50 decisive years

the IAEA in time

A child of wartime, the IAEA has become a leading advocate of global peace and security. It celebrates 50 years of international service in 2007 as the world's "atoms for peace" organization.

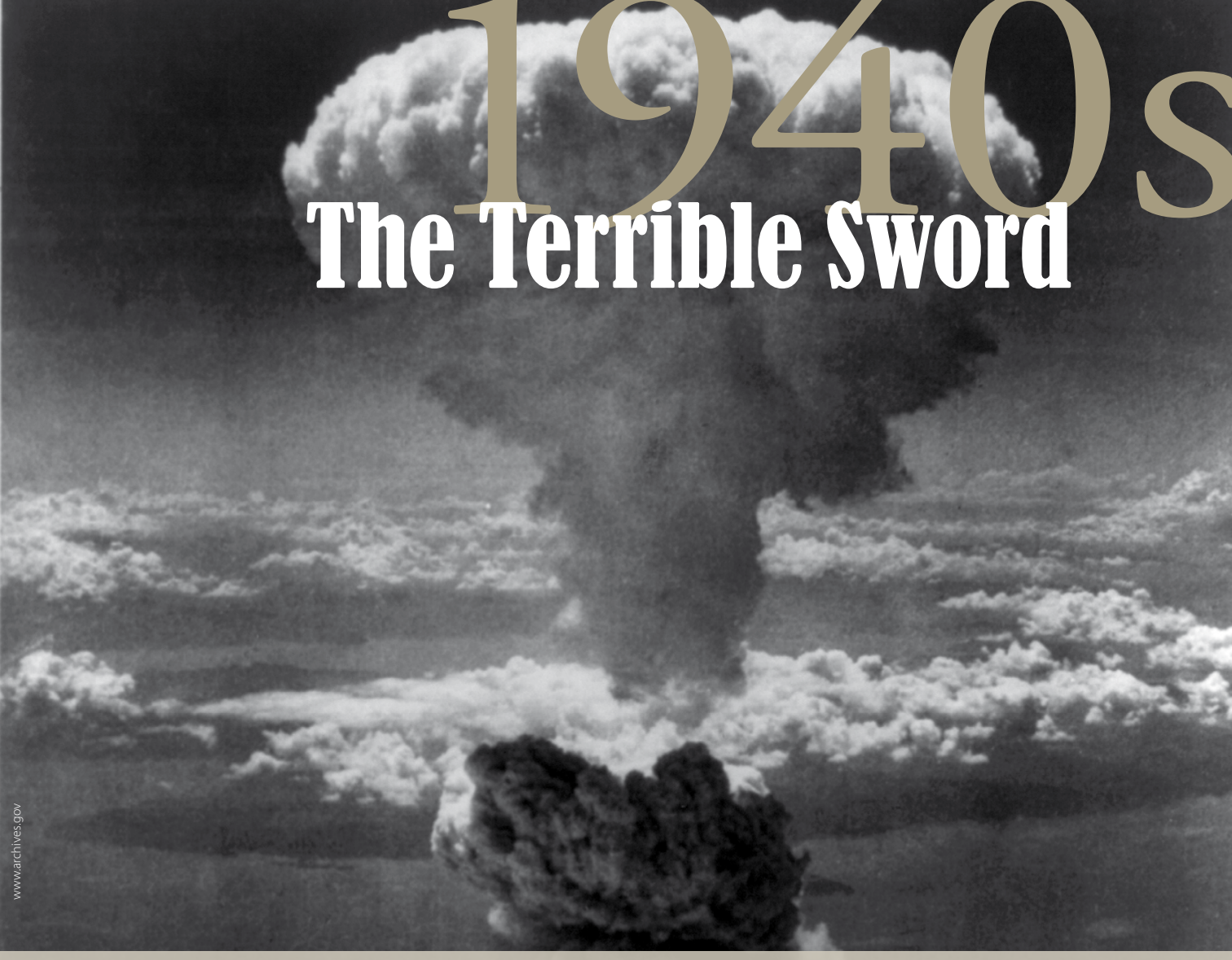
The years proved decisive in shaping where the IAEA stands today, and where it may be headed. They opened new chapters in the world's nuclear story and the IAEA's global role for the atom's peaceful development.

Selective highlights and developments are chronicled in this timeline.

atoms for peace

1940s

The Terrible Sword



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On the morning of August 6, 1945 the United States dropped an atomic weapon over Hiroshima, Japan. Three days later, another atomic bomb was dropped on Nagasaki, ending World War II.

