directly by the last century's most innovative authority on power, Joseph Goebbels". I have said in a recent paper that politics has poisoned the well from which democracy must drink. By this I mean that political expediency has all but eliminated the independent research. And along with that went public trust. And without public trust, I put it to you, democracy cannot work. So in the concepts of risk assessment, which is what we are about, science should provide the evidence, openly, transparently, and unalloyed by any interest other than it should find out the truth. On the basis of this evidence, politics should decide the risk that is acceptable, within the social and legal context of the time. Thank you'.

5. Els de Groen MEP

Els de Groen's full presentation

'Thank you. I am, like Ms. Lucas, in the Green/EFA Group in the European Parliament. Before that I did many things in my life and the reason for which I am sitting here is the fact that a good friend of mine, one of the most famous radiation experts in Holland, was dismissed about twenty years ago, when he refused to lie. I could not, I had already published by then a book about nuclear energy, he had helped me, so I was aware of the technical things, not into very many details, but I knew some. And there was Prof. Fast who also helped me writing this book. Four years later, I got a phone call from the radiation expert and this man he was very nervous and said Els please listen, I do not know what to do. I am in an awkward position, they are more or less forcing us to accept the new limits of the International Commission on Radiation Protection, the ICRP, and I can not accept this, if I want to keep my job I have to lie, like the others, because this is an order, and I have to obey, which I can not. The other alternative is that I go to the press, which will also lead to the same result, I lose my job. And the third possibility is that I write my own report. So the outcome of this was, that there was one report by our Dutch Commission for Radiological Protection and there was his personal report. What happened?

In the 70's, the ICRP found out that the dangers of radiation were 10 to 30 times higher than was estimated before. But instead of changing the limits, the doses, which were considered to be acceptable, they made them for up to 10 times higher. It happened before that they had a change in their estimation. First they considered 60 rem per year acceptable, that was changed into 50, that was changed into 5, and at the end of the 70's they found out that it should be 1,5 rem for one year for a worker in a nuclear power plant. That means that a citizen should have much less, but with this outcome there was no nuclear power plant which could produce nuclear energy anymore. So the outcome, the proof, the danger of radiation which was discovered, known, at the end of 70's could not be translated into new limits. And therefore world-wide the population got recommendations which were fully based on lies. In Holland this

happened in 1984, and it was at that very moment, that this friend of mine lost his job. I did my utmost to make clear what was happening, and for this I had to study what radiation means. I was forced to start this study to understand how these lies could be sold to the population world-wide. But it was necessary.

What is radiation? Radiation means that a certain element is out of balance, and to find back this balance this element is sending pure energy, it might be X-rays, it might be gamma-radiation, or it is sending out particles. Uranium, which is one of the heaviest elements we have, we have still heavier ones, but uranium is one of the heaviest ones, with 235 or 238 particles, is sending out four particles at a time. So that means a very slow, a very heavy radiation. If I put uranium or plutonium here in front of me and I put a sheet of paper upon it than I can stop the alpha-particles of the uranium.

But if I take away the paper and the uranium comes into my body, by air by breathing, or by eating something, having an apple or another piece of food which is contaminated, and it comes in my body by eating this food, then my body starts to function as a kind of transport channel, by blood, by the lungs, which has already been explained, so I am not going to repeat that. And then our body is like a computer, which is sending the particles to those parts of the body which need this element. And then uranium or plutonium they have the character of iron, and we need iron, our blood needs iron, and as you might know that our blood, red blood is made in the red bone marrow, than it goes to our bones and causes leukaemia or bone cancer. If it comes to our lungs it causes lung cancer. Children are far more sensitive to radiation than adults, and that is very understandable because children grow. And cancer has everything to do with growth. In order to grow, children have to split their cells. Splitting of cells makes children much more susceptible than adults to cancer, which is, let's say, a sick splitting of cells. And unborn babies are even 50 times more susceptible to cancer. And from there you can understand the awful and terrible pictures from Dr Al Ali, so once children are contaminated the chance of getting leukaemia is very high. And I want to add that you only need a very few particles of the element which is radioactive, to have a cancer or to die from it.

