



Blueprint

for a nuclear weapon-free world

by Eddie Gonçalves and Martin Jones

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The Campaign for Nuclear Disarmament was launched in 1958,
and is working for the global abolition of nuclear weapons.
It is the largest single issue peace movement in Europe.



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Designed by Sue Longbottom



CND is part of Abolition 2000 —
a global network to eliminate nuclear weapons

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Foreword

THE INIQUITOUS characteristics of nuclear weapons ,make the atomic bomb repugnant to every sensible person. The very first resolution of the United Nations General Assembly in January 1946 called for the elimination of nuclear weapons. Subsequent UN declarations have repeated this call. The five nuclear weapon states became legally committed to nuclear abolition when they signed the Non-Proliferation Treaty, agreeing in Article VI to proceed in good faith to complete nuclear disarmament. These states reaffirmed this commitment at the 1995 NPT Review and Extension conference.

The abolition of nuclear weapons is now the subject of serious study by highly respected institutions and by a governmental commission, the Canberra Commission on the Elimination of Nuclear Weapons. Clearly, a nuclear weapon-free world is not the weird idea of a fringe group but the desired objective of much of the global community.

The lesson from fifty years of the nuclear age is that nuclear weapons are not needed for world security; indeed, they are a menace to world peace. A nuclear weapon-free world is both desirable and feasible. Only political will is needed to make it a reality. It should be our conscious goal as we approach the new millennium.

Professor Joseph Rotblat
Nobel Peace laureate, 1995




CND

**NO MORE
NUCLEAR
TESTING**

**Boycott
French
goods
STOP
NUCLEAR
TESTING**

**Socialist
HIRO
NAGA
NU
AC
S**

**Socialist
HIROSHIMA
NAGASAKI
NUCLEAR
TESTING**

Preface

by Janet Bloomfield
Chair, Campaign for Nuclear Disarmament

ON 8 JULY 1996 the International Court of Justice in The Hague delivered a ruling which could prove to be the final nail in the coffin for nuclear weapons. The fourteen Judges ruled that the use or threat of nuclear weapons contravened the rules of international law, and that the nuclear weapon states are under a legal obligation to eliminate them completely. Coming from the highest legal body in the world, the authority of their judgment is unparalleled.

Their ruling is of historic significance and strengthens the voice of the global community which is clearly saying that nuclear weapons have no place in the 21st century, and that the new millennium should be nuclear-free. The hard-fought battles to reaffirm the abolition of nuclear weapons as a central part of the Non-Proliferation Treaty, the outrage at France's nuclear tests in the South Pacific, and the new mood among the general public and former military chiefs that the continued possession of nuclear weapons is unnecessary and can only encourage proliferation reflects the way in which nuclear disarmament has become a cause supported by the vast majority. The United Nations General Assembly has now called for the adoption of a timetable for the complete elimination of nuclear weapons.

This *Blueprint for a Nuclear Weapon Free-World* reflects some of the hard, rigorous thinking to have emerged in the last few years. The logic of the case for nuclear disarmament is now stronger than ever. CND is one of several hundred citizens' groups around the world uniting under the umbrella of Abolition 2000, a network pushing for the start of a Nuclear Weapons Convention by the new millennium to outlaw – as with the Chemical and Biological Weapons Conventions – these appalling weapons of mass destruction.

The authors have produced a document of hope, practicality and purpose. It deserves careful scrutiny and a wide audience.



“The threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law. . .

“There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control”.

International Court of Justice, 8 July 1996

A programme for global nuclear disarmament

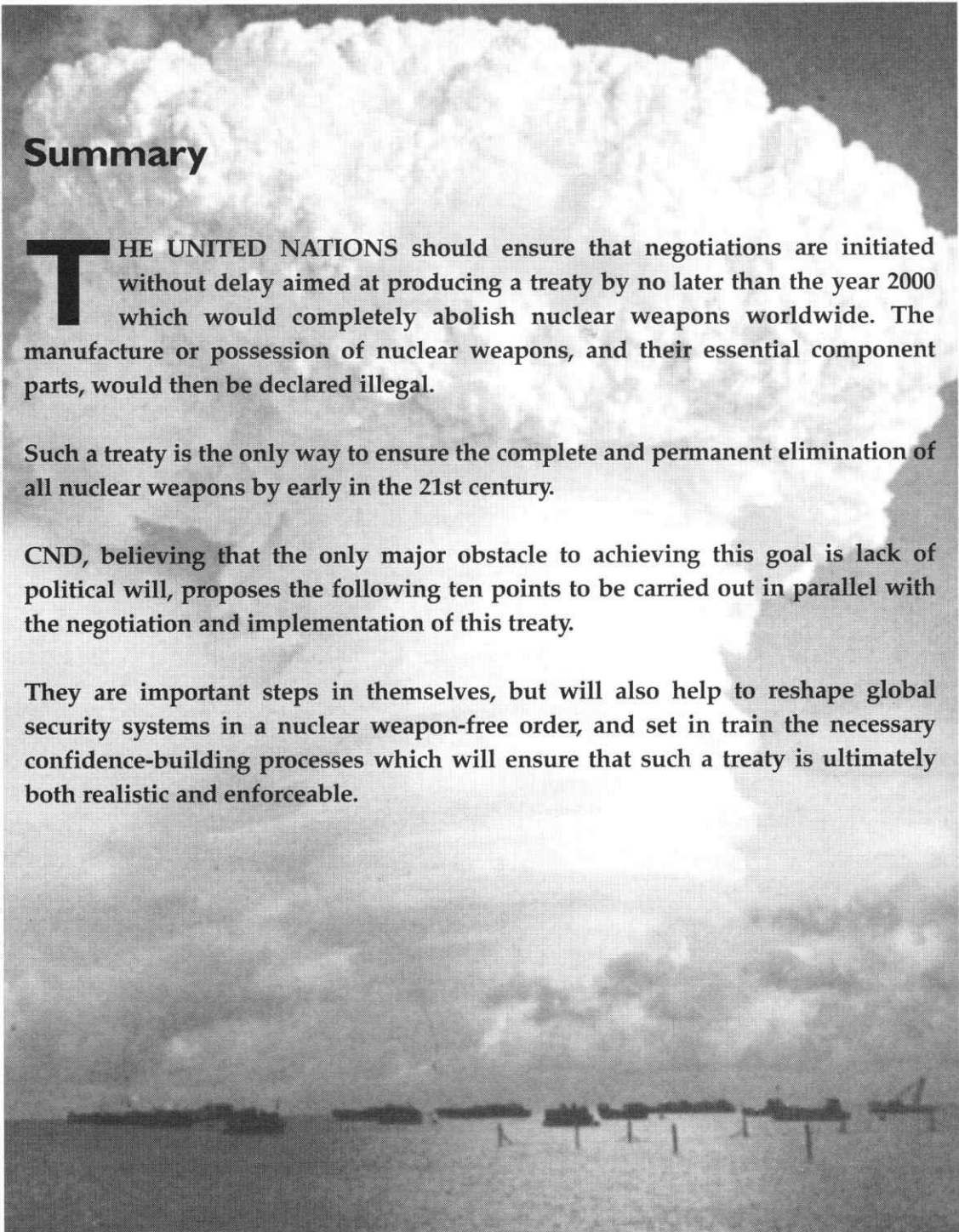
Summary

THE UNITED NATIONS should ensure that negotiations are initiated without delay aimed at producing a treaty by no later than the year 2000 which would completely abolish nuclear weapons worldwide. The manufacture or possession of nuclear weapons, and their essential component parts, would then be declared illegal.

Such a treaty is the only way to ensure the complete and permanent elimination of all nuclear weapons by early in the 21st century.

CND, believing that the only major obstacle to achieving this goal is lack of political will, proposes the following ten points to be carried out in parallel with the negotiation and implementation of this treaty.

They are important steps in themselves, but will also help to reshape global security systems in a nuclear weapon-free order, and set in train the necessary confidence-building processes which will ensure that such a treaty is ultimately both realistic and enforceable.



