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**International Inspection in Iraq and elsewhere**      II    *As delivered*  
By  
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*Introduction*

*Do international inspection activities raise questions of international law?*

Yes, drawing up and applying rules regarding access for international inspectors to sensitive installations, involve striking balances between governments' concepts of sovereignty and aversion to external activities on their territories and their need to show transparency to gain confidence that activities in nuclear and some other fields do not have military aims.

Inspection, verification and monitoring sound like very dry, technical accountancy matters. In part they are. Like accountancy in banking, accountancy in the nuclear, chemical and biological field include checking the accounts and see if they tally. And as one checks that gold and other securities are really in the bank vaults, inspectors check that nuclear, biological or chemical related material or equipment and installations in a state are only for peaceful purposes and not for military aims.

The weapons inspectors start from the book-keeping; then go into the declared sites to check that the items correspond to what has been declared. They take samples of nuclear material to verify its isotopic composition, degree of enrichment, if any etc. The state is obliged to give a declaration that is both correct and complete. The more difficult part of the verifier's task is to establish whether the declaration is *complete*. In the case of Iraq, it became evident soon after the Gulf War in 1991 that the declarations given to the UN and to the IAEA were very far from complete.

Monitoring, verification and inspection – for brevity I shall often refer to it all as *inspection* – is mostly accepted but rarely loved in our *national spheres*. However, we are used to tax and customs inspectors, to elevator and fire inspectors and a host of other personnel, whom big brother sends around. The governments checking on us are, themselves, even more jealous about the privacy of their territories, and have accepted *international visits and oversight* only because they have reluctantly concluded that it is their self-interest.

While the need to create confidence about the absence of *weapons of mass destruction* is the most common ground for states to accept international visits and oversight, other grounds are turning up. In the wake of the Kyoto protocol on global warming states will have a need for international inspections regarding emissions of green-house gases from their territories. Under various fishery conventions there are needs for inspection of ships of foreign nationality. It is getting common that foreign observers are invited for elections.

Undoubtedly states will accept more international oversight over activities under their jurisdiction because they find this to be in their interest. Yet, the instinctive national demand for exclusive control will often lead them to wave the *sovereignty flag* just as we individuals wave the personal integrity flag. There will, accordingly frequently be some tension in the drawing up of the *rules concerning inspectors' access* to documents, sites and persons.

Verification and inspection sometimes take on *a more difficult and dramatic character*. In the case of Iraq during the 90s, for instance, it was carried out in the presence of state escorts – minders – who might or might not open doors to buildings and rooms, which the inspectors wanted to see; in 2002 and 2003 foreign troops were poised to attack and invade Iraq and eventually did so.

The sheer organization and logistics of an inspection operation like Iraq, raise problems which are difficult even though Iraq was obliged to help – and was, in fact mostly helpful to UNMOVIC during the 3 ½ months it performed inspections. There was a need to lodge several hundred inspectors and other staff and deploy them with integrity in the totalitarian country. You need offices and laboratories that are secure, encrypted communications by fax and scrambled phone. You need also to send messages that are so confidential that you must avoid all electronic communications. You need

lots of jeeps and other vehicles, ground penetrating radars and other specialized equipment. You need a base outside the inspected country – in this case Cyprus.

You need eyes in the sky – *surveillance from above* – to give you pictures from various angles – pictures that can be compared with pictures taken years back enabling you to see what changes have occurred in industrial and other installations. At the top level there are satellites, whose pictures of one meter resolution you can buy commercially. At the next level you may have U2 planes placed at your disposal by the US. Next level down Mirage planes with the compliments of the French Government and, at the next altitude Russian Antonovs with night vision. In UNMOVIC's Iraq operation these planes were all delivered for action and German drones were promised for observation at the lowest level. It was a nice pile and gave a lot of staff work to coordinate for maximum information to the inspectors who could enter all installations on the ground.