I do not know exactly the amount when it comes to uranium but I can give an example when it comes to plutonium, which has 239 mass units, 1000 of a gram of plutonium is enough to make someone die. Women are four times more susceptible to radiation than men. Children take more than 100 times more radiation into their bodies than grownups. I already mentioned the dangers for unborn babies. What we face now is the heritage of the International Commission on Radiological Protection.

When I had done this whole study, and I did not only study what they were recommending in the 70s and early 80s. I was in a meeting, the meeting was about a nuclear power plant, but the meeting was mainly about the dangers of radiation for people living around it. And I said the following sentence, I said: 'After extensively studying the advice concerning protection against radiation and the ICRP recommendations in practice, July 1984, I have come to the firm conclusion that the scientists in this forum are a bunch of royally paid bastards'.

And then the circus started, I was followed by newspapers, I was followed by concerns, I was followed by very high ranking officials who are working actively in the nuclear power business. My editor was threatened. During a programme on television I was taken by the hair by somebody sitting behind me. Somebody working in this industry said after a long discussion in which I could deal with all of the arguments, he said, why are you scared? What are you worrying about? You will have maybe a hundred years at the most, that was the answer of the so-called scientist. So maybe my English is not as good as it should be today, but after seeing

these pictures from Iraq, and knowing what is known for so many years already, but what is hidden from the population, where all these lies are told, in very difficult sentences, and sometimes with the trick of changing the names, rem became sievert for instance, and you have again to go to the public, and listen, I have to explain again this is a trick. And there are many more tricks, but the evidence is there already. There are lies. The danger of radiation is immense, and people who know this and who use uranium in weapons: they are criminals. I'm willing to use that word, because I cannot find any other word for that. Thank you.

7. Gretel Munroe

Gretel Munroe's full presentation:

'There was a national conference of the Veterans for Peace a year ago this July, which took place at the same time as the Boston Social Forum. At a DU workshop at the conference, there was a lot of discussion at the end about testing for DU exposure because many of the Gulf War veterans there thought that soldiers coming back from Iraq should be tested and they themselves were interested in it as well. There was one young veteran who said that he and his wife wanted to start a family but didn't dare and he wanted to be tested for depleted uranium exposure first.

Joyce Riley, a Gulf War veteran herself, is head of an American Gulf War Veterans Association in Missouri. She hosts a daily radio talk show and she says: "We are overwhelmed with phone calls from people who have just returned from Iraq who are not getting treatment." Of course that includes other illnesses besides depleted uranium exposure, but that is an indication that veterans are really very concerned about the possible health effects of depleted uranium exposure among other things.

At the Hampton Veterans Administration Hospital in Virginia about half the Gulf War veterans who come in want to be tested for depleted uranium exposure. But what happens is that the nurse practitioner who is the head of the Gulf War program dissuades them all. She says they're not good candidates for testing unless they were in a vehicle or tank hit by a DU shell or nearby the tank at the time this happened or nearby shortly afterwards. So only one to two percent of the veterans actually get tested and they have never found a soldier who tested positive for DU.

Dan Fahey in a recent article cited a study by the General Accountability Office of the US Government. They surveyed 1,126 post-deployment questionnaires filled out by members of the Armed Services who had served in Iraq. The 22nd item was a question about whether they had ever been "sometimes," "often" or "never" exposed to depleted uranium. It was a self-reporting sort of thing. Anyway, 32 of these veterans said they thought they had been "sometimes" or "often" exposed to DU. In 26 cases, their health professional dissuaded them and three went on to be tested.