- 1** A Comprehensive Test Ban Treaty (CTBT) should be agreed by no later than December 1996. **By the end of 1996**
- 2** A treaty should be agreed to halt the production of all fissile materials, including the reprocessing of civil plutonium and the enrichment of uranium. **By the end of 1997**
- 3** All countries including those with nuclear weapons, should accept internationally-agreed safeguards on all aspects of their civil and military nuclear facilities, with each country's nuclear sites declared and open to intrusive inspection. **By the end of 1997**
- 4** All countries possessing nuclear weapons should declare a policy of no first use of nuclear weapons. **By the end of 1998**
- 5** Negotiations for a START III Treaty involving all five declared nuclear weapons states should be initiated. **By the end of 1998**
- 6** An international fund for nuclear disarmament should be set in place to help with the costs of implementing disarmament agreements. **By the end of 2000**
- 7** Countries possessing nuclear weapons should freeze the development and deployment of new nuclear weapon systems. **By the end of 2000**
- 8** Countries possessing nuclear weapons should implement additional and confidence-building measures, including restricting deployment of arsenals to their own soil and territorial waters. **From 2000**
- 9** Concerted efforts should be made to establish further regional nuclear weapon-free zones – especially in Central Europe and the Middle East – which are respected by all states. **From 2000**
- 10** Parallel agreements on other weapons of mass destruction, including chemical and biological weapons, should be completed along with other measures to strengthen international security. **From 2000**

Hiroshima: October 1945. Photo: Hayashi Shigeo



PART 1

The way forward to a nuclear weapon-free world

The United Nations should ensure that negotiations are initiated without delay aimed at producing a treaty by no later than the year 2000 which would completely abolish nuclear weapons worldwide. The manufacture or possession of nuclear weapons, and their essential component parts, would then be declared illegal.

THE MAIN TREATY governing nuclear weapons, the nuclear Non-Proliferation Treaty (NPT), has failed to fulfil one of its key aims; namely, the eradication of the nuclear weapons of the declared nuclear weapon states (USA, Britain, France, China, USSR/Russia). It has also failed to prevent the acquisition of nuclear weapons by at least two other countries – South Africa (since destroyed unilaterally) and Israel – and possibly more (India and Pakistan, for example).

The long term dangers of nuclear war and nuclear proliferation can only effectively be dealt with in the long run by the complete elimination of nuclear weapons. Many believe that only the United Nations has the authority and the mandate to take the initiative and demand that all nation states be party to a treaty eradicating nuclear weapons within a fixed timeframe. Others argue that a treaty brokered among the five declared nuclear powers, perhaps following a START III Treaty, is a more likely prospect.

Regardless of the mechanics of such a process, the fact remains that nuclear weapons have failed to prevent wars around the world and threaten an unacceptable level of destruction. With the end of the Cold War, the example set by the START treaties (and also the Chemical Weapons Convention) makes it clear that nuclear disarmament is desirable, realistic and verifiable. Whilst the agreement of a final treaty will take time, and the actual destruction of nuclear weapons longer still, there is no reason why the UN Conference on Disarmament should delay in starting the ball rolling.

The shape of such a treaty will be primarily determined by progress made in earlier agreements and the degree to which international relations continue to improve and are enhanced through unilateral, bilateral and multilateral confidence-building measures. The UN could play a central role in enabling such progress, and may also provide

practical facilities for interim measures – such as the ‘trusteeship’ of nuclear weapons pending eventual elimination. The question of reform of the UN would doubtless arise along the way, and may even provide an obstacle to progress in disarmament talks, because it is difficult to see how the question could be avoided. Nevertheless, securing consensus among the world community will be crucial to the success of an elimination treaty, and the United Nations Organisation still provides the most effective mechanism available for building this.

Any treaty involving the total abolition of nuclear weapons would, of necessity, have to include a universal law confirming their illegality. Such a law would have to encompass fissile materials and certain other components of nuclear weapons and not simply apply a narrow definition (for example, a ‘fully assembled and primed warhead attached to a delivery vehicle’). At the moment, since the Non-Proliferation Treaty does not contain a definition of a nuclear weapon, a country can acquire most of the components needed to construct one without breaching any of the terms of the Treaty.

Such a law should also explicitly endorse the concept of citizen’s verification, whereby individuals should have the right and duty to report treaty violations to an agreed international body. This duty should be recognised by individual signatory states with provisions for asylum being made available to any person who feared government reprisal as a result of reporting treaty violations.

A legal declaration may also provide the unambiguous enshrinement of enforcement and verification powers by the appropriate international bodies appointed to ensure compliance with any disarmament agreements, including – where necessary – sanctions or, as a last resort, military action.

A Comprehensive Test Ban Treaty (CTBT) should be agreed by no later than December 1996.

THE OUTRAGE caused by the French tests in particular was enormous and raised fundamental questions about the integrity of the members of the “nuclear club” and the nature of their intentions. China’s insistence until recently on conducting ‘peaceful nuclear explosions’, when it is known that China’s current testing programme involves the development of warheads for two new missile systems, only confirms those suspicions. Many countries must now be starting to wonder whether countries with nuclear weapons have any intention of ever scrapping them. Their suspicions only make it more likely that some of them may take the plunge and start their own nuclear weapons programme. Clearly some will feel that if nuclear weapons are here for ever, they would rather be in the club than out of it.

Already, some countries have sought to find a way around such a treaty. The American Government, for example, has made plans for conducting ‘sub-critical experiments’, while France is building a huge computer simulation laboratory. Nevertheless, a CTBT

would go some way towards curbing the development of increasingly sophisticated nuclear weapons. It is more of an obstacle to the upgrading of existing nuclear arsenals than the building of a first, crude bomb by would-be nuclear powers. Under a CTBT secret testing would be impossible. That is why a CTBT has long been seen by non-nuclear countries as a test of the nuclear club's willingness to contemplate the eventual elimination of their nuclear stockpiles. It's early entry into force is now vital.

2 A treaty should be agreed to halt the production of all fissile materials, including the reprocessing of civil plutonium and the enrichment of uranium.

A FISSILE MATERIALS 'cut-off' treaty to ban production of the key materials required to produce nuclear weapons (plutonium and highly-enriched uranium) is currently being considered by the United Nation's Conference on Disarmament. However, the British, French and Japanese governments would prefer civil reprocessing to be excluded. The problem with this is that while countries with nuclear weapons have halted the military production of fissile materials (or, in the case of Russia, announced their intention to stop in the near future) civil reprocessing such as that carried out by British Nuclear Fuels (BNFL) will continue to bring large amounts of weapons-usable plutonium onto the world market. Allowing civil reprocessing to continue makes both proliferation and nuclear terrorism more likely. The continued transportation of plutonium around the world also makes a terrorist hi-jack or an accident involving the dispersal of plutonium increasingly likely.

To ensure that a ban on fissile materials' production cannot be circumvented, the facilities for its production should be dismantled, the recycling of existing material should be outlawed, and a register of all national stocks of plutonium should be established so that all fissile material can be effectively brought under international control. All existing stocks, both civil and military, of separated plutonium and highly enriched uranium should be placed under international control and storage.

It has long been assumed that nuclear weapons cannot be made without the use of fissile material. However, the development of a total or pure fusion device may be possible in the near future using tritium. In addition, tritium is used in nuclear weapons to boost their explosive power and therefore allows for much smaller warheads and a far greater range of delivery systems. A complete ban on the production of tritium for military purposes would not only seriously restrict any attempts to evade a ban on nuclear weapons, but – because it decays at the rate of 5% a year – would also impose a time limit on most weapons in existing nuclear stockpiles.

Although there are legitimate civil uses for tritium (such as runway lights), alternatives for some of these could be found. Tritium is also used in medical isotopes but in such minute quantities that it should be possible to frame a ban in such a way that military production is stopped without affecting essential medical uses.

3 All countries including those with nuclear weapons should accept internationally-agreed safeguards on all aspects of their civil and military nuclear facilities, with each country's nuclear sites declared and open to intrusive inspection.

THE INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA) is seen by some countries as being a less than impartial agency. The fact that its powers of inspection do not extend fully to countries with nuclear weapons is one of the reasons that some dismiss the Non-Proliferation Treaty – of which the IAEA is the enforcement agency with regard to safeguards – as discriminatory. It must, therefore, have its powers extended to these countries.

If the IAEA is to be effective, it must have much more intrusive powers of inspection than at present, including the right of unannounced inspection, sophisticated high-technology inspection equipment (including satellites), and have access to intelligence gathered by signatory states. For all this to be achieved, more substantial funding will clearly have to be provided.

