

# Chemical and Biological News

## ARMS CONTROL

### **United Nations Secretary - General and OPCW Director - General Agree to Promote Mutually Beneficial Cooperation**

The UN Secretary-General Mr. Ban Ki-moon and the Director-General of the Organisation for the Prohibition of Chemical Weapons (OPCW) Mr. Rogelio Pfirter have agreed to strengthen the existing cooperation between their two Organisations in order to promote the international community's goals in the field of international peace and security. During their meeting held in New York on October 18, 2007, Secretary-General Ban Ki-moon referring to the disarmament objectives relating to weapons of mass destruction, characterised OPCW's work as being "the most well-advanced in terms of realising its targets".

The Secretary-General thanked the Director-General for the important contribution that the OPCW provides within its mandate to support the implementation of Security Council resolution 1540 and the 1540 Committee's work. He assured Director-General Pfirter that the OPCW can count on the Secretary-General's support including the promotion of the universality of the Chemical Weapons Convention (CWC), an important pillar in the field of multilateral disarmament. Congratulating the Director-General on the tenth anniversary of the CWC's entry into force, the Secretary-General commended the Technical Secretariat, which under the leadership of the Director-General had made significant strides towards realising the goals of the Convention. The Secretary-General also expressed the hope that OPCW Member States will fulfil their obligations to destroy all chemical weapons stockpiles within the CWC's deadlines.

Director-General Pfirter expressed his gratitude for the United Nations' strong support for the work of the OPCW and reaffirmed his commitment to continuing close cooperation with the UN in complementary and mutual beneficial areas as mentioned by Mr. Ban Ki-moon. He thanked the Secretary-General and his High Representative for Disarmament Affairs, Mr. Sergio Duarte for their support in organising a number of important events that highlighted the work of the OPCW in the context of its 10th anniversary. He welcomed in particular the high priority that the Secretary-General places upon multilateral disarmament. The Director-General expressed his gratitude to the Secretary-General for his offer of further support for promoting the CWC's noble objectives including the goal of making the Convention universally accepted. In this context, countries that are approached to join the Convention can be assured of an inclusive and cooperative spirit, which ensures that every nation is welcome and will receive the support needed to become a member of the OPCW family.

Director-General Pfirter and Secretary-General Ban Ki-moon also discussed further concrete avenues for promoting cooperation between the UN and the OPCW within the framework of their existing relationship agreement.

The Director-General extended a cordial invitation to the Secretary-General to visit the Headquarters of the OPCW.

***[http://www.opcw.org/The\\_Hague](http://www.opcw.org/The_Hague),  
October 25, 2007***

## DISARMAMENT

### **Tenth Anniversary of the Entry into Force of the Chemical Weapons Convention**

The year 2007 marked the tenth anniversary of the entry into force of the Convention. The anniversary was highly symbolic, both as a milestone in itself and as a catalyst for further efforts to consolidate the goals of the first non-discriminatory, multilateral, disarmament and non-proliferation treaty—a unique instrument that offers a credible and effective response to the threat posed by chemical weapons.

*Source: <http://www.opcw.org/>  
Tenth Anniversary / Overview*

### **Central African Republic Designates OPCW National Authority**

In compliance with its obligations under the Chemical Weapons Convention (CWC), the Central African Republic has informed the Organisation for the Prohibition of Chemical Weapons (OPCW) that it has designated the Ministry of Foreign Affairs as its National Authority.

A CWC National Authority is crucial in ensuring the effective implementation of the CWC within each State Party's national jurisdiction.

Article VII, paragraph 4 of the Chemical Weapons Convention states: "In order to fulfil its obligations under this Convention, each State Party shall designate or establish a National Authority to serve as the national focal point for effective liaison with the Organisation and other States Parties. Each State Party shall notify the Organisation of its National Authority at the time that this Convention enters into force for it."

The National Authority has the responsibility of implementing the provisions of

the Chemical Weapons Convention (CWC) at the national level. To meet its basic obligations, each State Party must be able to submit all the required declarations, communicate with the OPCW, cooperate with other States Parties, facilitate OPCW inspections, respond to OPCW requests for assistance, protect the confidentiality of classified information, monitor and enforce national compliance and cooperate in the peaceful uses of chemistry. States Parties are also obliged to declare and to eliminate all chemical weapons stockpiles and chemical weapons production facilities. The National Authority plays an indispensable role in all of these activities.

As of January 24, 2008, 176 of the 183 States Parties to the Chemical Weapons Convention have established or designated National Authorities.