Some statistics: over 187,000 veterans of the First Gulf War are on some sort of disability. This is out of under 700,000 veterans who fought in that war. Also over 10,000 veterans have died. The Veterans Administration as of December 2004 reported large numbers of returning veterans claiming to be suffering from undiagnosed illness. These illnesses include muscular and skeletal ailments, respiratory problems and ill-defined conditions not fitting any typical medical categories. There have been over 27,000 such reports and also more than 100 cases of cancers have been reported. In the Hampton VA Hospital, 20-25 percent of the Gulf War veterans who have been registered in a Gulf War Registry at the VA hospital have unspecified

illness or complaints. Doctors have not been trained to handle these cases and we presume they don't know much about depleted uranium.

I am going to give you a couple of case histories. We heard about Samawah in the film earlier. Raymond Ramos was with the New York National Guard. He was stationed in an abandoned train depot next to a battlefield in Samawah for about two and a half months and he was one of the nine National Guardsmen who got tested for DU exposure through Dr. Asaf Durakovic and Dr. Axel Gerdes of the University of Frankfurt. He said that helicopters landing and taking off caused huge swirls of dust and sand in the air, and I think he felt that that might have had something to do with coming in contact with depleted uranium dust, in addition to his living conditions. There were a lot of sandstorms around the train depot and they ate, drank and slept in the dust.

Ramos' symptoms include chronic fatigue, headaches, and numbness in the hand. He tested positive for depleted uranium through the German laboratory. He was later retested by the U.S. military at the Walter Reed Hospital and he met with two military people there. They were probably doctors. One was a Lieutenant Colonel who asked him why, of all the soldiers in Iraq, he thought he'd been exposed to depleted uranium. They dismissed Dr. Asaf Durakovic as an activist. They didn't mention that he was in his own way a scientist (an expert in the area of nuclear medicine). Anyway, Ramos was told that his total uranium urine level was too low, that it was about between six and eight nanograms of urinary uranium per liter, that that's a safe level and that his level was below that.

Actually, Lieutenant Colonel Mark Melanson who is a health physicist in charge of the health physics program at the Army Center for Health Promotion and Preventive Medicine says that three nanograms of total uranium per liter of urine is the cut-off point. They don't test below that ever. In Great Britain the British, through Dr. Randall Parrish are testing veterans from the First Gulf War, about 500 of them, with a test which will allow the detection of depleted uranium with just 0.1 (1/10th) nanogram of uranium per liter of urine, a test that is thirty times as sensitive as the test that we are using in the United States. I'll get back to this subject but I want to go back to the other case history.

Gerard Matthew, a former Marine who went to Iraq as a National Guardsmen, drove flatbed trucks with parts of destroyed Iraqi tanks and other equipment back and forth between the front lines, Baghdad and Kuwait. He went through lots of sand and dust; he saw the burning tanks; he probably was on the Highway of Death. His health problems: his face swelled up. He had migraines, black-outs, chronic fatigue, a burning sensation on urination. He came back to this country and his wife got pregnant. They did a sonogram on his wife and found that he baby had a limb deficit. The child has one hand that consists of half a palm with thumb finger fused with the palm. When the fingernail grows, it grows into the palm and it becomes bloody. The Matthews researched their families back through generations and could find no instances of birth defects going back for generations. Mrs. Matthew is afraid she will lose her husband in five or ten years. And she says that she's afraid that 100 babies will have to be born this way before the U.S. Government will do the right thing by the veterans.

The Pentagon and Congress are at odds in some ways at this point. For instance, Congress wanted the head of the Joint Chiefs of Staff, General Richard Myers, to look into how other countries were testing for depleted uranium exposure. But Mark Melanson said our test is fine; it's a thousand times as sensitive as necessary, and we're not interested in what other countries are doing.