In addition, the IAEA's safeguarding remit should be extended to the transfer of equipment including so-called 'dual-use' equipment (for example, equipment for civil nuclear programmes that could also be used in nuclear weapon construction programmes). A radical review of the entire role, structure and funding of the IAEA must be initiated so that its primary purpose becomes the enhancement of international security. If such a review proves unacceptable in view of the IAEA's historical role then consideration should be given to a new verification agency separate from and independent of the IAEA.

4 All countries possessing nuclear weapons should declare a policy of no first use of nuclear weapons.

GIVEN THAT countries with nuclear weapons insist they are only for use in the 'last resort' to prevent a nuclear attack on one's own territory, it is extraordinary that most of them are reluctant to issue more than the vaguest of commitments not to use or threaten to use them against non-nuclear countries and refuse to sign up to a treaty guaranteeing no first use of nuclear weapons.

In fact, of course, nuclear war planners envisage all sorts of situations in which they might bully a non-nuclear country by issuing veiled threats of nuclear attack in order to ensure their 'vital interests' overseas are secured. This use of nuclear weapons is quite unacceptable. Countries with nuclear weapons should make it clear that they would never use nuclear weapons first. The universal application of 'no first use' policies would, among other things, help to create a climate of trust between countries with nuclear weapons, thereby making the likelihood of agreement on disarmament measures more likely.

5 Negotiations for a START III Treaty involving all five declared nuclear weapons states should be initiated.

A START III TREATY could be a crucial stage in securing an eventual elimination agreement. Such a Treaty could set in train a process of continuing phased disarmament measures building on the successes of the START I and II treaties. The treaty could consolidate current agreements on the safe transport and dismantling of existing warheads, reduce further the alert status of nuclear arsenals, and initiate new agreements on accounting procedures. By entering into such negotiations, parties would be forced to assess security strategy afresh and consider the implications on international relations of deep cuts in nuclear stockpiles and non-nuclear defence strategies.

The primary aim of START III would be further multilateral cuts in nuclear arsenals. However, the negotiations for a new START Treaty will also help countries with nuclear weapons to discuss the development and implementation of more stringent accounting standards, verification procedures, and safeguards. This will necessarily involve, for the first time, all five declared nuclear states, and offer the possibility of including – perhaps at a later stage – the undeclared states also. By giving nuclear weapon states the opportunity of evaluating the risks and benefits of disarmament, it will also focus attention on transparency agreements and sanctions against violators. Crucially, the process of continuing disarmament processes will further ‘devalue’ nuclear weapons as part of national defence strategies.

6 An international fund for nuclear disarmament should be set in place to help with the costs of implementing disarmament agreements.

WHILE THERE have been agreements in principle on the disposal of certain types of nuclear weapons or the decommissioning of old nuclear facilities, the parlous financial state of the former Soviet Union has created practical problems in terms of implementation. For example, the delay before the Ukraine finally agreed to honour the Lisbon Protocol and thus allow the implementation of START I was primarily about economics rather than the fear of Russian expansionism.

Similarly, the countless reported cases of nuclear materials being smuggled out of the former Soviet Union reflect the problems faced by the nuclear industry in those countries which were once part of the USSR. The possible involvement of organised crime is only another dimension of the same problem. To tackle the problem of individual workers in the nuclear industry suffering hardship and economic difficulties at governmental level requires financial inducements to ensure that progress in extending disarmament initiatives is not derailed. There is already some assistance given by the US to help disarmament and disposal of nuclear weapons and materials in the former USSR. This will almost certainly need to be extended in a full-scale global operation. The fund could

also be used to help nuclear scientists – for example, in the Ukraine – pioneer methods for cleaning up the environmental damage caused by the nuclear weapon production process.

This fund could also be used to assist countries wishing to become self-sufficient in energy to develop safe, sustainable alternatives to nuclear power. A country able to build and sustain a major nuclear power industry is nine-tenths of the way to being able to establish its own nuclear weapons programme. However, for many countries without their own supplies of oil and gas, the possession of an independent source of energy is, naturally, vital for their economic prosperity and security. These countries may, therefore, require assistance to develop suitable alternatives to nuclear power. There is an argument about whether or not contributors to the fund should be made up only of countries with nuclear weapons, or even countries which are members of nuclear alliances. In reality, whilst some non-nuclear countries may be initially unwilling to contribute to such a fund, it makes sense that all nation-states make a proportional contribution to what would in effect be a global treaty in the sense that the NPT is a global treaty. An international tax akin to the proposed Tobin tax, which raises money for international bodies, may form the basis of such a contribution.

7 Countries possessing nuclear weapons should freeze the development and deployment of new nuclear weapon systems.

HAVING REITERATED in May 1995 their commitment to seeking full nuclear disarmament, it seems strange that some countries with nuclear weapons are continuing to develop new nuclear weapons. For example, one of the reasons behind the French Government's recent nuclear tests was to help the development of at least two nuclear warheads, including the TN-75 warhead for their new submarine-launched missile. It is thought that China is also currently developing two new warheads, and that America and Russia are looking to deploy 'improved' nuclear weapons. The United Kingdom may be looking even further ahead: although it is still in the process of deploying its new Trident system, the 1995 Statement of Defence Estimates makes clear reference to a nuclear weapon system that would replace Trident in 25-30 years time, and the ability to develop other new systems.

While countries with nuclear weapons are engaged with development programmes for new nuclear weapons systems, the chances of nuclear disarmament on a significant scale are remote. If negotiations on a global disarmament treaty are to begin in earnest, work on new nuclear weapons systems must be frozen, collaboration between countries with nuclear weapons on new systems should cease, and a register of existing stockpiles should be set up.

8 Countries possessing nuclear weapons should implement additional confidence-building measures including restricting deployment of arsenals to their own soil and territorial waters.

THE NEGOTIATION of an agreement to eliminate nuclear weapons may take time, as will its actual implementation. Its success will almost certainly depend on the degree to which a climate of trust has been created. Further confidence-building measures, such as removing nuclear weapons from active deployment outside home territories, would be a highly significant gesture. It would demonstrate the sincerity of the commitment of countries with nuclear weapons to take disarmament seriously. The UK's independent initiatives with respect to chemical weapons and verification procedures are a good model of how an individual country can help to build the global political capital necessary for the negotiation and implementation of a comprehensive disarmament treaty. Withdrawal of nuclear weapons from some less stable regions of the globe would also help ease tension in areas where countries with nuclear weapons are often presumed to be in alliance with, or have intentions against, particular countries.

9 Concerted efforts should be made to establish further regional nuclear weapon-free zones – especially in Central Europe and the Middle East – which are respected by all states.

THE 1995 NPT Conference re-iterated the importance of nuclear-free zones in enhancing global and regional security. For most countries, security concerns are regional, rather than global. Therefore, the establishment of unambiguous and verifiable nuclear-free zones which are respected by all states would help strengthen the process of developing the confidence-building measures that are crucial for ensuring the progress of disarmament negotiations, and also slow the drive towards proliferation. The establishment of African and the ASEAN nuclear-free zone treaties demonstrate the positive features of such agreements in this respect.

However, the full and active support of countries with nuclear weapons is essential in ensuring NFZ's long-term success. A good example is the 1986 Treaty of Rarotonga, whereby all the countries of the South Pacific agreed to make the area a nuclear-free zone. The refusal until recently of Britain, France and the USA to sign the treaty has to all intents and purposes negated it. That they have now signed will appear to many to be more a case of political expediency to appease anger over renewed nuclear testing than a genuine commitment by countries with nuclear weapons to honour nuclear-free zones. Moves to establish similar treaties in more turbulent regions may face serious obstacles if it is perceived that countries with nuclear weapons cannot be persuaded to support and honour such treaties in areas as free from strategic tensions as the South Pacific. The establishment of such zones in areas such as the Middle East and central Europe would be major developments in the pursuit of a global disarmament treaty.

10 Parallel agreements on other weapons of mass destruction, including chemical and biological weapons, should be completed along with other measures to strengthen international security.

THE MEASURES advocated in the preceding clauses are graduated not because we do not want nuclear weapons to be abolished quicker (or even unilaterally), but because we recognise that the continuing tensions that exist in international relations make a step-by-step approach more likely to be widely accepted. That is why we also believe that comprehensive measures must be taken to improve international security and confidence.

