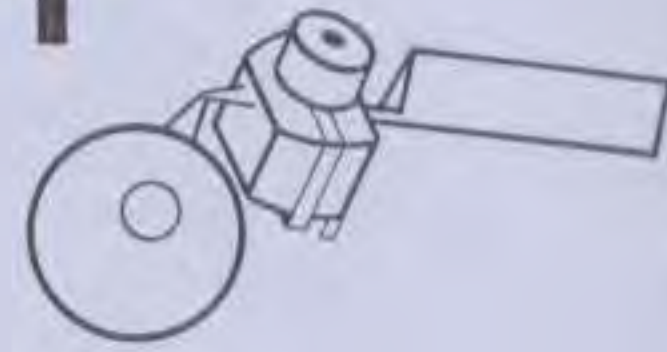


# TRUST AND VERIFY



## THE BULLETIN OF THE VERIFICATION TECHNOLOGY INFORMATION CENTRE

No. 26 February/March 1992

### Helsinki 1992

The Conference on Security and Cooperation in Europe (CSCE) opened in Helsinki on March 24 and is scheduled to last until July. During this time, the CSCE will discuss all the issues relating to the Helsinki Process. Prior to the opening of the Conference there was a preparatory meeting in Helsinki. VERTIC produced a document which was sent to all delegates at the preparatory meeting, and then to the delegates to CSCE proper.

The document, entitled "The CSCE, European Security and Verification: Considerations for Helsinki 1992", was written by Patricia Lewis and Owen Greene and forms part of a VERTIC project on European Security and Verification funded by the Ploughshares Fund in San Francisco. The document has been well received and its main conclusions were featured in an editorial in *Defence News* (30/3/92). The report looks at the main security issues facing the CSCE nations; it outlines the arms control agreements involving the CSCE and lists the institutions which exist for verification activities in Europe. The report proposes the following conclusions and recommendations:

- There are many possible structures within (the existing) Europe which could be applied to verification, confidence-building and security within the evolving "New Europe". These include the established bilateral government-to-government inspections and observations, NATO (through the VCC/VSS structure), WEU, CSCE (through the Secretariat and the CPC), EC, Euratom, IAEA and the UN.

- All of these institutions can and should be used where appropriate. Each has different expertise and experience, which can be applied to different situations accordingly.

- In the long term however, thought must be given to the way in which Europe is evolving and those institutions which encompass the largest number of states will have the greatest applicability in the future. This means that currently the government-to-government bilaterals, the CSCE, the IAEA and the UN have the most obvious appeal. However a rapidly expanded NATO or EC could also contribute in the long-term future as well as in the short term. The clear advantage of the CSCE, the IAEA and the UN is that the important Euro-Atlantic link is kept open (with all its considerable expertise and experience in these areas) and the CIS and East/Central Europe is also included in the process.

- Verification, transparency and confidence-building should be seen as one of the most important political-military activities for ensuring stability in a rapidly changing Europe. Such activities must not be side-lined and treated as an "extra". They are crucial in building trust between otherwise warring factions. They also provide an infrastructure for fact-finding and information exchange

which is a critical component of international mechanisms for conflict prevention.

- Verification and confidence-building activities should therefore be funded properly. Verification is an inexpensive way of improving security. The more resources wisely invested in verification and confidence-building the greater the collective security of the states involved. Security can reliably be improved with judiciously increased funding in this area. This is not true for increases in spending on military equipment – security may or may not increase as a result of military equipment spending, the outcome is uncertain and expensive.

- The application of verification and confidence-building measures to the newly independent CIS Republics would lead to greater transparency and trust between them. The most appropriate institution for the CIS states is clearly the CSCE through the 1990 Vienna Document and the 1990 CFE Treaty.

- The treaties apply straightforwardly to the militaries of each independent state in that through the notification, evaluation and inspection procedures they can check each other's declarations and satisfy themselves that there is no threat.