*Source: <http://www.opcw.org/>  
The Hague, January 25, 2008*

### **Toxic Chemicals Training Course Held in the Republic of Serbia**

The Ministry of Defence of the Republic of Serbia, in cooperation with the Organisation for the Prohibition of Chemical Weapons (OPCW), held a second training course on how to conduct toxic entries from December 3 to 4, 2007 at the Nuclear, Biological and Chemical Defence Training Centre (NBCDTC) in Kruševac. The training course, which was attended by 33 inspectors, lasted for two weeks.

This course is part of the offer made by the Government of the Republic of Serbia in support of the mandatory training that OPCW inspectors receive in detection, in decontamination procedures, and in the use of protective equipment, all of which are crucial when dealing with toxic chemical agents. The training was jointly conducted by experienced officials of the NBCD centre and staff members of the OPCW Inspectorate.

A total of 75 inspectors have been trained in 2007 at the NBCD Center in Kruševac. By offering to hold these training courses, the Republic of Serbia has continually demonstrated its strong commitment to the Chemical Weapons Convention and to helping the OPCW inspectors acquire the skills they need to fulfill their tasks under the stringent verification regime of the Convention.

*Source: <http://www.opcw.org/>  
The Hague, January 16, 2008*

### **Republic of the Congo Ratifies the Chemical Weapons Convention**

The Republic of the Congo will soon become the 183rd State Party to the Chemical Weapons Convention (CWC). The country deposited its instrument of ratification with the Secretary General of the United Nations on December 4, 2007, and the Convention will enter into force for this State on January 3, 2008.

As an OPCW Member State, the Republic of the Congo will benefit from OPCW's international cooperation-and-assistance programmes, which aim to enhance each State Party's national capacity to implement the Convention and to engage in the peaceful uses of chemistry.

The Republic of the Congo's ratification takes the Convention a step closer to its gaining universal acceptance.

The OPCW Director-General, Ambassador Rogelio Pfirter, has welcomed ratification by the Republic of the Congo as a contribution both to strengthening the norms established by the Convention and to advancing the cause of international peace and security. Director General Pfirter also called on the remaining twelve States that have not yet joined the CWC to do so as a matter of urgency.

To ensure a complete, global ban on chemical weapons, the OPCW has initiated an action plan to encourage every State to join the Convention. Since the action plan was

adopted in October 2003, 28 States have become OPCW Member States.

The Chemical Weapons Convention entered into force on April 29, 1997, and its implementing agency, the OPCW, works towards achieving four principal objectives: to eliminate chemical weapons, to prevent their proliferation and re-emergence, to provide assistance and protection upon any State Party's request in the event of the use, or threat of use, of chemical weapons, and to promote international cooperation in the peaceful use of chemistry. Adherence to the Convention contributes to global peace and security, and its universal and effective implementation provides concrete benefits for all Member States.

*Source: <http://www.opcw.org/>  
The Hague, December 14, 2007*

### **Albania – First Country to Destroy All of Its Chemical Weapons**

On July 11, 2007, the global chemical weapons watchdog agency, the Organisation for the Prohibition of Chemical Weapons (OPCW), confirmed the destruction of the entire chemical weapons stockpile in Albania.

Albania is the first nation completely and verifiably to destroy all of its chemical weapons by eliminating in total 16,678 kilograms of chemical warfare agent. The Albanian stockpile included mustard, lewisite, mustard/lewisite mixture, Adamsite, and chloroacetophenone agents. This disarmament campaign was conducted to fulfil Albania's obligations under the multilateral disarmament treaty, the Chemical Weapons Convention (CWC). Any State that possesses chemical weapons and is party to the CWC is obligated to destroy these weapons. Destruction is verified on-site by the OPCW's inspectors.

In commending Albania's achievement, the OPCW Director-General, Ambassador

Rogelio Pfirter, welcomed Albania's completion of this campaign, which had required them to overcome considerable technical challenges associated with chemical disarmament. He also extended his appreciation to OPCW Member States Greece, Italy, Switzerland and the United States for the support they had provided in Albania's destruction effort.

Since the CWC entered into force ten years ago on April 29, 1997, 182 nations have joined this independent, multilateral disarmament agency to abolish chemical weapons.

In total, six OPCW Member States have declared and secured over 71,000 metric tonnes of deadly chemical warfare agents. By the end of June 2007, over 33% of that total has been destroyed under international monitoring. Over 94% of the chemical weapons production facilities are already certified as destroyed or converted for approved peaceful purposes. As foreseen by the CWC, all chemical weapons stockpiles are to be destroyed by 2012.