A ban on nuclear weapons will only be effective if parallel measures are taken with regards to other weapons of mass destruction, and the international arms trade in general. Some military figures justify the continued possession of nuclear weapons by reference to the development of chemical and biological weapons by other countries.

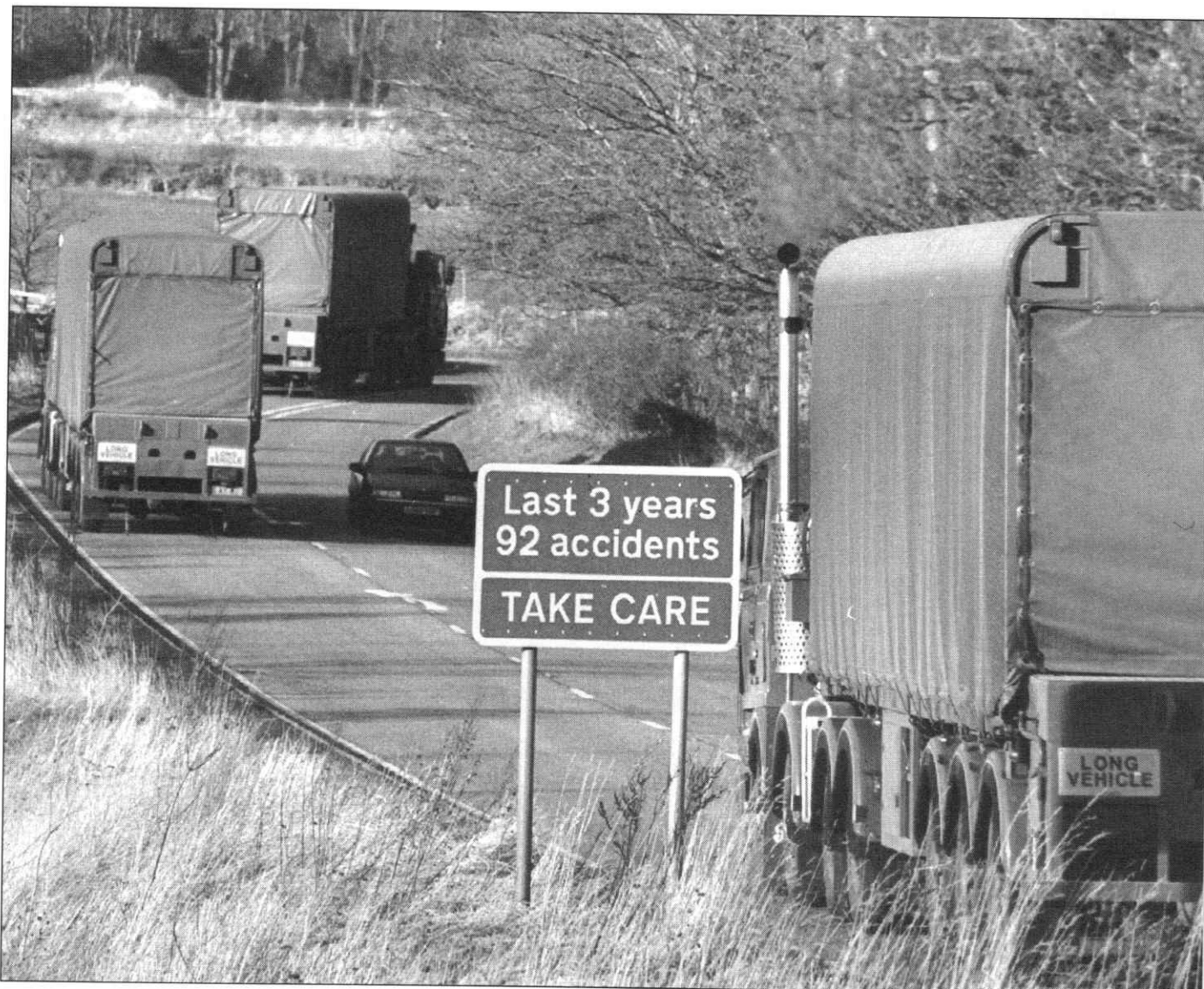
The Chemical Weapons Convention (CWC), signed in 1993, includes a series of tough verification procedures to ensure the prohibition of the development, production, stockpiling and use of chemical weapons, and the destruction of existing stocks. However, the Convention will not come into force until six months after at least 65 countries have ratified it. Theoretically, controls already exist over biological weapons – the Biological Weapons Convention came into force in 1975 – but this treaty is not as comprehensive as the CWC, and its verification measures in particular need to be significantly strengthened.

It is possible that the leading military powers could seek to minimise the effects of a ban on nuclear weapons simply by upgrading ‘conventional’ weapons in terms of technological capability and destructive yield. The five declared nuclear powers also account for 80% of the international arms trade. This would fundamentally undermine international security, and also confidence in any prospective convention banning nuclear weapons. Parallel measures on so-called conventional weapons also need to be taken alongside agreements banning non-nuclear weapons of mass destruction, including the introduction of much more severe curbs on the export of arms, the complete banning of landmines, the encouragement of further conventional arms reduction treaties, and – perhaps crucially – reducing Governments’ funding of military research and development (which in Britain alone still accounts for over 40% of the Government’s entire science effort).

The structure and capabilities of the United Nations itself also needs close examination. There needs to be much greater confidence in the United Nations’ effectiveness if international concerns are to be properly addressed. The UN’s record in conflict-avoidance and resolution has been uncertain. A stronger and more assertive UN – and one not seen simply as the tool of certain powers – will be needed if we are to move towards a new millennium where security issues are tackled more comprehensively. The UN’s entire emergency peacekeeping budget is equal only to the budget of the New York City Fire and Police Departments. A much more proactive UN will be needed to monitor and prevent conflict situations from arising. This may include the establishment of an international Satellite Monitoring Agency, a new civilian corps of specialist conflict-

resolution teams, and a non-military UN Police Force charged with protecting human rights and relief supplies.

This clearly indicates a shift in the system of global governance, and some of the scenarios depicted may seem a long way away. However, as Boutros Boutros-Ghali pointed out in his *Agenda for Peace*, 'the time of absolute and exclusive sovereignty ... has passed'. The process of securing a world free of nuclear weapons inevitably means the birth of a new world order. The world is heading for a show-down between the nuclear *haves* and the nuclear *have-nots*. The international community can secure the transition from one order to another peacefully, if it so chooses. By seizing the initiative, the nuclear club can head off the coming show-down and ensure a peaceful transition to a new world order free of the threat of the nuclear Sword of Damocles.



Trident nuclear warheads being transported to their base in Scotland

Photo: Tony Iley



HMS Vanguard, Britain's first Trident submarine

Photo: Courtesy of the Scotsman

PART 2

The road to disarmament

A short history of nuclear disarmament

RECENT CHANGES in the global political order have helped to create a new optimism about nuclear disarmament and real reductions in the world's nuclear armoury. Public disquiet and the work of CND over the last few decades has helped to make disarmament possible by placing the nuclear issue in the public domain and translating public concern into political pressure. CND was established in the late 1950s when the first anti-nuclear dissent emerged in opposition to nuclear tests in the atmosphere. CND was to become probably the largest single-issue peace movement in the world, and the power of public opinion was demonstrated when the Partial Test Ban Treaty was signed in 1963.

The 1980s saw the arrival of new nuclear weapons in Europe – including Cruise missiles in Britain – and a consequent re-emergence of CND and anti-nuclear movements in other parts of Europe. Demonstrations throughout the world ranged from rallies of hundreds of thousands of people in cities to peace camps at the sites of nuclear bases, putting nuclear weapons and disarmament back at the top of the political agenda. This highly vocal and visible expression of public concern over the nuclear threat prompted the signing of the Intermediate Nuclear Forces (INF) Treaty in 1987 eliminating Cruise, Pershing and SS20 missiles. The INF was soon followed by two Strategic Arms Reduction Treaties (START), which initiated major cuts in the strategic arsenals of the USA and the USSR, and unilateral cuts in the tactical arsenals of both countries.