- Difficulties arise in the prevention of conflict between different ethnic groupings within one state. It should be possible, through the Consultative Committee of the Conflict Prevention Centre in Vienna, for representatives from the different groupings within a state to settle disputes before they become violent. However this mature state of affairs is clearly unlikely to occur for some time. In the meantime, the CPC should intervene in violent clashes within a state and set up mechanisms for resolution and confidence-building procedures to take place.

- To fulfil this function, the CPC and the CSCE Secretariat should be better resourced and funded. The two centres should be able to draw on the expertise that exists within the member states and within other institutions, such as NATO and the WEU, and put it to full use for short periods of time.

- In the longer term, similar measures could also be applied to the final outcome of the Yugoslavian civil war. As the republics end up as independent states then they could then join the CSCE as such. If further disputes occur, they could be resolved through a stronger and more powerful CPC.

- The CPC could establish a mechanism for representatives of the different ethnic groupings and regions within the republics of the CIS or Yugoslavia to inspect each other's military facilities and to talk with each other about further confidence-building measures. However, to avoid controversial singling out of states, such measures should in principle apply equally to all CSCE states.

● The expertise in coordination and cooperation in the field of political-military decisions and in the field of verification which has been built up by NATO and by the WEU should not be allowed to go to waste. Care must be taken now to institute links between the verification sections of these two organizations and the CSCE/CPC Secretariats. Joint inspections for CFE/Vienna Document would clearly be a sensible, cost-saving exercise and should be considered as an option for the near future.

● The WEU satellite data centre and all the work associated with it (such as the European Space Agency decision to include verification as part of its peaceful activities) should be well funded. The WEU, the USA, France and Russia should consider extending the sharing of their satellite data to all the CSCE states.

● States making unilateral reductions of military equipment, whether nuclear, chemical or conventional, should declare those reductions and deposit the declaration with the UN and with the CSCE. Attached to the declaration should be provisions for states within the CSCE structure to inspect and monitor the reductions.

● The CFE Treaty should be joined by all the CIS states which are affected by it (including Kazakhstan), and by the Baltic States. In signing the treaty, these states will help to ensure the long term stability of their regions and can be involved in follow-on negotiations and so be able to influence future decisions.

Copies of the report are available from the VERTIC office for £5 (post free); a more detailed report on the same subject will be available at a later date.

## Open Skies

The start of the Helsinki CSCE meeting saw the formal signing of the Open Skies Treaty. Signed so far by all the NATO states, plus the former members of the WTO (excluding the USSR), Russia, Belarus, Georgia and Ukraine, Open Skies allows states to fly aircraft over each other's territories with a range of sensors on board. The sensors include photographic cameras (including video cameras), infra-red sensors, and synthetic aperture radars. The maximum ground resolution permitted for the sensors is 30 cm.

Inspections are permitted from Vancouver to Vladivostok with 72 hours notice and then a further 24 hours notice once the inspectors are in-country and have filed their flight plan. The inspections teams may stay in the country for a total of 96 hours. The entire territory of each State Party is open to aerial inspections. Each state may be subject to an annual quota of inspections which it has to accept (the passive quota) although for the first three years (the initial phase) each state only has to accept 75% of this quota. Active quotas — the number of aerial inspections states can carry out per annum — vary depending on the needs of each state. Some states have banded together to pool their quotas (e.g. the Benelux states have formed a pool, as have the states of the WEU). The USA has an annual passive quota of 42 overflights, as has Russia/Belarus. If other FSU states decide to join in with the Belarus/Russia pool then this number could go as high as 52 and the USA will match the increase for itself.

The treaty enters into force 60 days after the depository states (Canada and Hungary) and a total of 20 states have ratified. After this date, for a period of six months, other CSCE states can request to join the treaty and if no state objects they are automatically accepted; but their application can be vetoed by any State Party. The

successor states to the Soviet Union have the right to accede to the treaty at any time. After this six month period any country in the world can request to join and the application goes to the Open Skies Consultative Commission.

The Open Skies Treaty is 100 pages long and copies are available on request from the VERTIC office for the cost of photocopying (£10) plus postage/packing.