The real problem with what the Pentagon is doing, whether from ignorance or a desire to prevent any truth from coming out, they took 1,000 participants in something called the NHANES Survey (a National Health and Nutrition Examination Survey). These 1000 participants were tested for total uranium in their urine to build up sort of a database. In another part of the study they took 500 people and did the same thing. So what they are telling a number of veterans is, your total uranium is within normal limits. But if you know anything about depleted uranium, you know that there isn't really a relationship between total uranium and depleted uranium in your urine. We all get a certain amount of natural uranium, in small, very small amounts in our food and drink. Depleted uranium, if you inhale it, it gets into your deep lung and up to 70 percent of it may be insoluble. When it's insoluble, it stays in the lung or it may move to the lymph nodes but it's not going to go into the urine. It won't go into the urine as I understand it, until it becomes soluble. So if you have some depleted uranium in your urine, there is no telling how much depleted uranium you have elsewhere in your body. You may have 100 times that amount or only ten times that amount. At this point there is no way of telling how much you have. So any amount of depleted uranium in your urine indicates there's a problem.

The Pentagon is buttressed by the research of the Baltimore Veterans Administration researchers led by Dr. Melissa McDiarmid. In a 2004 article in *Health Physics* they tested and retested soldiers with a high total uranium level. Their cut-off point was 0.05 (5/100th) microgram. Now a microgram is a much bigger number than a nanogram. So the cut-off point was 5/100 of a microgram per gram creatinine. The veterans who tested that level or higher were retested before the researchers considered testing them for depleted uranium and only tested them if they tested high the second time. This is the sort of research that is gong into prestigious journals in the United States and people who don't know much about depleted uranium are very likely going to accept it at face value.

There are other problems between Congress and the Pentagon. Congress wanted the Pentagon to give soldiers physical examinations pre-deployment and post-deployment. The Pentagon is giving troops a two-page health questionnaire instead. Then Congress asked the Pentagon to save blood samples that could be compared to post-deployment blood samples. So what the Pentagon did, it's saving the serum. With the serum you can't test for mutation rates, you can't test for white blood cells. You don't have the right stuff to do tests on. Congress however did not feel it could push the Pentagon because they felt they were putting so many restrictions on the Pentagon already. So that's what the Pentagon is doing. So anyway, that's pretty much my report. I saw a film recently called "Poison DUst" which had some interviews with some of the National Guardsmen who were in Samawah. Anyway, thank you'.

8. Dr Katsumi Furitsu

Katsumi Furitsu's full presentation:

'Solidarity and support to the uranium weapons victims – epidemiology'
Community-based environmental epidemiology and its possible application in DU contaminated areas

i) Introduction

I am a geneticist with the Japanese pressure group Campaign Against Radiation Exposure (CARE). Although not a specialist in epidemiology, I have been taught these methods by Dr. Rosalie Bertell from the International Institute of Concern for Public Health, who unfortunately could not be here with us today.

I would like to talk about the basic ideas of community-based environmental epidemiology and to discuss its possible application for populations in DU contaminated areas. To illustrate this further I will draw on some examples from my own work with the A-bomb victims of Hiroshima and Nagasaki.

ii) The two different approaches to environmental epidemiology
I think that there are two ways of undertaking environmental epidemiology. One is, I would say, "conventional environmental epidemiology." The other is community-based environmental epidemiology, which is getting more and more of a consensus among the researchers and people who have been concerned about environmental problems for the past 10 or 20 years.

iii) "Conventional" environmental epidemiology
The purpose of conventional environmental epidemiology is usually to examine the so-called "scientific evidence" relating to the effects of a possible environmental hazard. The number of subjects in a typical study is usually in the thousands.

They are usually carried out by epidemiologists and public health specialists, often without the participation of the community members who have been facing the hazards. For the researchers, the community are simply subjects to be investigated, like experimental animals. They treat the community only as the subject of their research.

The possible outcome of this kind of research might be: when the data show the statistically significant effects of some environmental factors, some intervention or preventive policy might be taken by the authorities. However, if the result is not statistically significant, and in the "grey zone" or negative, it is often regarded as "no effect" and nothing will be done by the authorities. And the community continues to be exposed to the possible environmental hazard. The researchers only say that "further research is necessary" and do nothing.