Today's nuclear weapons have a combined destructive power around a million times greater than the bomb that hit Hiroshima

The Intermediate Nuclear Forces (INF) Treaty of 1987 may have destroyed few missiles and no warheads, but START I and START II – when implemented – will lead to a reduction in US and Russian strategic missiles from a Cold War peak of over 20,000 to a total for both countries of about 6,500 by the year 2003 (although there will still be several thousand short-range and other warheads left in 'reserve'). In the USA, nuclear weapons have been removed from the army and marine corps, as have tactical bombs on the navy's

Nuclear weapons and changing British public opinion

1. SEPTEMBER 1991 (*Guardian* 19/9/91)

“Britain is safer having its own nuclear weapons”

Agree – 49% (58% excluding don't knows)
 Disagree – 36% (42% excluding don't knows)
 No preference/no opinion – 16%

2. FEBRUARY/MARCH 1992

(*Greenpeace/On-Line Telephone Surveys Ltd* 24/2 - 1/3/92)

“Now that the Cold War is over, do you think Britain still needs nuclear weapons like the Trident missile system or not?”

Yes – 63%
 No – 37%

3. SEPTEMBER 1993 (*Guardian* 17/9/93)

“Britain is safer having its own nuclear weapons”

Agree – 51% (59% excluding don't knows)
 Disagree – 35% (41% excluding don't knows)
 Neither/don't know – 14%

4. SEPTEMBER 1995 (*Greenpeace/MORI* 15/9 – 17/9/95)

“Do you agree or disagree with the following statement, or would you say you are neutral? – ‘Nuclear weapons are still necessary’”

Agree – 32% (39% excluding don't knows)
 Disagree – 50% (61% excluding don't knows)
 Neutral/Don't Know/No opinion – 17%

5. SEPTEMBER-OCTOBER 1995

(*Security 2000/GALLUP* 27/9 – 3/10/95)

“What do you think is best for Britain's security – that we do or that we do not have nuclear weapons here?”

We do – 39% (43% excluding don't knows)
 Do not – 51% (57% excluding don't knows)
 Don't know – 10%

aircraft carriers. In Russia, nuclear weapons are no longer deployed outside its borders.

If the general direction appears to be in favour of disarmament, the fact remains that there are still enormous numbers of nuclear weapons in the world today. Today's combined global nuclear weapon armoury is still capable of inflicting complete devastation. While the threat of all-out nuclear war may have receded, new nuclear weapons with highly sophisticated capabilities are being developed or deployed by the nuclear powers. Moreover, there are now new challenges to be considered, not the least of which are the dangers of nuclear proliferation and nuclear terrorism.

In the 1980s Mikhail Gorbachev had a vision of a world free of nuclear weapons. Is global nuclear disarmament still desirable? If it is, is it feasible and what is the most effective and realistic route that we should take?

Who wants nuclear disarmament – and who does not

THE FRENCH GOVERNMENT'S decision in 1995 to conduct a series of underground nuclear tests provoked an unprecedented fury amongst governments and ordinary citizens alike. For many it was confirmation of their darkest suspicion that countries with nuclear weapons want to prevent other countries acquiring nuclear weapons but have no intention of getting rid of their own.

National governments and millions of ordinary people voiced angry protests at the French Government's decision. The sale of French wines went down by around one-third in Britain alone. The outcry surprised many commentators. However, opinion polls suggest that there has in fact been a major shift in public attitudes to nuclear weapons in Britain and elsewhere. As late as 1993, polls conducted for the *Guardian* newspaper showed 51% of people in the UK believed Britain was safer having its own nuclear weapons. However, by 1995 only 32% of British people

thought nuclear weapons were still necessary (MORI, 15-17 September 1995) – and 50% believed that they were not. A Gallup poll published in October 1995 found that 51% of British people do not want nuclear weapons in Britain.

The MORI poll produced figures in the non-nuclear countries of Europe that were even clearer: 92% of Austrians, 79% of Germans, and 85% of Swedes did not believe nuclear weapons were still necessary. Only in France was opinion seriously split, with 44% in favour of nuclear weapons and 39% against. An average of 74% of people across Western Europe now believe nuclear weapons are no longer necessary, and only 15% think that they are.

Up until now, by far the largest contributions to the reduction on the world's nuclear armoury have come from the United States of America and the former Soviet Union. It is becoming increasingly clear, however, that if further reductions of any significance are to be achieved in nuclear arsenals, then the stockpiles of Britain, France, China and Israel should now be included in that process, and that consideration to the issue of India and Pakistan should also be given.

Some of these countries have of course made some gestures in this direction – the abandonment by Britain of the TASM programme, for example, or the dismantling of France's Hades land-based missile system. However, France and China have both recently been engaged in nuclear test programmes designed to aid the development of new warheads, and Britain is progressing with the deployment of its new and much-enhanced Trident nuclear submarine system, and is rumoured to have benefitted with information from the French Government's nuclear tests. Israel's former Prime Minister Shimon Peres, on the other hand, recently hinted at a willingness to consider nuclear disarmament as part of a Middle East peace deal freeing the region of all weapons of mass destruction.

At hearings at the International Court of Justice in late 1995 on whether or not the use or the threat to use nuclear weapons is illegal, Government representatives from all around the world queued up to tell the panel of Judges why they wanted to see the elimination of all nuclear weapons. The vast majority of countries around the world do not possess nuclear weapons and have no intention of acquiring them. The obsession with nuclear weapons by a tiny number of countries threatens the survival of the whole global community. It may also now be creating the conditions for a new and very dangerous nuclear arms race.

What the world told the International Court of Justice during hearings on the legality of nuclear weapons:

“It cannot be consistent with humanity to permit the existence of a weapon which threatens the very survival of humanity”
Australia

“Five countries cannot arrogate to themselves forever the exclusive privilege of having their finger on the trigger”
Malaysia

“It is as difficult to establish that deterrence has kept the peace as it is to prove that ghosts exist”
Costa Rica

“While it is true that a minority of states have relied on nuclear deterrence as part of their security doctrine, that does not prove its necessity or legality.”
Zimbabwe

A new rationale for nuclear weapons

IN FEBRUARY 1995, the *Independent* newspaper reported that the US Government was putting Britain under pressure to put what will soon be Britain's only nuclear weapons, the Trident system, onto the bargaining table. A US Government official was quoted as saying that "at a time when radical bilateral disarmament is under way ... Britain and France have both signalled that they have no intention of getting rid of their nuclear weapons." ("US urges Britain to ditch Trident", *Independent* 19/2/95)

"I believe history will show that an insistence on a UK nuclear capability was fundamentally misguided, a total waste of resources, and a significant factor in our relative economic decline over the past fifty years."

Sir Michael Atiyah,
President, The Royal Society (1990-1995)

British Government ministers have previously justified the purchase of Trident, which represents a significant increase in Britain's nuclear capability, by reference to the forces of the Soviet Union. By the mid-1990s, when the Soviet threat was acknowledged to have disappeared, it was inevitable that questions would again be asked about Trident and its role, and – of course – whether Britain would now consider scrapping it. Anticipating this, Malcolm Rifkind (then Defence

Secretary) made a keynote speech in November 1993 in London where he laid out a new rationale for Trident, and conspicuously chose not to outline any circumstances in which Britain would consider nuclear disarmament.

In presenting a new reason for keeping nuclear weapons now that the old one had disappeared, Mr Rifkind gave some indication that British nuclear policy was moving in a radically new direction. He told the audience of academics and journalists gathered at King's College, London that it was important for the UK to possess "the capability to undertake a more limited strike in order to induce a political decision to halt aggression by delivering an unmistakable message of our willingness to defend our vital interests to the utmost."

"The nuclear arms race has no military purpose. Wars cannot be fought with nuclear weapons. Their existence only adds to our perils because of the illusions they have generated."

Lord Louis Mountbatten, May 1979

This careful choice of words suggests that the Government is anticipating a range of scenarios in which nuclear force might be contemplated other than to defend Britain from imminent nuclear attack. This is further suggested by the Government's 1995 Defence White Paper, which states that one of the goals of British security policy is to be able to deter or defend against "external aggression against the United Kingdom, our Dependant Territories or our vital national interests", which are later listed specifically as British trade, the sea routes used by such trade, raw materials from abroad, and British

investments abroad worth an estimated \$300 billion. The 1996 Statement of Defence Estimates goes even further, stating that the goal of British security policy is "to pursue its legitimate interests at home and abroad" including "promoting an international framework that favours freedom and democratic institutions and open trading

relationships", and that resources will be allocated to contribute to promoting the UK's wider security interests including "free trade". The Government has, in addition, failed to give clear assurances to non-nuclear countries that they will not be targeted with nuclear weapons.