#### *Current items of interest in the sphere of inspection*

To illustrate the political interest in and tension about various some international cases of inspection you need not leaf through many pages of the daily newspapers.

In *Iran* the IAEA has been engaged for many months in mapping the country's program of enrichment of uranium. Such a program is not prohibited under the Non-Proliferation Treaty, to which Iran is a party, but Iran failed to observe its duty under a safeguards agreement with the Agency to report about the activity – which understandably raised suspicions about the intentions. If you can enrich to 5 % you can enrich to 85 %, which is weapons grade.

All nuclear material leaves wonderful fingerprints and in the case of *Iran* the IAEA is able to see, on pieces of equipment, which level of enrichment has been attained and even whether the enriched material has originated in Iran or come from Pakistan or some other country. In the case of the *Republic of Korea* the Agency established – following a declaration by the government – that a very tiny quantity of uranium had been enriched without subsequent required reporting.

In *Libya* a program was revealed earlier this year to make a nuclear weapon. It had not been discovered by the IAEA. It followed the seizure of a ship under German flag carrying equipment for the enrichment of uranium. Libya, we have learnt, had bought the design of a nuclear weapons from the father of the Pakistani bomb, Dr. Khan and a whole network of clandestine business channels for nuclear trade was revealed. While this may have contravened Pakistani law and was politically highly embarrassing, Pakistan, not being a party to the Non-Proliferation Treaty, had not been obliged under international law to prevent the trade.

In the *Sea of Japan* a naval exercise was recently held by Japan, the US, Australia and a number of other states within the framework of the so called *Proliferation Security Initiative (PSI)*. Under this initiative by the US government, the parties aim at catching any illicit transport of weapons of mass destruction or material or equipment relevant to such weapons. The only known successful intervention so far was the transport to Libya, which I mentioned. The participants in the initiative mutually grant each other and states, which so agree, the right to board ships and aircraft carrying their flag on suspicions of trafficking.

#### *Inspection, monitoring and verification in the future*

It would seem probable that in a world moving toward less weapons, notably fewer weapons of mass destruction, extensive verification and on-site inspection will be indispensable to give confidence against any unwelcome surprises. For instance, if an agreement were to be reached setting a ceiling at 1000 for nuclear weapons, non-detection of 10 or even 100 over that number might perhaps not matter much in terms of security, but if the commitment were to have been to zero nuclear weapons, non-detection of even one would be a dramatic matter. Well, we are not likely to get to such far-reaching commitments any time soon.

Where are we going with disarmament and inspection?

Today the traditional sources of conflict and war – claims of territory or ideological differences – are not present between great powers and blocs, if, indeed, there are any blocs. The global outlook is hopeful after the collapse of world communism and the outbreak of détente.

Nevertheless, most global disarmament efforts are presently at a standstill. It is curious that at a time when countries like Russia and China, which in the past were stiffly against international inspection, have finally turned around, the United States has developed a very skeptical attitude. The current US attitude to international organizations does not raise expectations for institutional cooperation. With the US and Russia together today holding nearly 30 000 nuclear weapons the world has time to ponder how to get to global disarmament and zero weapons of mass destruction. It will take more than effective verification. Some think it will require that a global institution control weapons. However, who would control such an institution?

### *The roots of inspection*

I shall not speculate about the future of the UN, world disarmament and international inspection. Rather, let me for a moment trace the *roots* of inspection.

During the 19<sup>th</sup> century we find strong humanitarian based efforts *to prohibit the use of certain types of weapons*. I mentioned those in my first lecture and cited the 1868 St Petersburg declaration prohibiting the *use* of certain kinds of explosive bullets. In 1899 other bans on *use* were agreed regarding the dum dum bullet, which flattened against the human body and was deemed to cause *unnecessary suffering*. The use of deleterious and asphyxiating gases and poison was also prohibited. After the First World War, during which extensive use was made of gas the Geneva Protocol of 1925 amplified the ban on poisons and gases from 1899 to cover both gases and bacteriological methods of warfare.