## Testing Yeltsin

In a Presidential Decree on 27 February 1992, President Yeltsin instructed the Russian Federation Ministry of Atomic Energy and the High Command of the CIS Joint Military Forces to carry out the necessary works of drilling, building and assembling for the preparation of two to four underground nuclear tests on the island of Novaya Zemlya, in case of the termination of the existing moratorium. This decree seems to be a step back from a previous decree in October 1991 which banned nuclear tests in Novaya Zemlya for one year, and it retreats from Boris Yeltsin's long-standing opposition to nuclear testing. As early as May 1990, in his nomination speech, Yeltsin proposed the elimination of nuclear testing on Russian Territory.

As a twin-track strategy, President Yeltsin also instructs the Ministry of Atomic Energy, the High Command and the Russian Federation Ministry of Foreign Affairs to prepare a proposal for bilateral negotiations with the USA on limiting nuclear testing. He also set up a line of credit from the Russian Federation of Economics and the Ministry of Finance to directly finance the operation at Novaya Zemlya.

## CIS update

It appears that Ukrainian president Leonid Kravchuk will proceed with the transfer of Ukraine's tactical nuclear weapons to Russia after previously saying that the process would be halted until he was assured that destruction of the weapons was taking place rather than storage or redeployment by Russia. Kravchuk's temporary suspension of transfers emphasises the fragility of the process of establishing secure command and control over CIS nuclear weapons. There was always the possibility that strategic nuclear weapons in Kazakhstan, Ukraine and Belarus might be used as bargaining chips in relations with Russia (and this indeed has proved to be the case), but all tactical nuclear weapons from all Republics were supposed to be transported to Russia by July 1st 1992 and indications were — as reported in the last *Trust and Verify* — that the process was going according to plan. Tactical weapons were being quickly transported to Russia to avoid any repeat of the incident in Baku, Azerbaijan in 1991 when a tactical nuclear weapon storage depot was attacked. The Ukraine is no longer proposing that a destruction facility be built in the Ukraine, and that warhead destruction there be supervised by American and Western European officials; it now wants some of its officials to monitor Russia's dismantling of Ukrainian warheads.

Tactical weapons remain in Russia, Ukraine (43% left) and Belarus. The story reported in *Defence News* and *The Economist*, apparently derived from the German magazine *Stern*, that Iran bought two or three tactical nuclear warheads from Kazakhstan has been denied by Lieutenant General Sergei Zelentsov, deputy head of the CIS Joint Armed Forces Main Directorate. He says that the CIS has inventoried all its nuclear weapons and all can

be accounted for. It has been suggested by some commentators (e.g. *The Economist*, January 18 1992) that Western aid could be the quid pro quo for Republics which cooperate in the verifiable disabling – by removing fuses – of tactical nuclear weapons. It would obviously be in the interests of the West to help remove causes of suspicion between CIS republics in such ways. Many FSU nuclear weapons do not have the PALs (Permissive Action Links) which make non-authorized use less feasible. The weapons instead depend on the physical separation of warhead and missile, plus a numerical launch code. Ships carry missiles and warheads together and so present greater dangers.

Zelentsov claims that Russia has sufficient dismantling facilities to handle the influx of missiles and warheads; this is queried by others. All CIS facilities for destruction of nuclear weapons are in Russia and "have an annual capacity of no more than 2,000 weapons" (*JDW*, February 15 1992). Financial aid for the construction of storage sites for plutonium and uranium retrieved from warheads is being requested by Russia.

Even if weapons are inventoried, uranium reserves which are distributed mainly between Russia, Uzbekistan, Kazakhstan (30% each) and Ukraine present the danger that raw or partially enriched uranium could be sold for much needed cash by these Republics. Kirgizia has said (*The Times*, 19/3/1992) that it wants to sell its uranium reserves under IAEA supervision.

The US, Russia, the EC and Japan have agreed to create an international science and technology centre which would put Russian nuclear scientists to work on civilian projects. The idea is to give these scientists work so they will not sell their expertise to states interested in developing a nuclear capability. The US is providing \$25 million and German Foreign Minister Hans-Dietrich Genscher proposal that EC technical funds also be used to support the centre has been agreed. The EC will match the US contribution and Japan will also provide funding.