*Source: <http://www.opcw.org/>  
The Hague, July 12, 2007*

## NATIONAL AND INTERNATIONAL DEVELOPMENTS

**Environment department Defra failed to contain the first foot-and-mouth outbreak this summer despite declaring the nation virus-free, a study says.**

The first outbreak in August was traced to the Pirbright lab site in Surrey.

A second outbreak - 11 miles (17km) away in September - was thought to have been caused by separate contamination.

But the Institute of Animal Health research

concluded the two outbreaks came from the same source, suggesting the first was not fully eradicated.

### Transmission sequence

Its scientists studied the genetic fingerprints of the virus recovered from the different infected premises in the 2007 outbreak.

After analysing the evidence they have been able to determine the probable sequence of transmission between infected premises.

An independent expert peer review process has accepted the study's conclusions that the second phase of the outbreak originated from the first phase and was not from a separate release.

It suggests that the Department for Environment, Food and Rural Affairs (Defra) failed to identify premises that had continued to be infected throughout August.

Defra, however, says it was not a failure on their part, "This infected premises was located outside of the original 10km surveillance zone and therefore could not have been picked up by the extensive surveillance and sampling we carried out according to internationally recognised standards."

The second outbreak in September came as a surprise and embarrassment to the government.

It had taken credit for successfully containing the virus leak from the Pirbright site in Surrey, which houses both the IAH's Pirbright Laboratory and the vaccine company Merial.

But according to the IAH investigation, the virus was somehow transported 17km from the first infected premises in Normandy to another farm in the Virginia Water area.

### Conflict of interest

This raises the possibility that Defra

supervised disinfection of the original Pirbright premises and disposal of infected animals, but did not eradicate the virus.

The research was made public by the scientists to refute newspaper claims that there was a second breach in biosecurity at the site.

The IAH scientists' decision to publish their findings came as the government announced Defra was to be stripped of its role as regulator for laboratories which handle animal viruses.

The decision was triggered after a review found there was a conflict of interest in Defra being both a major recipient of research carried out at Pirbright, and the site's regulator.

*Source: <http://news.bbc.co.uk/1/hi/sci/tech/7143260.stm>. Foot-and-mouth 'wasn't contained' By Pallab Ghosh, Science Correspondent, BBC News*

### **The government in India's north-eastern state of Mizoram has decided to increase wages and food grain supplies to villagers hit by a plague of rats.**

The state's heavy flowering bamboo crops attract hordes of rats, a phenomenon known locally as Mautam.

Not only do the rats thrive on the bamboo flowers, they also then go on to destroy the farmers' crops.

The Mizoram council of ministers has doubled daily wage rates so that villagers can cope with food shortages.

#### **Wanton destruction**

"We have also decided to increase the weekly allotment of rice to the villagers so that they have enough to eat," Mizoram Home Minister Tony Tawnluia said after a meeting of the council.

Every adult villager is now getting 2kg of rice per week - with minors receiving half that amount.

"We have ordered the district officials to immediately increase the wage rates and food grain supply," Mr Tawnluia said.

Mizoram has been reeling under an acute shortage of food grain because of the wanton destruction of crops by rodents.

The rat population has multiplied several times because of the abundance of food created by the flowering of bamboo crops.

The food crisis has been made worse by the massive destruction caused by unprecedented monsoon downpours this year, which damaged hundreds of homes, roads, fish ponds and paddy fields.

The state government has declared Mizoram a "disaster area", and has asked the central government for extra cash to mitigate the suffering of the people.

Most Mizo farmers have not sowed rice or corn this year, fearful that the rats would eat all their crops.

#### **'Damage control'**

Plant Protection Officer James Lalsiamliana says that Mautam struck the Mizo Hills in 1910-11 and again in 1958-59. He says that it is now back with a vengeance.

"It will affect more than 30% of Mizoram's land area and much of the area where crops are grown," he said.

"It cannot be stopped, we can only do damage control."

A report by India's forest and environment ministry predicts that at least 5,100 sq km of Mizoram's forest area (out of a total of 6,446 sq km of forest) will be affected by the Mautam in 2007.

More than half of Mizoram's population of nearly 900,000 people are farmers.

The Mizoram agriculture department anticipates a crop shortfall of at least 75% in 2007-2008 because of farmers not planting.

Desperate to control the rising rat population, the state government announced a reward of one rupee for every rat killed.