A common feature in all these bans was that no mechanism was attached for verification of any alleged violations. It was thought that use would be manifest and that the risk of retaliation would deter from non-compliance.

The *Partial Test Ban Treaty of 1963* had as its primary aim to prevent further radioactive fall-out in the atmosphere. Like the prewar instruments it had no mechanism for inspection. It was not deemed necessary as a violation would be registered through the fall out.

During this period the Soviet Union urged the adoption of a treaty for general and complete disarmament under effective international control. It sounded good but was a Soviet propaganda exercise. The effective

international control proposed was meant to be an international presence when agreed quantities of weapons were being destroyed. There would be no verification how much remained, nor of whether any new weapons were produced to replace the destroyed ones. At this time the Soviet Union was a closed society, which regarded any intrusive inspection as “espionage” and which saw a tactical military advantage in the secrecy about its arsenals.

One must remember that hiding the truth about arsenals can mean either that there are *more weapons* than assumed – intelligence often point to worst case scenarios – or that there are *less weapons*. Saddam Hussein, it turns out, ordered the destruction of Iraq’s biological and chemical weapons already in 1991 in order to be able to demand that the economic sanctions on Iraq should be lifted by the Security Council. At the same time he behaved as if weapons were still hidden, one explanation being that he wanted to create the impression that he was still dangerous. He hung a sign “Beware of Dog” without having a dog!”

### *The Non-Proliferation Treaty of 1968*

The Non-Proliferation Treaty of 1968 was the first arms control treaty that required verification and on site inspection. There was a double bargain.

- The non-nuclear weapon states parties committed themselves not to develop or otherwise acquire nuclear weapons and to accept IAEA safeguards inspections on all their present and future nuclear material and equipment.
- The five great powers which were members of the Security Council and which had already tested nuclear weapons, were required by the treaty to conduct negotiations in good faith about a cessation of the nuclear arms race, about nuclear disarmament and general and complete disarmament under effective international control. These obligations could not be subject to inspection.

The NPT has often been criticized as an *unequal treaty*. The critics have not really contended that the treaty violated any rules of the Vienna Convention on the Law of Treaties. They have rather said that the two types of obligations were not balanced; that like some treaties in colonial time one party contracted advantages and the other burdens. The commitments not to acquire nuclear weapons and to accept on site inspection were clear-cut and

substantial commitments; to negotiate in good faith – *a pactum in contrahendo* – was not much of a burden.

Nevertheless, the non-nuclear weapon states parties have joined voluntarily and as parties they have been promised access to peaceful nuclear technology and material, which might not otherwise be made available. The nuclear weapon states have also committed themselves – with some reservations – not to attack non-nuclear weapon states parties. As a good will gesture they have also – with some variations – accepted IAEA inspection on their peaceful nuclear installations.

What is of particular interest to note is that while the ultimate aim of the NPT – like the older weapons bans – is undoubtedly to reduce the risk that any further *use* be made of the weapons, it sees non-possession as the most reliable way of achieving it: the safest nuclear weapon is the one you don't have. Moreover, to create confidence that parties abide by this commitment and do not hide anything in their closets or labs, transparency is institutionalized through continuous declarations of all nuclear activities and through IAEA verification of the declarations and on site inspection.

With the safeguards system of IAEA the first global on site inspection system was born. A standard safeguards agreement – called INFCIRC 153 – was developed, specifying the rights and obligations of the states and of the Agency under the verification system. This was a quantum leap forward and the aim was to create confidence about compliance. There were, however, *severe limitations* in the system, which was designed primarily with democratic, industrialized non-nuclear weapons in mind – Germany, Japan, Sweden, Switzerland. These were the states, which in 1968 were embarking on the peaceful use of nuclear energy.