Japan is proposing to build a fast breeder reactor which could be used to burn off plutonium from both FSU and US nuclear weapons. 200 tons of plutonium could result from the dismantling of US and FSU warheads under INF, START and more recent promises. The proposed reactor would be able to consume two tons of plutonium per year for 40 years. Plutonium would be converted to a less enriched plutonium for use in commercial reactors. If the idea is accepted the reactor would probably be built in either the US or FSU and would not be operating until early in the next century.

## CFE

By the end of July NATO wants the eight members of the CIS covered by CFE, plus the Baltic states, to have settled their allocations of equipment covered by the Treaty. This would then serve as the basis for formal adoption of the CFE by FSU republics. Germany is pressing NATO to help FSU Republics verify compliance with CFE, and a seminar on treaty verification, held under the auspices of the WEU, has just taken place (18-20 March in Berlin). The seminar addressed concerns such as those expressed by Poland, Hungary and Czechoslovakia that they lack the technology and the money to verify their neighbours' compliance with CFE. Germany sees a possible solution in multinational CFE inspections and East-West cooperation in information exchange, and is promoting this approach.

From March 18 to 22, a very successful and interesting meeting of Verification CFE Unit Commandants was held in Strausberg near Berlin. All NATO and ex-Warsaw Pact units were represented (except the USSR), along with Belarus and Russia

## The IAEA

Suggested measures for improving IAEA performance (*The Economist*, January 18 1992) include challenge inspections of suspect sites at short notice. Special inspections are in fact allowed for in the IAEA charter but have never been invoked (the IAEA work in Iraq was authorised by the UN Security Council). Other ideas are: more frequent regular inspections; monitoring of nuclear facilities rather than merely reactor fuels; the IAEA to be notified of new nuclear facilities at the planning stage instead of when such facilities are practically ready to operate; transgressors to be named and denied future IAEA help.

It is obvious that if the IAEA is to be strengthened then its budget must be expanded from the present inadequate \$75 million a year, especially with the accession of new members such as China, France, South Africa and, hopefully, CIS Republics. At present 113 states contribute to IAEA funding, but they recently declined to set up a database to monitor imports and exports which would have cost £1.75 million (*Sunday Times*, 5/3/1992). At present 200 IAEA inspectors are trying to supervise 1,000 installations in 60 countries. Frank Barnaby, former SIPRI Director says the IAEA should be a "nuclear Interpol with teeth".

## Iraq

Iraq has now provided more information about its residual ballistic missile and chemical weapons capability to the UN. The information is being studied by the UN Special Commission. A deadline of March 27th had been imposed by the UN on Iraq to draw up a programme of destruction for its ballistic missile factories, or face possible military strikes. Iraq has refused to allow UN teams to destroy several factories which allegedly make parts for its Scud ballistic missiles and for the Al-Atheer nuclear weapons facility. The IAEA is drawing up a list of Al-Atheer facilities it wants destroyed. Iraq has said it wants the factories and facilities converted to civilian use and that verification must not infringe upon Iraq's sovereignty. Iraq "accepts the principle of verification in future" (*The Guardian*, 13/3/1992). Iraq has also been ordered to hand over a list of all its weapons programmes, including the names of foreign companies that helped with supplies.

## In The News

### Verification news from the US

Arms control research funding in the US into verification technologies will increase by 4% from \$181 million in the 1992 budget request to \$188 million in Fiscal 1993 budget request. (*Aviation Week and Space Technology*, Feb 3rd 1992) This is about 0.07% of the total defence budget for 1993 which stands at \$267.6 billion. The Republican Chairman of the House Science, Space and Technology Committee, George Brown, has recommended that Lawrence Livermore National Laboratory become a civilian technology laboratory and that the Los Alamos facility become the National Defence Laboratory (*Aviation Week and Space Technology*, Feb 17 1992). The third of the three major US national weapons laboratories, Sandia

National Laboratories in Albuquerque, New Mexico, would under the Brown plan become the focal point for treaty verification activities. Brown has also called for a nuclear test ban saying that only 10 more tests in the next three years should be needed to complete any necessary maintenance and enhancement work for the existing US nuclear stockpile. New Mexico Democratic senators are opposing Brown's proposals.