During 2006 alone more than 200,000 rats were killed. The killing continues but the rats keep coming in hordes.

Mr Lalsiamliana told the BBC 1.2 m rats have been killed in Mizoram since 1 October and the government is now paying two rupees for each rat-tail.

It was in October 2005 that the initial heavy flowering of the bamboo was first noticed at Chawngtlai bamboo forest in the southern district of Champhai.

It then spread rapidly in 2006 and the situation is now worsening.

*Source: [http://news.bbc.co.uk/2/hi/south\\_asia/7141067.stm](http://news.bbc.co.uk/2/hi/south_asia/7141067.stm). **Plague of rats hits Indian state** By Subir Bhaumik, BBC News, Calcutta*

### **Saddam Hussein ‘pretended to have weapons of mass destruction’ Jan 27, 2008.**

Saddam Hussein “pretended to possess weapons of mass destruction” to prevent a possible Iranian attack but never thought that America would invade Iraq and overthrow him.

The deposed Iraqi dictator, who was executed in 2006, revealed these to FBI’s special agent George Piro who interrogated him after his capture in 2003.

“For him, it was critical that he was seen as still the strong, defiant Saddam. He thought that (faking having the weapons) would prevent the Iranians from re-invading Iraq,” Piro told ‘60 Minutes’.

However, the FBI special agent claimed that Saddam was keen to start the production of weapons of mass destruction in Iraq. “Saddam still had the engineers. The folks he needed to reconstitute his programme are still there.

“He wanted to pursue all of WMD... to reconstitute his entire WMD programme. This included chemical, biological and nuclear weapons,” Piro told the popular American current affairs TV programme.

Claiming the deposed dictator told him that he did not expect the United States to invade Iraq, Piro said, “He told me he initially miscalculated, President Bush’s intentions.

“He thought the United States would retaliate with the same type of attack as we did in 1998... a four-day aerial attack. He survived that one and he was willing to accept that type of attack.”

It took nine months to finally capture Saddam and he bragged that he changed his routine and security to elude capture. “What he wanted to really illustrate is how he was able to outsmart us.

“He told me he changed... the way he travelled. He got rid of his normal vehicles. He got rid of the protective detail that he travelled with, really just to change his signature,” Piro told the channel.

*Source: [http://timesofindia.indiatimes.com/World/The\\_United\\_States/Saddam\\_Hussein\\_pretended\\_to\\_have\\_weapons\\_of\\_mass\\_destruction\\_articleshow\\_2735329.cms](http://timesofindia.indiatimes.com/World/The_United_States/Saddam_Hussein_pretended_to_have_weapons_of_mass_destruction_articleshow_2735329.cms)*

### **Paul Wolfowitz, named the Chairman of a panel that will advise the State Department on Arms Control**

Paul Wolfowitz, the former World Bank president and former deputy secretary of defence who was instrumental in the US decision to invade Iraq in 2003, has been

named chairman of a panel that advises the State Department on arms-control issues.

Wolfowitz, now a visiting scholar at the American Enterprise Institute in Washington, will head Secretary of State Condoleezza Rice's International Security Advisory Board, the State Department said yesterday in a statement.

"The ISAB provides the Department of State with a source of independent insight, advice, and innovation on all aspects of arms control, disarmament, nonproliferation, political-military issues, and international security and related aspects of public diplomacy," the State Department said.

Wolfowitz was among the senior US officials who warned of Iraq's alleged weapons of mass destruction capabilities, a key justification for invading Iraq and toppling the late dictator Saddam Hussein.

"Disarming Iraq of its chemical and biological weapons and dismantling its nuclear weapons program is a crucial part of winning the war on terror," Wolfowitz told the Council on Foreign Relations in New York in January 2003, two months before the US-led invasion of Iraq.

A United Nations report in September 2004 found that Iraq possessed no weapons of mass destruction at the time of the invasion.

A US-appointed fact-finding commission reached the same conclusion in March 2005.

Joseph Cirincione, a senior fellow and director for nuclear policy at the Center for American Progress, a Washington-based policy research group, criticized Wolfowitz's appointment.

"The advice given by Paul Wolfowitz over the past six years ranks among the worst provided by any defence official in history," Cirincione said. "I have no idea why anyone would want more."

Veronique Rodman, a spokeswoman for the

American Enterprise Institute, said she had no comment on Wolfowitz's appointment.

Wolfowitz, 64, resigned from the World Bank presidency in May, less than halfway through his five-year term, amid criticism over his securing a pay raise for his companion.