We have to examine such research critically and very carefully. But, sometimes, we can discover useful information even from such limited studies, sometimes enough to provide us with clear evidence of harm, allowing us to demand intervention and compensation.

iv) Community-based environmental epidemiology
In community-based environmental epidemiology, the purpose is to find any possible environmental hazards and take whatever action is necessary to recover the "healthy community." Such studies are often started at the request of the community members themselves. This approach treats the community as the patient.

The size of the study depends on the size of the community itself; sometimes it may number just a few hundred. The communities are often minorities in the society, such as the poor or the victims of discrimination or political oppression.

Unlike in conventional epidemiology, the research is carried out as a cooperative project between the researchers and the community members. Good communication with the community members is essential in this kind of study. In the process, ethical problems such as informed consent or structural issues such as the method, data control and the publication of results must be agreed between the community and the researchers.

Detailed questionnaires form the basis of the survey, while additional clinical examinations of some members of the community, for example, in the case of the DU victims, the chromosomal analysis of peripheral lymphocytes, detection of the DU in the urine and so on,

are helpful. Further environmental research (soil, water, air, local food, and so on) may also provide evidence in assessing environmental risk factors.

Should problems be found, there must be a concrete intention to assist in recovering both the environment and the health of the community, providing the proper treatment and preventive measures, with due consideration for future generations. On a wider scale, this might imply a ban on the toxic materials in question.

It is necessary to consider that, among community members, there are children who are usually more sensitive and vulnerable to environmental hazards, this is also true of women, particularly pregnant women, in whose case the foetus is even more sensitive and vulnerable. Likewise with the old, and the infirm. Such communities are often exposed to multiple and mixed environmental risk factors, usually for 24 hours a day. This is markedly different to occupationally exposed workers. In spite of this, in environmental assessments, the "standard" or "permissive safety levels," are typically those for healthy adult men.

v) The development and application of the questionnaire used in community-based environmental epidemiology

The questionnaires used in community-based environmental epidemiology were originally developed by Dr. Alice Stewart in the 1950s. She used them in her study on the affect of in-utero X-ray exposure on childhood cancer and leukemia rates.

After that, Dr. Rosalie Bertell and others developed it further, applying it to many community surveys, in cooperation with the victims of hazardous environmental factors. In 1960, Rosalie was involved in the Tri-state leukemia study, which provided evidence of the effects of medical radiation exposure on the increased rate of leukemia in three states in US.

Later, Dr. Bertell worked with the community around Clark Air Force Base in the Philippines, which was exposed to many toxic substances; with the Rongelap people who were exposed to radiation from atmospheric nuclear testing; with the victims of the United Carbide accident in Bhopal, India and also with local communities in Canada.

In all of these cases, Dr. Bertell worked on developing preventive measures for each hazard, and also wrote beautiful reports and recommendations to the authorities in an effort to change government policy, which in some cases worked successfully.

vi) Possible applications for DU victims

The question here is whether this method of community-based environmental epidemiology may also be helpful for the victims of DU exposure. The communities in question here are the people in the affected countries such as Iraq and the Balkans in addition to veterans' groups and those affected by DU facilities including the workers and local residents.

I believe that there must be the possibility of using this method in the case of DU victims. And we would like to start the discussion on the subject, following consultation on the subject with Dr. Rosalie Bertell and also with Dr. Baverstock, if he'd kindly accept it. He has been a public health specialist for many years, as you know. We also need the help of specialists like Dr. Heike Shroder, who is also a science adviser to ICBUW and a good friend of us all.

In the case of Iraq and the study proposed by Dr. Al-Ali, efforts have already begun with the support of IPPNW-Germany. Unfortunately we could not get anyone from IPPNW-Germany here for this conference. However, I hope that we will be able to work co-operatively with

IPPNW-Germany and also with other NGOs concerned. We might also be able to start a discussion with veterans' groups.

vii) Some experience of A-bomb victims
I myself have some experience with the medical care of A-bomb victims, and, with colleagues, have undertaken a kind of "community-based study." Unfortunately, I do not have time to talk about it today but I have some copies of my report here, so please come to me later, if you are interested.