Twelve teams of 97 advisors from the US arms control verification agency are being used to ensure that food and medical supplies to FSU republics are getting to the right people. The On-Site Inspection Agency has experts in the FSU monitoring nuclear weapons reductions mandated under the INF treaty. (*Defense News*, February 24 1992).

#### Non-military use of Satellites

Many different projects worldwide are proving that satellites have an important future in non-military applications to help world social and environmental problems. Four examples follow. The UN High Commission on Refugees has been using satellite images to help the resettlement of some 350,000 Cambodian refugees on the Thai border by pinpointing areas with fertile farmland. This is the first time the UN has used satellite data for a refugee programme. Meanwhile the US army is using satellite imagery to help log and monitor the habitats of endangered species, as well as the army's impact on the environment. For example, satellite images are being studied to see if they can help in the design of tank rotating manoeuvres which will allow vegetation damaged by NATO exercises in Germany a chance to regrow. NASA's Earth Observation System satellites, due to be launched at the end of the decade, will be able to provide crucial data for emergency services dealing with disasters. Finally, the forerunner of the European Commission's soon to be set up European Environment Agency is being funded by the European Community to map Eastern Europe so that massive environmental degradation in affected countries can be addressed. The

effects of different kinds of pollution will be studied in Czecho-Slovakia, Poland and Eastern Germany (*Space News*, February 3-9 1992).

#### Weapons disposal - new initiative

The US firm Aerojet is planning to build a rocket propellant disposal facility in Nevada by 1994. At present rocket propellant from missiles to be destroyed as a result of arms control initiatives is burned in the open. This has led to environmental concerns and in consequence the US alone has 400 million pounds of material awaiting disposal. The new process first of all removes the propellant from missile cases by means of high-power water jets. Then the propellant is ground up under water and ammonium perchlorate is removed for resale. In the final step remaining materials are burnt producing an ash containing aluminium which can also be resold. (*Space News*, January 27-Feb 2nd 1992).

### VERTIC News

After 3 years as VERTIC's Administrator and researcher/producer for *Trust and Verify*, Julie Cator has moved on to a new job in Brussels at Climate Action Network. Everyone at VERTIC is grateful for her hard work and we are sure that readers of *Trust and Verify* will join us in wishing Julie all the best for the future. She will be missed. Philip McNab, who has worked with VERTIC over the years since 1987, is the new Administrator. All enquiries should be addressed to him.

For the next few months, VERTIC has also been fortunate enough to secure the part-time services of Kim Tay, who will be assisting in press work.

VERTIC's Director, Patricia Lewis will be away from the middle of April on 6 months maternity leave. The baby is due at the end of May. VERTIC will continue to operate as normal, and in her absence Patricia's areas of work will be covered by several other VERTIC personnel. More news on the happy event will follow at a later date!

*Trust and Verify* is compiled and edited by Declan McHugh; research and production by Philip McNab.  
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#### Voluntary Subscriptions

The production of this bulletin entails considerable cost to VERTIC so we would welcome a subscription of £12 (individual) or £20 (organisation) for a year's issues. Thank you to those who have sent a subscription. Anyone wishing to contribute information for inclusion in *Trust and Verify* should send it to the VERTIC office.

#### What is VERTIC?

VERTIC is an independent organisation aiming to research and provide information on the role of verification technology and methods in present and future arms control and environmental agreements. VERTIC coordinates six working groups comprising 21 UK consultants and 11 overseas advisors. VERTIC is the major source of information on verification for scientists, policy makers and the press. VERTIC is funded primarily by grants from foundations and trusts and its independence is monitored by an Oversight and Advisory Committee.

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