**Source:** [http://www.boston.com/news/nation/washington/articles/2008/01/25/wolfowitz\\_appointed\\_chairman\\_of\\_arms\\_control\\_advisory\\_panel/Wolfowitz\\_appointed\\_chairman\\_of\\_arms-control\\_advisory\\_panel](http://www.boston.com/news/nation/washington/articles/2008/01/25/wolfowitz_appointed_chairman_of_arms_control_advisory_panel/Wolfowitz_appointed_chairman_of_arms-control_advisory_panel) *Security board offers insight to State Department* By Janine Zacharia, *Bloomberg News / January 25, 2008*

### **Russia Accuses World Powers of WMD Espionage**

"Western and Asian spy agencies" have attempted to uncover Russian technologies for producing weapons of mass destruction at a facility in Siberia, Russia's FSB security service said in a statement released Friday.

The espionage attempts targeted "enterprises specialising in nuclear energy, biology and nanotechnology work" at Novosibirsk, a research center located about 1,740 miles east of Moscow, Agence France-Presse reported.

Several foreign nationals including a Chinese citizen have been deported for their involvement in the spying efforts, local FSB Sergei Savchenkov said according to RIA Novosti.

**Source:** [http://www.nti.org/d\\_newswire/issues\\_2008\\_1\\_28.html#4A5E7594](http://www.nti.org/d_newswire/issues_2008_1_28.html#4A5E7594)

### **Subregional Workshop on Assistance and Protection against Chemical Weapons Held in Malaysia**

A subregional workshop on assistance and protection against chemical weapons for the Member States of the Organisation for the

Prohibition of Chemical Weapons (OPCW) in Southeast Asia was held in Kuala Lumpur, Malaysia, from December 3 to 5, 2007. This workshop was jointly organised by the Government of Malaysia and the OPCW. Seventy-five representatives from the following 10 States Parties participated: Brunei Darussalam, India, Indonesia, Laos, Malaysia, Palau, Philippines, South Korea, Thailand, and Viet Nam.

The aim of this workshop was to provide information to managers and planners who are involved in the protection of their civilian populations against chemical weapons, or who would be responsible for the provision of emergency assistance under Article X of the Chemical Weapons Convention. During this meeting, participants discussed a subregional plan for assistance and protection in the event of an emergency caused by the use of chemical weapons. In addition, during the workshop, an exhibition was held on assistance and protection against chemical weapons.

In his keynote address, the Foreign Minister of Malaysia, H.E. Mr Y.B Dato' Seri Syed Hamid Albar, thanked the OPCW for organising such a fruitful meeting, and extended an offer for future cooperation to achieve sustainable results in the area of assistance and protection under Article X. Foreign Minister Syed Hamid Albar also inaugurated the exhibition to commemorate the tenth anniversary of the entry into force of the Convention.

In his opening statement, OPCW Deputy Director-General Mr John Freeman expressed his sincere appreciation to the Government of Malaysia for hosting this event, and drew attention to the opportunity it provided for the development of closer cooperation, and for Southeast Asian States Parties to more closely coordinate their actions in order to respond to any abuse of chemistry. He further noted the importance

of regional cooperation amongst States Parties for the effective implementation of the CWC.

A wide range of issues were discussed in regard to Article X, including an overview of the databank on assistance and protection, bilateral agreements, the OPCW's experience in national and regional capacity-building projects, and emergency medical response to chemical incidents. National presentations were made by delegations on the status of their readiness to respond to any incident. Participants further indicated their requirements for assistance, and shared experiences on the measures they had taken in relation to national implementation of Article X.

*Source: <http://www.opcw.org/>  
The Hague, January 07, 2008*

### **NATO becomes the latest and first military agency to sign up for Global Public Health Intelligence Network**

NATO recently became the latest agency, and the first military one, to sign up for the Global Public Health Intelligence Network, an international initiative that monitors media and other open-source material 24/7 for signs of emerging pandemics and other public health disasters.

The network, based in Ottawa and known by its initials GPHIN, is an "early-warning system using media to detect public health events," GPHIN Senior Surveillance Officer Richard Lemay told United Press International in a recent interview.

Lemay said NATO was "piloting the GPHIN system to see whether it can fulfill some of their public health surveillance needs," adding the network was open to membership from all sorts of agencies and organisations. "If we have a request (to join), we will assess whether it fits the GPHIN mandate," he said.