But I would like to say that our research showed that radiation exposure caused not only cancer and leukemia, but also many non-cancer diseases. This data of ours is also adapted in the report of ECRR,2003, by Dr. Chris Busby.

I also would like to mention that the subjective symptoms of the Gulf War Veterans are quite similar to A-bomb victims. Of course, we need a more scientific basis to explain the situation, because the types of radiation exposure are not the same in both cases.

But I would like say that this ill health cannot only be attributed to pschological stress. Instead it may well be caused by the effect of exposure itself on the many organs and systems of the human body. I also have similar information on Chernobyl victims, nuclear power plant workers, as well as down-winders of US nuclear facilities.

We presented our data, together with the A-bomb victims, and demanded that the Japanese government give them compensation and better health care.

viii) In conclusion
Finally I would like to emphasize that the activities to support DU victims, and the activities to demand a Ban on DU weapons must be carried out cooperatively. It is important to unite the two activities. Supporting activities for DU victims might include the kind of direct medical support that Dr. Al-Ali, Dr. Inoshita and many NGOs are working on, the legal and political support for the victims as Francesco is doing in Italy, providing scientific information to the veterans as Gretel does in US, and also the scientific and financial support to the community based epidemiological study.

The issue of DU is not only a future hazard, it is one that people are facing now - there are already victims. I hope that this workshop will be the first step in our cooperative work in this direction. Thank you'.

Appendix

An extract from the resolution of the European Parliament, November 2005.

This resolution, demanding a moratorium leading to a ban on the use of DU weapons, was passed as a direct result of this conference.

Texts adopted by European Parliament

Thursday 17 November 2005 - Strasbourg Provisional edition

Weapons of mass destruction P6_TA-PROV(2005)0439 A6-0297/2005

European Parliament resolution on non-proliferation of weapons of mass destruction: A role for the European Parliament (2005/2139(INI))

The European Parliament ,

- having regard to United Nations Security Council Resolution 1540 (2004), describing the proliferation of weapons of mass destruction (WMD) and their means of delivery as a threat to international peace and security;

- having regard to the European Security Strategy (ESS), which states that the proliferation of WMD is potentially the greatest threat to our security;

- having regard to the implementation of the ESS and in particular the European Union Strategy against the proliferation of WMD (the EU WMD Strategy) adopted by the European Council on 12 December 2003,

- having regard to the fact that all European Union Member States are States Parties to the major multilateral agreements that make up the non-proliferation regime, namely the 1968 Nuclear Non-Proliferation Treaty (NPT), the 1972 Biological and Toxin Weapons Convention (BTWC), the 1993 Chemical Weapons Convention (CWC) and the 1996 Comprehensive Test Ban Treaty (CTBT) and that two Member States, the UK and France, are nuclear-weapon states as defined in the NPT, and that US tactical weapons are stationed on the territories of many more Member States: Germany, Italy, the United Kingdom, Greece, the Netherlands and Belgium and states applying for EU membership, Turkey in particular;

- having regard to the Member States" commitment to pursue the universalisation of these multilateral agreements, in particular in Council Common Position 2003/805/CFSP of 17 November 2003(1),

- having regard to the report of the High-level Panel on Threats, Challenges and Change, set up by the UN Secretary-General, which states: 'We are approaching a point at which the erosion of the non-proliferation regime could become irreversible and result in a cascade of proliferation',

- having regard to the response by the UN Secretary-General in the report "In larger freedom: towards development, security and human rights for all", underlining the importance of multilateral agreements in safeguarding international peace and security in the field of nuclear,

biological and chemical weapons as well as recent efforts to supplement shortfalls such as in UN Security Council Resolution 1540 (2004),