In open societies of this kind the concealment of large non-declared nuclear installations would not be easy. The chief concern was about the diversion of nuclear material in declared facilities. While the inspected states were eager to rely on independent verification and inspection to create confidence about their nuclear activities, on-site international inspection was nevertheless felt as an intrusion. It was feared they could lead to the leakage of industrial or commercial secrets. The result was some significant limitations:

- On site inspections were focused on *declared nuclear facilities* and in these, on so called 'strategic points'. Theoretically *access* could be gained to non-declared sites through '*special inspections*'. However,

without at that time any access to satellite images and intelligence from member states, pointing to suspect sites, the IAEA had limited possibilities to identify sites which would warrant special inspections.

- The inspected states had the right to *reject inspectors* and frequently did so or refused visas without presenting any reasons. It was an undermining of the principle that the inspectors were international civil servants, whose nationalities should be irrelevant.
- It was realized that lab scale activities to enrich uranium or produce plutonium or diversion or loss of small quantities of such nuclear material could hardly be detected. The ambition would have to be set at detecting the diversion or loss of *significant quantities*. These were set at 8 kg of Pu and 25 kg of enriched uranium.
- As the system was designed to create confidence that *nuclear material* – in particular the enriched uranium or plutonium – the inspection effort was heavy on states having much such material. This resulted in much inspection in countries like Canada, Germany and Japan and rather little in states like Libya, Iraq and Iran. A police can concentrate resources in areas of high crime. To respect the *sovereign equality* of its member states an international organization is obliged to follow the principle used at *air port* controls: all go through the same checking routines.

When, in 1991, Iraq's cheating and nuclear weapons program were revealed, I declared that the IAEA needed greater access to sites, greater access to information and greater access to the Security Council. It was understood that the system had to be upgraded. By 1997, when I retired from the IAEA, two additional protocols were adopted through which the system was strengthened. A chief challenge is now to induce all parties to the NPT to accept the more effective safeguards which have resulted. One legal question is whether it is open to the Agency and member states to hold that the duty of NPT parties under art. III of the treaty to conclude a safeguards agreement now applies to the new, more demanding model.

### *The 1972 convention on biological and toxin weapons*

The Geneva Protocol of 1925 only prohibited the *use* of gas and bacteriological methods of warfare. At the initiative of President Nixon a much more far-reaching convention was concluded in 1972 prohibiting both the use and the possession of biological weapons and toxins and required the

destruction of stocks. The convention differed in some important respects from the NPT.

- It imposed the *same obligations on all states*. Those who had the weapons committed themselves not to acquire them and those who had them obliged themselves to destroy their stocks. There was no criticism that the treaty was ‘unequal’.
- It contained *no mechanism for verification and inspection*. It was thought at the time that these weapons had limited military interest. Accordingly, no hurry was felt to impose a verification system. However, a party suspecting another party of violating the convention can complain to the Security Council and all parties are obliged to cooperate with the Council in any investigation initiated by the Council. (Art. VI)

In the last decade biotechnology has advanced very fast and new horrifying types of pathogens can be developed against which no vaccination is possible or which might be designed to affect specific human groups. The lack of a system to create confidence about compliance is felt as a severe shortcoming. The concern is felt the stronger as it is known since a good number of years that the Soviet Union secretly and on a very large scale violated the commitment it had undertaken under the convention. An outbreak of anthrax at Sverdlovsk was the first visible sign. The enormous size of the Soviet program was made known after the end of the Cold War.

After many years of work a proposal for such a system aiming at verification and implementation of the convention was worked out and was presented a few years ago. However, it was rejected by the US Bush administration, which – as I have shown -- is generally skeptical to treaty based verification and inspection systems. In 2006 a review conference is to be held for the bio-convention and there is at present a feeling of concern, not to say despair, among scientists and arms control professionals.