If NATO decides to sign on, it will become

the latest GPHIN subscriber, joining public health agencies from several European and North American countries and global actors like the World Health Organisation and the U.N. Food and Agriculture Organisation.

GPHIN analysts monitor broadcast media and the Internet 24 hours a day, collating and translating material in seven languages: Arabic, Chinese, English, French, Persian, Russian and Spanish. Other languages will be added as the system grows, according to the network's Web site

GPHIN has "a broad scope," said Lemay, tracking topics including outbreaks of infectious diseases in human and animals; incidents of food and water contamination; bioterrorism and accidental releases of chemical, biological and radioactive materials; and natural disasters.

According to the network's Web site, it also monitors "issues related to the safety of products, drugs and medical devices."

GPHIN analysts assess the significance of reports, for example of a new outbreak of avian flu, and enter them into a secure online database. Depending on the significance of the report and the preference of subscribers, automatic alerts can also be sent out via e-mail.

Lemay said that, by monitoring non-official sources of information like news broadcast, Web sites and blogs, GPHIN was able to provide much more timely information than government agencies generally provided.

"In some cases," he said, "the head start was as much as six months." As an example, he said that the first reports about possible H5N1 bird flu infections in Iran appeared in Persian language media in September 2005, but despite discussions with international experts later that year, it was not until February 2006 that Iranian officials confirmed the outbreak.

Ann-Marie Kimball, a professor at the University of Washington in Seattle who specialises in public health and the monitoring and control of emerging diseases, said GPHIN had been "a pioneer" in using technology in this way. "They have a long history," she said.

Over time, the network had been able to improve both the sensitivity and the specificity of its information-gathering techniques, she said, adding there had been a large number of recent advances in the kind of filtering and searching technology that such systems employed.

Subscription fees vary depending on factors such as the type of organisation—governmental, non-governmental, academic etc. — the number of users at the organisation, and how much customisation the subscriber requires. Rates can run up to a quarter of a million Canadian dollars annually, though non-profits can pay as little as Canadian \$30,000 a year.

GPHIN is run by the Public Health Agency of Canada, the nation's nerve-center for expertise and research in public health. It was originally developed as an English-language-only service in 1998 by Canadian health officials. In November 2004 — with financial support from the Washington-based anti-proliferation non-profit the Nuclear Threat Initiative — version two was brought online with an expanded language capacity and other additional capabilities.

The network is managed by Health Canada's Centre for Emergency Preparedness and Response, created in July 2000 to serve as a central coordinating point for public health security.

**Source:** [http://www.terradaily.com/reports/Analysis\\_NATO\\_begins\\_pandemic\\_monitoring\\_999.html](http://www.terradaily.com/reports/Analysis_NATO_begins_pandemic_monitoring_999.html)  
**Analysis:** NATO begins pandemic monitoring by Shaun Waterman, Washington (UPI) Jan 30, 2007

## **Sensor Deprivation By Steven Chillrud, Greg O'mullan and Wade McGillis**

At the suggestion of the federal Department of Homeland Security, New York City Council members have drafted legislation requiring anyone who has or uses a detector that measures chemical, biological or radioactive agents to get a license from the Police Department.

The purpose of the bill is to reduce unwarranted anxiety and damage from false alarms of terrorist attacks. Proponents say police officers need to know where detectors are and make sure they're reliable. But the bill, which appears to be the first of its kind in the country and a model for other cities, could stifle the collection of environmental information vital to the public good.

The problem is that the bill as written would cover all "environmental sensors," and in the extreme interpretation even laboratory analyses, used by students, teachers, researchers, activists, unions and many other groups. Their work has far more to do with ecology, education, public health and worker safety than with terrorism. These sensors allow them to measure things like greenhouse gases in order to document air pollution.

There are many examples of non-governmental groups collecting important environmental data based on laboratory analyses. Indeed, the original identification of PCB contamination of the Hudson River did not come from the government but from a study by Sports Illustrated magazine that included data on striped bass collected from the river by a private citizen, Robert H. Boyle.

When a steam pipe exploded in Midtown Manhattan last year, scientists were able to quickly allay fears that asbestos was in the air. In the wake of 9/11, private groups using both hand-held particle sensors and samples that were analyzed in laboratories enabled

us to better understand the health risks of the disaster. Future environmental and public health research will rely increasingly on sensors that immediately measure contaminant levels.

The hassle of getting a license that the police could deny or delay on any grounds — or simply not have time to process — could hamper or stop the flow of environmental data. It certainly wouldn't be a wise use of our tax dollars to have them spent on issuing permits for monitors that have nothing to do with identifying terrorist activities.