- having regard to its resolutions expressing concern at the proliferation of WMD and associated materials and technologies, in particular its resolution on biological and toxin weapons of 14 June 2001(2), its resolution on nuclear disarmament of 26 February 2004(3) and its resolution on the Nuclear Non-Proliferation Treaty 2005 Review Conference of 10 March 2005(4) ,

- having regard to the Advisory Opinion of the International Court of Justice of 8 July 1996 on the legality of the threat or use of nuclear weapons,

- having regard to Rule 45 of its Rules of Procedure,

- having regard to the report of the Committee on Foreign Affairs on (A6-0297/2005),

A. whereas nuclear non-proliferation issues have always been at the heart of the European Union since the establishment of the European Atomic Energy Community by the Treaty of Rome,

B. whereas non-proliferation policies remained limited and are only now being seriously addressed within the ESS, and in particular by the Member States through the EU WMD Strategy and the Commission's work, under limited existing budget lines, in preparation of the 2007-2013 Financial Perspectives,

C. whereas the EU Council achieved a Common Position (including some 41 separate measures) that was presented at the 2005 NPT Review Conference, but failed to persuade the other members of the NPT to pursue a like-minded common strategy as set out in the Common Position, notwithstanding that proliferation of WMD is to be considered as the most dangerous threat to global security;

D. whereas this highlights the urgency with which the European Union must provide new leadership to safeguard its interests by reinvigorating the measures in the Common Position and the EU WMD Strategy in order to strengthen the non-proliferation regime,

E. whereas the States Parties will meet in 2006 for the BTWC Review Conference to monitor progress towards implementation of the Treaty's provisions, and it is therefore essential to find ways of developing verification provisions for the BTWC and to reinforce the norms against biological weapons - including measures to criminalise the development and possession of biological weapons through national legislation,

F. whereas the European Parliament remains concerned that the EU WMD Strategy is currently weakened by inadequate financing for the achievement of its objectives as specified in the list of priorities attached to the progress report of the Office of the Personal Representative for non-proliferation of WMD(5) ("the OPR") and the expected outcomes of the studies run by the Commission under the Pilot Project 2004 entitled "Reinforcing EU Cooperative Threat Reduction programmes: Community Action in support of the European Union Strategy Against the Proliferation of Weapons of Mass Destruction",

G. whereas the EU WMD Strategy calls for an increase in the EU's contribution to cooperative threat reduction in the light of the Financial Perspectives beyond 2006 and envisages the creation of a specific Community budget line for non-proliferation and disarmament of WMD,

A role for the European Parliament

81. Recalls the positive contribution that can be made by the European Parliament in addressing common security concerns on non-proliferation and disarmament in its capacity as a budgetary authority, as already shown in its support for nuclear safety and nuclear security programmes under TACIS;

82. Reiterates its call for a moratorium - with a view to the introduction of a total ban - on the use of so-called "depleted uranium munitions";

83. Recalls equally the positive contribution that the European Parliament has continued to make in the case of the second Pilot Project (2005), whereby EUR 1.5 million has been allocated for use by the Commission to launch an EU Export Control Cooperation Initiative; recalls its decision to continue supporting such actions with the financing in 2006 of a third Preparatory Action enabling the Commission to further prepare the ground for future Community-funded programmes under the new Financial Perspectives 2007-2013;

84. Recalls the role that Parliament plays in its codecision legislative capacity and as a budgetary authority in issues such as the proposed Stability Instrument, which should include export controls and border security, support for chemical weapons destruction and weapons-grade fissile material elimination, radioactive and nuclear material management and control, bio-security, conversion of former weapons expertise, etc., in coordination with a Nuclear Safety Instrument, export controls, etc.;

85. Further recalls its involvement via assent in the Union's most important international agreements with third countries, and in particular those agreements which include a non-proliferation clause; recalls in that connection the support required from Parliament for all those initiatives designed to counter proliferation in certain countries by offering cooperation in return, and for any other kind of international agreement or partnership;