#### *The 1982 GA resolution authorizing the SG to appoint expert groups*

While the 1925 Geneva Protocol and the 1972 Bio-weapons and Toxin Convention had no institutionalized verification mechanism the General Assembly in 1982 adopted a resolution, which authorized the Secretary General of the UN to appoint *expert groups* to examine reports about

possible violations of the Geneva ban on *use* of B and C weapons. This did not envisage verification of the 1972 convention's ban on production and stockpiling and the obligation to destroy B weapons. Nevertheless, it was of some use. In March 1984 and March 1986, the Secretary-General did send expert groups which examined and affirmed the charges that Iraq had used C-weapons during the war with Iran. As is well known the regime of Saddam Hussein also used C-weapons in a horrible attack against civilian Iraqi Kurds at Hallabja.

### *The 1993 Chemical Weapons Convention*

After many years of negotiation the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and their Destruction (CWC), was signed on 13 January 1993 in Paris. Like the B-weapons Convention it overlaps with the 1925 Geneva Protocol in the use aspect and it is also similar to that convention in containing the same obligations for all parties—great powers as others – and in demanding destruction of stocks, no acquisition and no production.

Unlike the B-weapons convention, however, it has a most elaborate system for verification and inspection. For this purpose and to serve as a Secretariat of the Convention a permanent organization is established and located at the Hague (OPCW). The verification and inspection system builds upon the IAEA safeguards system and develops it further. There are elaborate rules concerning clarification, consultation and challenge inspections. A Conference of the Parties can bring grave issues to the attention of the UN General Assembly and Security Council.

An interesting and special feature in the verification system of the C-weapons convention is so called “*managed access*”, which has been introduced for inspection of sensitive installations. It permits the inspected party to remove sensitive papers and to shroud sensitive equipment unrelated to the object of the inspection.

After a few years of teething problems the system seems to have matured. However, the obligation of the parties to *destroy* their stocks of chemical weapons has required very large and costly operations and the work is still ongoing.

### *The 1996 Comprehensive Test Ban Treaty (CTBT)*

At this point let me break the chronological order for a moment and describe a verification system, which exhibits the unusual feature of *being in operation but not in force*. I have in mind the Comprehensive Test Ban Treaty, which was signed in 1996.

The CTBT still misses the ratifications of several states whose participation is a formal requirement, including the United States whose Senate rejected the treaty. Yet, the Treaty has for years had a “provisional technical secretariat” in Vienna and it has recently declared itself fully operative with parties and some non-parties paying the costs.

The verification approach of the CTBT comprises no periodic visits of inspectors. What would they visit? Empty test sites? Instead any tests are to be detected through continuous seismological monitoring, radionuclide monitoring, hydro-acoustic monitoring and infrasound monitoring. For this purpose an extensive network of stations is established around the world. It sends data continuously to the Secretariat center in Vienna. These are compiled and made available to institutions in States party to the Treaty. An Executive Council of states parties – but not the head of the technical secretariat – can decide on *on-site inspection* at the request of a party, if it is not satisfied with explanations given.

No tests have been registered since the treaty was signed but if this moratorium was to be broken, say, by the United States which is exploring new types of nuclear weapons, the regime might collapse. For the time being the information relayed by the Secretariat is eagerly consumed by states around the world, not so much to spot nuclear test as to help *predict earth quakes!*

#### *Iraq inspections on the basis of GA Res. 687(1991)*

At the end of the Gulf War in 1991 the Security Council adopted resolution 687 (1991) as a part of the cease fire. Iraq was obliged to eradicate all nuclear, chemical and biological weapons programs and the means to deliver these weapons. It was to declare all items related to them and to accept a drastic verification and inspection regime. If, to quote Klauswitz, war is to

continue diplomacy with other means, what we had here was inspection continuing war with other means.

The pressure upon Iraq to comply was significant. *No state was allowed to buy Iraqi oil* until the Security Council, after reports by the inspectors concluded that the weapons were eradicated. Iraq lost practically all its export income – until the Oil for Food Programme started, when it was allowed to use the proceeds to buy non dual use items. It was thought that the Iraqi government would promptly and correctly declare all prohibited items, help to destroy them and fully cooperate with the IAEA in the nuclear field and the United Nations Special Commission (UNSCOM) in the other fields. This proved in important respects to be an erroneous expectation.