Reducing false alarms may be a worthy purpose, but pushing through this legislation without clearly defining standards and policies doesn't make sense. For example, the bill defines a biological agent as any microorganism or product of a microorganism that can cause "death, disease or other biological malfunction in a living organism, deterioration or poisoning of food or water, or deleterious alteration of the environment." Such biological agents flood into local waters when rain storms make sewers overflow. So, conceivably, a high school class wanting to measure the presence of fecal matter in river water would need a license. These definitions are simply too broad to be useful.

This bill relies upon judicious enforcement to counterbalance the all-encompassing language. Even though we believe that the current city administration would use the law rationally, once such a vaguely worded statute is passed, it opens the door for abuse. If it passes here, Homeland Security will probably use it as a model for other cities.

Since September 11, 2001, the nation has looked to New York City on security issues. We must set the example. Restriction of environmental information is rarely in the public's interest. The ability of scientists and citizens to gather data quickly and efficiently should be fostered, not suppressed.

The City Council should seek more public input and take its time in refining this legislation. It should expand the definition of detectors into different classes and make it clear that the legislation is applicable only to the class of real-time detectors that measure biological, chemical and radiological agents that would pose a danger to the public from terrorist activities or weapons of mass destruction. All other types of detectors should be exempted.

Indeed, one could consider not having any permits at all, even for those designed to detect terrorist attacks. And instead the legislation should focus on reporting procedures that would keep false alarms from snowballing into panic. That, after all, is what proponents say the purpose is.

*Source: <http://www.nytimes.com/2008/01/30/opinion30omullan.html>*

### **Nonproliferation Experts Identify 10 Most Significant Proliferation-related Events and Trends of 2007 James Martin Center for Nonproliferation Studies Monterey Institute of International Studies**

An Affiliate of Middlebury College Wednesday January 9, 2008 Iraqi insurgents use chlorine as improvised chemical weapon 2007 began with a series of attacks in Iraq that combined truck bombs with chlorine gas. Chlorine does not disseminate readily with explosives, but as the insurgents became more proficient, the casualties and the panic among Iraqi citizens rose. A serial attack on March 16 killed 8 and injured more than 350 with chlorine. Although the attacks subsided as Iraq increased security over chlorine stocks and the vehicles transporting it, they caused concern about more widespread terrorist use of commercially available chemicals, and the possible use of such chemicals in terrorist attacks in other countries.

*Source: <http://cns.miis.edu/>*

### **NTI's Global Health and Security Program Receives Major Grant from Google Foundation**

The Google Foundation today announced a \$2.5 million grant to NTI's Global Health and Security Initiative (GHSI) to greatly enhance its work to rapidly detect, identify and respond to infectious disease outbreaks in Southeast Asia. This funding will strengthen GHSI's global public health agenda, which includes efforts already underway in Southeast Asia and the Middle East. The Global Health and Security Initiative, which develops and implements the biological programs of the Nuclear Threat Initiative (NTI), is working around the world to prevent, detect and respond to biological threats.

"Google.org is deploying their resources, innovative technologies and outstanding personnel to combating emerging threats and making the world a better and safer place," said former Senator Sam Nunn, co-chairman of NTI. "We view the fight against infectious disease as a security imperative as well as a health imperative. Whether a disease is naturally occurring or intentionally caused, the essential elements of an effective response are to detect the outbreak, diagnose the disease and take the right measures to treat it and contain it immediately. This exciting partnership with Google will advance our work in building laboratory and epidemiologic capacity in Southeast Asia and can lead by example to enhance global efforts to combat infectious disease in other key regions of the world."

The initial focus of the work in Southeast Asia will be in countries that are already members of the Mekong Basin Disease Surveillance network (MBDS) — Cambodia, China, Laos, Myanmar, Thailand and Vietnam. NTI's Global Health and Security Initiative, in partnership with the Rockefeller Foundation, has been working with these

countries to sponsor national and regional exercises that test their capabilities to respond to a possible human influenza pandemic, among other activities.

With this grant from Google, GHSI will continue to help the regional partners improve laboratory diagnostics capabilities and increase the training of personnel. In addition, GHSI will support the strengthening of a management system to enable these countries to work together as a regional network to reduce the burden of infectious disease for their populations. The grant will also enable GHSI to work with a wider range of partners in the region, including the new Google-sponsored non-profit organisation, Innovative.