Further evidence of the Government's new thinking on nuclear weapons has come from Attorney General Sir Nicholas Lyell MP. Sir Nicholas told a hearing of the International Court of Justice on November 15 1995 that nuclear weapons were not 'inherently' indiscriminate and need not lead to mass civilian casualties:

"Modern nuclear weapons are capable of far more precise targeting and can therefore be directed against specific military objectives... In some cases, such as the use of the low-yield nuclear weapon against warships on the high seas or troops in sparsely populated areas, it is possible to envisage a nuclear attack which caused comparatively few civilian casualties. It is by no means the case that every use of nuclear weapons against a military objective would inevitably cause very great collateral civilian casualties."

In other words, the Government appears to be quite serious in its belief that nuclear weapons can be deployed and actually used in some kind of 'limited strike' scenario to maintain Britain's privileged trading position and its preferred version of international 'order' - a kind of military version of the short, sharp shock. Yet in the very same speech in which Malcolm Rifkind outlined Trident's new role, he specifically rejected the idea that low-yield nuclear weapons could be effective in surgical strikes against perceived aggressors. Either this was a 'denial' clause - because of the strong content of the rest of his speech - or it is an indication of the inherent contradiction between the Government's aim on the one hand to 'secure an international environment in which states are not motivated even to consider proliferation' with, on the other hand, its intention to keep British nuclear weapons out of disarmament talks. Whatever the reality, it is clear that nuclear weapons remain a high priority for British defence planners. That much is clear from the 1995 Statement of Defence Estimates, which explicitly refers to plans for a new nuclear weapon system to replace Trident in 25-30 years time, and the ability to develop other new systems.

Britain and France are not alone in developing new military strategies to justify the continued development of nuclear weapons. A leaked US Strategic Air Command document in 1991 called for a new nuclear targeting strategy which included the ability to assemble 'a Nuclear Expeditionary Force... primarily for use against China or Third World targets'. (*The Role of Nuclear Weapons in the New World Order* - Strategic Advisory Group of the Joint Strategic Planning Staff, US Strategic Air Command. Quoted in Navy News and Undersea Technology, Washington, 13/1/92). In September 1995 it was revealed that the US was developing an earth-penetrating nuclear device based on the B-61 gravity bomb, allowing it to threaten otherwise indestructible targets.

"While we possess a nuclear weapon it is only sensible to say that we might use it. That is the obligation of the old strategy. In the new circumstances, it may become more sensible to save the money by giving it up completely".

Rt Hon Roy Hattersley MP, 1 July 1996

The threat of proliferation

ONE OF the strongest arguments for disarmament is that the continuing possession and deployment of nuclear weapons by a small number of countries could lead to the spread of nuclear weapons to other countries. There is an obvious, inherent contradiction in countries with nuclear weapons advocating nuclear weapon 'abstinence' by other nations, whilst declining to demonstrate any intention of disarming their own nuclear forces. Yet nuclear disarmament is one of the key objectives of the Non-Proliferation Treaty, which, in Article VI states: 'Each of the Parties to the treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and

"Reiterating the ultimate goals of the complete elimination of nuclear weapons and a treaty on general and complete disarmament under strict and effective international control . . . the nuclear-weapon States reaffirm their commitment, as stated in article VI, to pursue in good faith negotiations on effective measures relating to nuclear disarmament".

Final Document, 1995 Review and Extension Conference
of the Nuclear Non-Proliferation Treaty

effective international control'. The NPT, signed in 1968 and which came into force in 1970, has more signatories than any other international treaty and aims both to prevent an increase in the number of countries which possess nuclear weapons and to reduce and eventually eliminate the stockpiles of those five countries (USA, UK, Russia, China, France) who already have a nuclear arsenal.

The Treaty has been partially successful. Some new countries have acquired nuclear weapons (Israel, South Africa, and probably India and Pakistan), but nothing like the number once expected. South Africa has since unilaterally disarmed itself, while Argentina and Brazil – two of the countries it was expected would develop competing nuclear arsenals – have entered into a mutual agreement not to develop nuclear weapons. Other countries which were believed to have the capacity to develop their own nuclear arsenals appear not to have done so.

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However, in encouraging disarmament by the five declared Nuclear Weapon States the NPT has been a dismal failure. Since the US signed the Treaty, it has introduced 20 new nuclear warhead systems. Between the time it came into force and when delegates gathered at the NPT's Review Conference, the Soviet Union had more than doubled its arsenal. The arsenals of both China and France increased dramatically – by a factor of five in the case of China, and a factor of ten in case of France. Britain, of course, has seen the deployment of Trident, the most significant up-grading of Britain's nuclear arsenal since it became a nuclear power.

In the run-up to the NPT Renewal Conference in April-May 1995, countries with nuclear weapons argued strongly for an indefinite and unconditional extension of the Treaty. Many countries (and CND), however, argued that for the Treaty to have the continued confidence of all its signatories, and to be acceptable to those countries who are not signatories (including India and Pakistan), considerably more than a 'no-strings-attached' extension was needed. In the end, after extensive 'diplomatic pressure' and arm-twisting,

the Treaty was extended indefinitely after countries with nuclear weapons agreed to exercise 'the utmost restraint' on nuclear testing and promised to pursue the 'elimination' of nuclear weapons with renewed vigour. Most countries grudgingly went along with this, but the reasons behind their hesitancy were quickly confirmed when China conducted a nuclear test within a week of the conclusion of negotiations, and by the announcement within a month by the new French President, Jacques Chirac, that France was to start a new programme of nuclear testing later in the year.

Official announcements soon revealed just how subjectively countries with nuclear weapons interpreted what had been agreed at the NPT Renewal Conference, and indeed in the NPT itself. In a letter dated August 29 1995 to the World Court Project (UK), the French Ambassador to London wrote: 'France is one of the five permanent members of the United Nations Security Council and one of the five nuclear powers recognised by the Non-Proliferation Treaty. This status confers on her special responsibilities and particularly the right to maintain her deterrent at a credible level'. Quoted in an article in the British Medical Journal on August 19 1995, a spokesman from the UK Foreign Office went even further, stating: 'We, and the responsible powers, recently had a ringing endorsement from 178 countries in the form of the renewed Non-Proliferation treaty which extended indefinitely the right of the nuclear powers to keep their weapons'.

"A nuclear weapon free world is no longer a fanciful idea. It is taken seriously by strategists, military experts, even former US Secretaries of State for Defense. This is because they now concede the point – which peace movements have been making for years – that nuclear weapons diminish, rather than enhance, the security of nuclear weapon states"

Beyond the NPT, International Network of Engineers and Scientists Against Proliferation, 1995

The speed with which China and France resumed nuclear testing and nuclear weapons development programmes after the conference ended demonstrated the truer intentions of the 'nuclear club'. Successive Review Conferences of the NPT and statements from countries which have not signed the NPT suggest that the failure of countries with nuclear weapons to abide by their part of the NPT's bargain – namely, to pursue the total elimination of their stockpiles – seriously threatens that Treaty's credibility. Reports of fresh nuclear tensions between India and Pakistan, with the former suspected of trying to reactivate its nuclear testing programme and the latter threatening to respond in kind, may be a sign of things to come. Confidence in the NPT remains crucial to preventing proliferation, and the key to building and maintaining confidence in the NPT remains Article VI and disarmament.

Time to choose

THE WORLD appears to have three options regarding nuclear weapons. The first option, which nobody favours, is to allow the unchecked proliferation of nuclear weapons to many more countries. The second is to control the spread of nuclear weapons to other countries, but permit the continued possession of nuclear weapons for the foreseeable future by those who already have them. The third option is nuclear disarmament as part of a global security agreement.

“There is no learning curve with nuclear weapons – you make a mistake here and you destroy a nation”

Robert McNamara, US Defense Secretary, 1961-68
(*Independent*, 23/1/96)

The evidence clearly suggests that, simply to control proliferation, countries with nuclear weapons will have to work much harder at demonstrating their stated commitment to disarmament and eventual elimination of their own stockpiles. If countries with nuclear weapons continue to make long-term defence decisions which include nuclear weapons:

then it is only a matter of time before other countries that have the potential to produce nuclear weapons will look again at their own options. This, of course, has dangerous implications for less stable regions of the world where localised nuclear arms races could become a reality as some countries seek to ‘impress’ their neighbours. Moving purposefully towards the goal of a worldwide ban on nuclear weapons would be in the self-interest of countries which currently possess them, and is realistically the best way to control proliferation.