We now have good reason to believe that all biological weapons and a good deal of the chemical weapons and nuclear equipment were, in fact, unilaterally destroyed in the summer of 1991. Large quantities of chemical weapons and many missiles were declared and later destroyed under UNSCOM supervision. What was not declared was the evolution of the programs – especially the nuclear and biological ones – and installations related to the programs. Iraq no doubt sought to rescue costly infrastructure, which could be used for a possible future resuscitation of programs or for other industrial purposes. The inspection authorities succeeded in mapping these installations and they were demolished. All relevant nuclear material was flown out of the country to Russia.

In an exchange of letters of 14 May 1991 between the UN Secretary-General and the Iraqi Foreign Minister the rights of the inspectors were specified. I cite examples:

- Unrestricted freedom of movement without notice within Iraq;
- Unimpeded access to any site or facility for the purpose of on-site inspection;
- Right to request, receive, examine and copy any record, data, or information;
- Right to designate any site whatsoever for observation, inspection or other monitoring activity;

A new Security Council resolution adopted in October 1991 specified further rights given for the purpose of monitoring and verification. E.g.

- To stop and inspect vehicles, ships, aircraft [*sic*] or any other means of transportation within Iraq...;
- To inspect imports or exports of material and other items upon arrival or departure;

Inspections in Iraq under the regime established in 1991 ended, when inspectors were withdrawn toward the end of 1998 after a rather long period during which the Iraqi side put obstacles in the way of many inspection efforts.

A new resolution at the end of 1999 (1284) established UNMOVIC to succeed UNSCOM, whose reputation had been tarnished when it was understood that the US and UK sent “experts” from their special forces to join the UN inspection teams. This had placed the independence of the UN inspections in doubt and raised the suspicion that such experts might provide targeting information for US/UK bombings undertaken to enforce the controversial program, which these countries pursued to maintain “no fly zones” in Iraq.

UNMOVIC, which I headed, was given the same tasks as UNSCOM had had but it took several measures to become a genuinely independent UN authority. Thus, while welcoming intelligence from member states, especially regarding sites deemed to deserve inspection, it saw this and other assistance as a mainly one-way street. At no time would it allow itself to be a “prolonged arm” of national intelligence. From the very outset the new Commission’s independence was strengthened by independent financing and less dependence on assistance from big Western members. There was no longer a deputy chairman of US nationality and UNMOVIC discontinued the practice of holding briefings and debriefings of its inspectors at the US naval base in Bahrein. UNMOVIC’s staff was mainly on regular UN contracts and they were all given solid training for their tasks, including knowledge about their independent UN mandate.

Although UNMOVIC was established in 2000 it was not until October 2002 that Iraq declared itself ready to receive inspectors again. The terror attacks on the United States on 9/11 2001 and an increasing US military build up in the Gulf area as from the summer of 2002 had put Iraq under pressure. In October the Security Council adopted yet another resolution – 1441 (2002) – which left the Iraqis with very little leeway against the inspectors, whether regarding U 2 planes in the air or private interrogations on the ground.

During the three and a half months that the UNMOVIC inspections were pursued before the US/UK led invasion occurred some 700 inspections were performed at some 500 sites. Access was invariably given promptly, even at “presidential” sites. A small number of relevant items was found and a category of missiles was deemed illegal and ordered destroyed. However, no “smoking guns” were found and several dozens of sites recommended for inspection by various intelligence agencies were found to have no proscribed items. While the assertiveness about Iraq illegally retaining weapons of mass destruction grew in the winter of 2002-2003, particularly in Washington, the credibility of the evidence relied upon weakened.

When the invasion of Iraq took place the inspecting authorities – UNMOVIC and IAEA – could not exclude that prohibited items still remained in Iraq but they had also no convincing evidence to that effect, whether of their own or from any government. We reported this and the doubts we had about some of the evidence presented.