### **Support to Emergencies, Diseases and Disasters (INSTEDD).**

“This enhancement of capabilities is very much in the global interest to provide for the early detection and warning of possible worldwide pandemics of infectious disease, such as highly pathogenic influenza,” said Terence Taylor, Director of GHSI.

### **Middle East Consortium for Infectious Disease Surveillance (MECIDS)**

As part of these efforts, GHSI will apply lessons from its work elsewhere in the world, in particular the Middle East, where GHSI is supporting the groundbreaking Middle East Consortium for Infectious Disease Surveillance (MECIDS). In one of the most challenging political and security environments in the world, top public health officials from Israel, Jordan and the Palestinian Authority have been working together side-by-side, on a daily basis, developing regional strategies and capabilities to detect, control and respond to infectious disease threats since 2004.

With financial support from the Bill and Melinda Gates Foundation and operating with partners, including the World Bank, the RAND Corporation and IBM, GHSI has been providing financial resources and expertise in support of this network, with hopes of expanding MECIDS to include other Middle East countries.

In an effort to increase the reach of its activities, GHSI also works closely with the International Council for the Life Sciences (ICLS), which promotes biosafety and biosecurity standards and training in the Middle East and North Africa. ICLS was launched in December 2005 with the support of NTI.

### **Building Global Regional Networks**

GHSI hopes to help build a regional network to combat infectious disease in South Asia as well. It has begun working with experts in India and Pakistan and plans to reach out to experts in additional South Asian countries. Contacts have also been made with public health networks in Africa and Latin America with a view toward establishing stronger links between the regional networks to share experience and best practices. “We believe this effort can help increase the overall global capability for rapid detection and identification of infectious diseases,” said Mr. Taylor.

*Source: <http://www.nti.org/>*

## **RECENT DEVELOPMENTS IN SCIENCE AND TECHNOLOGY**

### **Nonproliferation Experts Identify 10 Most Significant Proliferation-related Events and Trends of 2007**

Advances in life sciences threaten effectiveness of bioweapons nonproliferation regime.

In June 2007, a research group at the J. Craig Venter Institute in Rockville, Maryland, announced that it had synthesized the world's first artificial bacterial genome, a long strand of DNA containing all the instructions needed for a bacterium to survive and reproduce in the laboratory. Sometime in 2008, the Venter group plans to insert the artificial genome into a living bacterium, where it is expected to start directing the biochemical machinery of the cell. Such advances in synthetic biology and other life sciences disciplines simultaneously offer great promise for discoveries that will benefit mankind and for abuse that could result in new and more devastating germ weapons. Although scientists and security specialists have advocated buttressing the Biological Weapons Convention (BWC) with additional tools, such as oversight of dual-use research of concern in the life sciences, the intersessional process between the 2006 and 2011 BWC review conferences is authorized only to discuss—not to negotiate or take action on—measures to strengthen the regime, leaving it increasingly behind the pace of scientific advances.

*Source: <http://cns.miis.edu>*

## RECENT PUBLICATIONS IN THE FIELD

**Incapacitating Biochemical Weapons**, co-edited by Alan Pearson, Marie Chevrier and Mark Wheelis, Lexington Books, 2008.

**Kellman, Barry, “Bioviolence Preventing Biological Terror and Crime”**. Cambridge University Press, New York, 2007.

## SEMINARS

On January 8, 2008 Institute for Peace and Conflict Studies (IPCS) and the Washington DC-based Center for Strategic and International Studies (CSIS) addressed the issue of “Governance for Biological Threat Reduction: A Comprehensive, International, Interdisciplinary Approach” in a workshop organised at IDSA, New Delhi. Gerald Epstein and David Heyman from CSIS presented an approach to dealing with biological risks of both manmade and natural origin, and a wide-ranging discussion ensued among workshop participants from a diverse range of disciplines and professional communities.

During the Conference, it was noted that the threat from biological weapons is tangible, although the historical record does not provide much precedent. The key challenge is the need to address catastrophic terrorism. Biotechnology is not only a potential source of this problem; it is also be part of the solution to help in managing this problem. The weaponisation process is very difficult for biological weapons, and some claimed that the state of the art technology for bio-weapons will only be available with states. Others, however, noted that states – and in particular, the national security agencies of states – do not in general have the level of expertise in biological science and biotechnology that can be found in academia, industry, or civilian parts of government. Nevertheless, given how hard it would be to deny states or other sophisticated actors the capability to create biological weapons, the main counter to a bioattack would be public health – an area that needs to be augmented.

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