One of the key elements that will need to be addressed in securing a disarmament treaty that carries the confidence of its signatories and which is enforceable is the issue of trust. The process of establishing the level of trust which will be required for such a treaty has already begun. The success of the INF Treaty led directly to the numerically more significant START treaties. The enactment of further confidence-building measures will demonstrate that disarmament need not threaten anybody’s security – for example, the freezing of new deployments, restricting current deployments to one’s own territorial boundaries, and agreeing not to use nuclear weapons first. However, work on seeing how a Treaty can

“A world without nuclear weapons would actually be better”.

Les Aspin, former US Defense Secretary, June 1992

most effectively be established to eliminate nuclear weapons cannot wait until all such measures are implemented. This work needs to start as soon as possible – for example, to determine whether it is the United Nations’ Conference on Disarmament, or a forum consisting only of the declared nuclear powers, or even a separate brokering body which is best placed to deliver such a treaty.

The other main area to be addressed will be the necessity of establishing strict controls governing all existing stocks of plutonium and highly-enriched uranium, and possibly even tritium. This is important because reprocessing plants (such as the THORP plant at Sellafield in Cumbria) will vastly increase the world’s stocks of plutonium. Given that most countries assess their security needs by judging their neighbours’ capabilities as much as by what they perceive to be their intentions, the continued transportation of plutonium could also dangerously threaten the balance of power in politically sensitive regions of the world. For example, Japan has major contracts with both France and British Nuclear Fuels to reprocess plutonium from nuclear reactor waste. It is widely accepted that Japan has the technological skill to develop nuclear weapons. All it needs to cross the line is the political will to do so and appropriate amounts of fissile material. The separated plutonium from THORP and La Hague will provide that fissile material. The mere fact that Japan has the ability to develop nuclear weapons could trigger a future nuclear arms race in a region where tensions between North and South Korea, China, Taiwan and Japan are already considerable.

The UN's Conference on Disarmament must give a high priority to a fissile cut-off treaty which includes civil re-processing and which then progresses to examining the problem of how to register and police existing stocks. Serious consideration would have to be given to some of the practical consequences of such a treaty. For example, an inclusive fissile cut-off treaty will inevitably seriously disrupt the civil nuclear power programmes of many countries. While an international fund for nuclear disarmament would seek to promote the development of alternative and sustainable sources of energy, the fact that nuclear power accounts for around 20% of the world's current electricity output cannot be neglected. It will be difficult to replace this source of energy without prior and effective planning. This is, of course, a major challenge but it also offers the hope that a worldwide ban on nuclear weapons would work because without these materials it will not be possible for anyone to build nuclear weapons again. Getting to grips with the problem of fissile materials is intrinsic to getting to grips with the problem of ensuring that a worldwide ban on nuclear weapons will be enforceable.

“The most effective way to prevent proliferation is to dismantle the arsenals that already exist”.

William J Perry, US Defense Secretary, 13 May 1996

Enforcement and verification of a ban on nuclear weapons

THE ENFORCEMENT and verification procedures for a global ban on nuclear weapons will, of necessity, need to be tough. The degree of global governance required cannot be under-estimated, nor shied away from. Among the issues that negotiators would have to face are those of control and inspection, upon which previous arms treaties have depended (or, in some cases, faltered). The appointed international bodies charged with monitoring the treaty would require the political, economic and perhaps also the military capabilities to carry out their mandate. The resources and expertise already gathered together in bodies such as the International Atomic Energy Agency and other scientific organisations could potentially be utilised to great effect. Sir Michael Atiyah, the President of the Royal Society, told an audience at his farewell address on November 30 1995 that ‘the aim of totally eliminating nuclear weapons no longer seems an impossible dream. In working towards this goal scientists have a unique responsibility, and they can help in various ways. On the technical side they can assist with the dismantling of weapons, the disposal of plutonium and the monitoring of security. On the political side they can keep reminding the public of the horrific nature of nuclear warfare and so maintain pressure on their Governments to continue along the disarmament route’.

“We will eventually see the time when the number of nuclear weapons is down to zero”.

General Colin Powell, June 1993

The resources of nation-states and the international community would need to be deployed through intelligence networks and surveillance technology to ensure vigorous and effective verification. There are also issues surrounding the question of what happens to nuclear stockpiles in any interim period. One suggestion, proposed by, among others,

“The Cold War’s end and the dangers of nuclear proliferation demand a fundamental reappraisal of the role of nuclear weapons in US policy and in global politics ..

US national security would be best served by a policy of phased reduction in all states’ nuclear forces and gradual movement toward the objective of eliminating all weapons of mass destruction for all countries”.

An Evolving US Nuclear Posture, The Henry L Stimson Center, 1995.

Signed by:

- General Andrew J Goodpaster, *Supreme Allied Commander in Europe, 1969-74;*
 - General William F Burns, *Joint Chiefs of Staff Representative for Intermediate Range Nuclear Forces, 1985-86;*
 - General Charles A Horner, *Commander in Chief, North American Aerospace Defense Command and US Space Command, Commander, Air Force Space Command, 1992-94;*
 - General W Y Smith, *Deputy Commander in Chief, US Europe Command, 1981-83;*
 - Senator James M Jeffords *(Republican);*
 - Robert S McNamara, *US Secretary of State for Defense, 1961-68;*
 - Ambassador Paul H Nitze, *Chief Arms Control Negotiator, 1981-89;*
 - Ambassador Rozanne L Ridgway, *Co-Chair, the Atlantic Council.*
- And nine others.

Sir Peter Emery – a Conservative Member of Parliament, who is also a member of the North Atlantic Assembly – is to transfer control of stockpiles to United Nations safekeeping in the form of a ‘trusteeship’ agreement, while other proposals include lowering the alert status of nuclear forces and the separation of warheads and delivery systems.

The development of cooperative arrangements on issues of nuclear safety, security and accounting procedures will contribute greatly to the building of effective verification and safeguard systems. Nevertheless, the effective enforcement of elimination and verification agreements may require high-capability preventive measures being available and in place to counter the threat of potential violators and prevent possible ‘breakout’ by individual states. The United Nations, under Article 43, has the potential capability of mustering a force capable of delivering such a safeguard system, although an alternative force may evolve to fit this role which is more effective and in which the global community – including, most importantly perhaps, the nuclear weapons states themselves – has greater confidence.

The readiness to sanction such a resolute response should always be a last resort and should not detract from the necessity of working to improve international relations as an essential element of an elimination agreement. Confidence-building measures and diplomacy will always be preferable and, in the long-term, more effective than strong-arm tactics. However, the global community should be ready to act with appropriate determination to ensure that such an agreement is strictly adhered to if it is to come about at all.

The prospects of a nuclear-free world

IN THE EARLY 1980s, the problem of nuclear weapons was recognised as being one of the greatest issues confronting humankind. Nowadays, relations between the two largest nuclear weapon powers have been transformed. A number of nuclear weapons have been dismantled, some unilaterally and others through treaties, but many thousands remain. If any good can have come from French nuclear testing perhaps it will prove to be the reminder that nuclear weapons have an awesome destructive power, still pose a terminal threat to the environment and indeed to civilisation, and that merely to wish them away is not enough. The former Australian Prime Minister Paul Keating has set up a 17-member Commission on the Elimination of Nuclear Weapons – the Canberra Commission – comprising statespersons, disarmament experts, military strategists and scientists. Its findings will be presented to the United Nations General Assembly later in 1996.

Within the current structure of international affairs and the new balance of power that exists, 'deterrence' is no longer (if it ever was) an applicable strategy – as even former Defence Secretary, Malcolm Rifkind, has accepted. It is clearly not feasible to think in terms of the status quo, and the continuing development of ever more sophisticated nuclear weapons armed with the latest technology makes it imperative that serious progress on nuclear disarmament is made if a future nuclear 'flashpoint' or conflict is to be avoided. The Cold War represented a crude and horrifically dangerous system of 'crisis stability', but the emergence of new weapons, launching systems and strategies is in many ways as dangerous. The new nuclear warheads being developed by France – including the TN-75 warheads which will be fitted onto French submarines – will possess a 'stealth' capability in order to help them avoid radar detection, and also an earth penetration capability enabling them to burrow deep underground and knock out enemy bunkers. ISIS, the respected arms control institute, estimates that the TN-75 is intended to constitute approximately 80% of France's future nuclear arsenal. Such weapons only hasten the danger of actual use of nuclear weapons in a conflict situation, and therefore only serve to undermine security.