86. Asks therefore that the European Parliament be fully associated with all initiatives aimed at implementing the EU WMD Strategy;

87. Recommends that an official Parliament delegation attend the next NPT Review Conference as well as the BTWC Review Conference;

88. Calls on the Member States and the Council to include Members of the European Parliament in the Union's delegation at any future peer review on export controls; also calls on the Council and the Commission to keep Parliament regularly informed about the EU's role at the Australia Group, the MTCR, the Wassenaar Arrangement and the Nuclear Suppliers Group (NSG);

89. Proposes to adopt annually a report on the status of non-proliferation activities of the European Union containing relevant policy recommendations;

Financial aspects of the European Union strategy against the proliferation of WMD
90. Calls on the Member States to assign adequate financial resources to implement the priorities listed in the progress report by the OPR;

91. Calls on the Commission to set out in a transparent and clear manner the resources it has already committed for both "nuclear safety" and "WMD non-proliferation";

92. Calls on the Commission to present in a transparent and clear manner the resources needed for the necessary Community contribution to the EU WMD Strategy during 2006 and under the new Financial Perspectives 2007-2013, making a clear distinction between “nuclear safety” and “WMD non-proliferation” headings;

93. To that end, calls on the Commission to set out a list of priorities and estimated costs for the actions necessary to meet its commitment in the framework of the G8 Global Partnership, and for extending its action beyond the CIS to meet global needs;

94. Calls on the Council, the Commission and the Member States to support specific projects conducted by multilateral institutions, such as the IAEA and the OPCW, and to provide financing where appropriate;

95. Calls in particular on the Member States to provide finance regarding the list of priorities of the OPR for export controls and technical assistance programmes;

96. Is of the view that conflict prevention and crisis management should not be financed at the expense of the WMD prevention budget, and that the high-level ambitions expressed in the WMD Strategy and supported by all the European institutions and Member States require an adequate level of financing; recalls in this connection the increasing difficulties in funding recent initiatives (specifically the renewal of the Joint Action with the OPCW and a new Joint Action in support of the BTWC) from the CFSP budget or Community instruments;

97. In the framework of the discussions on the Financial Perspectives 2007-2013, proposes therefore a review of the existing Interinstitutional Agreement of 6 May 1999 and the establishment of a specific budget line within the Union’s budget to finance all activities regarding WMD issues, irrespective of whether they fall within the Community or CFSP framework, whilst respecting their respective decision-making processes as well as the competences of the Council, the Commission and the Personal Representative;

98. Instructs its President to forward this resolution to the Presidency-in-office of the Council, the Council, the Commission, the governments and parliaments of the Member States, the UN Secretary-General, the governments and parliaments of the United States, Russia, China, Israel, India, Pakistan, Iran and North Korea, and all other States party to the NPT and members of the IAEA.

(1) OJ L 302, 20.11.2003, p. 34.

(2) OJ C 53 E, 28.2.2002, p. 400.

(3) OJ C 98 E, 23.4.2004, p. 152.

(4) Texts Adopted, P6_TA(2005)0075.

(5) Council of the European Union, OPR, “Implementation of the WMD Strategy: 6 monthly progress report/List of priorities”, 3 December 2004: _http://ue.eu.int/uedocs/cmsUpload/st15246.en04.doc_.

(6) Texts Adopted, P6_TA(2005)0382.

(7) OJ C 174 E, 14.7.2005, p. 190.

(8) OJ C 247 E, 6.10.2005, p. 159.

(9) Council Regulation (EC) No 1334/2000 setting up a Community regime for the control of exports of dual-use items and technology (OJ L 159, 30.6.2000, p. 1). Regulation as last amended by Regulation (EC) No 1504/2004 (OJ L 281, 31.8.2004, p. 1).

- The Draft Convention and Executive Summary are available on the ICBUW web site: http//: www.bandepleteduranium.org