Within a few months after the invasion American investigators had interrogated a large number of scientists, military personnel and administrators, offered rewards for information leading to prohibited items but only received the answer that the respondents did not know of any weapons stocks. In September 2003 and in October 2004 the successive heads of the US Iraq Survey Group – Mr. Kay and Mr. Duelfer – reported that while there were violations of the restrictions on missiles there were no WMDs. Nevertheless, according to Mr. Duelfer persons close to Saddam Hussein had had the impression that he *intended* to revive a program for weapons of mass destruction, if and when sanctions were lifted. There was no documentation on the matter. Nor were there any plans in the Security Council to lift sanctions and monitoring was for long term.

### *Conclusions*

Let me note some important experiences based on the material I have discussed, in particular the material from nearly eight years of verification and inspection in Iraq.

- The war proved – and is still proving – to be a *very expensive way* of finding out that no such weapons existed. A few months *more of inspection* might have achieved nearly the same certainty at a fraction of the cost in money and at no cost in lives.

- Nearly *eight years* of highly intrusive inspections in Iraq backed by economic, diplomatic and military pressure led to the eradication of the programs through measures by the Iraqi regime and by the inspection authorities. The nuclear program was fully mapped and few questions of any significance remained. Yet, while no proscribed items of any significance were found the inspection authorities *could not exclude* that some weapons and other prohibited items remained in Iraq.
- To *prove the negative* was difficult for the Iraqi side and even more difficult for the inspection authorities, which did not have knowledge and control of all relevant personnel and archives in Iraq. It is simply not practically possible to ensure the detection of small relevant pieces in a large country. While nuclear material leave strong fingerprints and modern methods of environmental sampling are very powerful tools for inspections, there are items which do not leave traces.
- Even the best verification and inspection system will always leave *some residue of uncertainty*. It is like a radar scanning the sky, seeing what is here and now but less likely to read intentions and the future. It is neither possible in medicine nor in inspection activities to give *clean bills of actual or future health*. This does not mean that it is a matter of indifference how thorough and professional inspections are. The more thorough the greater the probability that the absence of any finding of relevant items is due to there being none.
- Inspection authorities must always indicate with what degree of certainty their assessments are made. In the last resort it is a *political task and judgment* what degree of uncertainty is tolerable. In the case of Iraq, Iran or the DPRK not much benefit of the doubt is given. In cases like Brazil and the Republic of Korea the benefit of doubt is more likely to be given.
- The case of Iraq's cheating under the traditional IAEA safeguards showed their *inadequacy*. The case of Libya showed the same thing and demonstrated the value of national intelligence to spot proliferation efforts. By contrast the case of the DPRK in 1992 and Iran 2004 show how much can be learnt through a *modern professional operation* of international verification and inspection.
- International verification and inspection authorities need to retain their independence to remain credible internationally and to have a better chance of being accepted by the inspected party. However, they also need the diplomatic, economic and military support and pressure that

that governments and the Security Council can bring to bear. While the international inspection authorities have the great advantage of the legal right to access to sites, installations, documents and persons in an inspected state, *national intelligence* have other sources, like electronic surveillance. There is a strong case, therefore, to combine the two tools and enable international inspections to obtain some intelligence in a one-way traffic. Any reverse traffic would compromise the role of the international authority in the eyes of the inspected party and make it look like a remote controlled instrument of foreign intelligence.

- Inspection and verification aims at establishing facts. If it is effective – and not cosmetic – it may deter some potential violators from going ahead. It may also reveal or provide timely warning about possible violations and enable international organizations and governments to take political, economic or, indeed, military measures to prevent violations or further violations of commitments entered into.
- To establish facts you need critical thinking. The experience in the case of Iraq was that national intelligence services, but not international inspection authorities, bent their reporting to support conclusions, which were politically desired by their governments. Regrettably, the erroneous diagnosis was followed and the results of international inspection were ignored.