Similarly, it is difficult to believe that, without a treaty which controls and eventually eliminates the materials which help to make a nuclear weapon, that they will not one day fall into the hands of terrorists. The threat of terrorism – whether nuclear or otherwise – cannot be deterred as such (a British Trident nuclear missile on a submarine cannot deter detonation of a nuclear bomb in a suitcase in London, for example). There is also no way in which a government can guarantee that there will never be an accident involving nuclear weapons or nuclear materials. As Chernobyl showed, the risk of even one such accident is too great a risk to keep taking.

No doubt those with the most to lose, such as the military-industrial complex and politicians with vested interests, will be among the strongest advocates of the argument that nuclear weapons cannot be disinvented, and that a global nuclear disarmament convention is therefore a naive impossibility. It is odd, then, that many of these same politicians who have already condemned such an objective in these terms expressed such confidence in the convention which banned chemical weapons. These weapons also cannot be 'disinvented', and are considerably easier to produce than nuclear weapons, yet a global treaty banning the use of these cheaper but devastating weapons of mass destruction has been agreed and enthusiastically supported.

Achieving the goal of global nuclear disarmament need not be as difficult as some suggest. The world has seen many momentous changes in presumed orthodoxy occur

“Nuclear disarmament is substantially facilitated by the easing of international tension and the strengthening of trust between States which have prevailed following the end of the cold war. The undertakings with regard to nuclear disarmament as set out in the Treaty on the Non-Proliferation of Nuclear weapons should thus be fulfilled with determination. In this regard, the nuclear-weapons States reaffirm their commitment, as stated in article VI, to pursue in good faith negotiations on effective measures relating to nuclear disarmament”.

Non-Proliferation Treaty, Final Document, 1995 Review and Extension Conference, Treaty on the Non-Proliferation of Nuclear Weapons.

in a very short space of time – remember the time it took for communism to collapse, or apartheid to fall. Once seen as impossible dreams, all are now looked back upon as inevitable events. The vast majority of the signatories of the NPT – the most widely-supported international treaty in existence - would be willing signatories to a new treaty which effectively answers their concerns over nuclear ‘discrimination’. The United Nations General Assembly has shown signs of a new determination to push for nuclear disarmament. In December 1995, for the first time ever, it overwhelmingly voted for the achievement of the total elimination of nuclear weapons within a fixed time period. Members of the General Assembly called on countries with nuclear weapons to ‘stop immediately the qualitative improvement’ of their nuclear arsenals and to ‘undertake step-by-step reduction of the nuclear threat’. By 106 votes to 39 (and 17 abstentions), the resolution called on the UN’s Conference on Disarmament to begin negotiations on ‘a phased programme of nuclear disarmament and for the eventual elimination of nuclear weapons within a time-bound framework’.

Hundreds of Non-Governmental Organisations (NGOs) around the world, including CND, have joined together to form ‘ABOLITION 2000’, a new international campaign for the abolition of nuclear weapons through a global disarmament treaty. The number of supporters grows almost daily. There is a new momentum for nuclear disarmament, and an opportunity which cannot be wasted. Of course the road to complete nuclear disarmament is littered with hurdles of one sort or another. But a species which is capable of building weapons that can destroy all life on Earth is surely also capable of framing an effective agreement for ridding it of them too.

Appendix I

Inventory of declared nuclear weapon states' stockpiles, end of 1995

UNITED STATES			
Name	Launchers/ SSBNs	Total warheads	Total yield (kt)
Land-based missiles			
Minuteman III	525	1 575	428 625
MX Peacekeeper	50	500	150 000
Submarine-launched missiles			
Trident I C4	192	1 536	153 600
Trident II D5	192	1 536	297 600
Aircraft			
B-1B Lancer	82	1 000	150 000
B-2 Spirit	81	400	950 000
B-52H			
Stratofortress	76	400	60 000
Grand total	1 125	8 000	2 189 825

RUSSIA			
Name	Launchers/ SSBNs	Total warheads	Total yield (kt)
Land-based missiles			
SS-18	186	1 860	1 395 000
SS-19	150	900	495 000
SS-24	36	460	253 000
SS-25	345	345	189 750
Submarine-launched missiles			
SS-N-18	208	624	312 000
SS-N-20	120	1 200	240 000
SS-N-23	112	448	44 800
Aircraft			
TU-95 MS6	27	186	47 000
TU-95 MS16	36	912	228 000
TU-160		6 300	75 000
Grand total	1 236	7 235	3 279 550

FRANCE

Name	Launchers/ SSBNs	Total warheads	Total yield (kt)
Aircraft			
Mirage IVP /ASMP	18	18	5 400
Mirage 2000N/ ASMP	45	45	13 500
Super Etendard/ ASMP	38	20	6 000
Submarine-launched missiles			
MSBS M4A/B	64	384	57 600
Grand total	124	467	82 500

CHINA

Name	Launchers/ SSBNs	Total warheads	Total yield (kt)
Aircraft			
Hong-5	30	Total of 150	
Hong-6	120		
Qian-5	30		
Hong-7	0 bombs		
Land-based missiles			
Dong-Feng-3A	50	50	165 000
Dong-Feng-4	20	20	66 000
Dong-Feng-5A	4		420 000
Dong-Feng-21	36	36	10 800
Dong-Feng-31	0	?	?
Dong-Feng-41	0	?	?
Submarine-launched missiles			
Julang-1	24	24	7 200
Julang-2	0	?	?
Artillery/ Rockets/ADM's			
	150	?	?
Grand total	460	284	269 000

UNITED KINGDOM			
Name	Launchers/ SSBNs	Total Warheads	Total Yield (kt)
Aircraft			
Tornado GR.1	72	100	20 000
Submarine-launched missiles			
Trident II D5	32	192	19 200
Grand total	104	292	39 200

TOTAL FOR ALL DECLARED NUCLEAR WEAPON STATES			
US	1,125	8,000	2,189,825
RUSSIA	1,236	7,235	3,279,550
FRANCE	124	467	82,500
CHINA	460	284	269,000
UK	104	292	39,200
Total*	3,049	16,278	5,860,075

*In addition, Israel is believed to have 100-300 nuclear weapons. India and Pakistan have sufficient fissile materials to construct a small number of nuclear weapons. In 1974 India conducted a nuclear test.

Appendix 2

Annual running costs of the United Kingdom nuclear weapons programme

Trident fleet operating costs	£200 million
WE-177 bomb operating costs	£20 million
AWRE Aldermaston operating costs	£784 million
Six Tornado GRI squadrons	£284 million
RAF Marham	£47.1 million
RAF Bruggen	£90 million
Decommissioning of Polaris	£60 million
Transportation of nuclear weapons	£1 million
Nuclear Accident Response Unit	£0.3 million
Proportion of operating costs at Faslane and Coulport	£200 million
Total	£1.7 BILLION

Glossary of terms

ASEAN	Association of South East Asia Nations
ISIS	International Security Information Service
SSBN	Ballistic missile carrying, nuclear-powered submarine
ABM	Anti-Ballistic Missile
IAEA	International Atomic Energy Agency
CTBT	Comprehensive Test Ban Treaty
NPT	Nuclear Non-Proliferation Treaty
NGO	Non-Governmental Organisation
CND	Campaign for Nuclear Disarmament
START	Strategic Arms Reduction Treaty
CWC	Chemical Weapons Convention
TASM	Tactical Air-to-Surface Missile

"A nuclear weapon-free world is both desirable and feasible. . It should be our conscious goal as we approach the new millenium".

Joseph Rotblat, *Nobel Peace Laureate, 1995.* (Extract from the Preface)

"With this Blueprint, CND has made a vital contribution to rethinking global security in the 21st century".

Martin Butcher, *Director, Centre for European Security and Disarmament*

"It is a well thought out document and covers almost every aspect of nuclear disarmament. Organisations like CND have a very important role to play in educating and sensitising public opinion against nuclear weapons".

Ron McCoy, *Canberra Commission on the Elimination of Nuclear Weapons*

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