"A weapon of an unparalleled power is being created which will completely change all future conditions of warfare... Humanity will, therefore, be confronted with dangers of unprecedented character unless, in due time, measures can be taken to forestall a disastrous competition in such formidable armaments and to establish an international control of the manufacture and use of the powerful materials." —Neils Bohr, writing in November 1944 and March 1945. Bohr won the Nobel Price for Physics in 1922 and worked on the Manhatten Project that developed the bomb.

1942

The scientific team led by Enrico Fermi achieves the world's first controlled nuclear chain reaction in December at the University of Chicago, US.

1945

The United Nations is born—Heads of State sign the UN Charter on 26 June 1945 in San Francisco, US. During the final weeks of World War II, the United States tests the first atomic bomb near Los Alamos, New Mexico, in July 1945. In August, the US explodes two atomic bombs on Hiroshima and Nagasaki. World War II ends.

1946

The United Nations takes the first steps to control nuclear energy, as States create the UN Atomic Energy Commission (UNAEC). The US and Soviet Union propose alternative approaches, including creating an international organization. Negotiations make little progress over next three years.

1949

The Soviet Union in September carries out its first nuclear weapons test, signaling arms race and effectively ending UNAEC's role.

1950s
Atoms for Peace

1952
In October, the UK tests a nuclear weapon.
In November, the US tests the first hydrogen bomb.

1953
US President Dwight Eisenhower proposes harnessing "atoms for peace" in speech to UN General Assembly in December. He calls for an "international atomic energy agency" to safeguard nuclear material and to "devise methods" whereby it would be allocated to serve the "peaceful pursuits of mankind".

1954
The US amends its Atomic Energy Act to permit peaceful international nuclear cooperation, leading to bilateral agreements with a number of States. The head of the US Atomic Energy Commission is quoted as saying electricity would become "too cheap to meter".

In the USSR, the world's first nuclear power plant is commissioned at Obninsk in June.

In the US, the *Nautilus*, the first nuclear submarine, begins operation in December.

1955
Work begins on drafting the Statute of the International Atomic Energy Agency (IAEA) with representatives from Australia, Belgium, Canada, France, Portugal, South Africa, United Kingdom, and the US. The drafting group later expands to twelve with representatives from the USSR, Czechoslovakia, India, and Brazil.

The UN's *First International Conference on Peaceful Uses of Nuclear Energy* opens in July in Geneva, a landmark scientific meeting of more than 1500 delegates.

1956
In New York, States approve the IAEA Statute at a conference in October of 82 States at the UN. It incorporates responsibilities for both the control and development of nuclear energy for exclusively peaceful purposes.

1957
The IAEA officially comes into existence 29 July, the day when the required number of Member States ratify the Statute. In October, delegates from 59 States attend the first General Conference of the IAEA in Vienna, Austria.

The IAEA's first Board of Governors includes 23 Member States: Argentina, Australia, Brazil, Canada, Czechoslovakia, France, Guatemala, India, Indonesia, Italy, Japan, Korea, Pakistan, Peru, Portugal, Romania, Sweden, Turkey, Union of South Africa, USSR, United Arab Republic (Egypt), United Kingdom, and the US.

In France, countries agree to set up the European Nuclear Energy Agency of the Organization for European Economic Cooperation (today the NEA of the OECD). Six European countries sign the "Rome Treaties" establishing the European Atomic Energy Community (Euratom) and the Common Market.

Global Events: The Soviet Union announces the launch the first satellite into outer space, the unmanned Sputnik-I.

1958
The UN convenes the *Second International Conference on Peaceful Uses of Nuclear Energy* in July. It opens more technical and scientific information to the international community about most aspects of the civil nuclear fuel cycle except for uranium enrichment.

IAEA

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The IAEA initiates its technical assistance programme and nuclear research contracts with laboratories and scientific institutes.

Nuclear Issues: Ireland raises the idea of an international nuclear treaty to stop the spread of atomic weapons. Under global pressure, the US and Soviet Union start negotiations in Geneva on a nuclear test ban.

1959

The IAEA convenes its first scientific meeting in April, on medical radioisotope scanning, and in September, its first scientific conference on the application of large radiation sources in industry.

In the Soviet Union, the first civilian nuclear-powered ship, the *Lenin*, is built.

1960s
Rising Hopes

1960
In February, France tests its first nuclear weapon, becoming the fourth State to declare itself a nuclear-weapons power.

1961
Sweden's Dr. Sigvard Eklund, a physicist, is appointed IAEA Director General.

The IAEA's Laboratory opens in Seibersdorf, Austria, near Vienna, for global nuclear research.

The IAEA signs a trilateral agreement with Monaco and the Oceanographic Institute headed by Jacques Cousteau for research on the effects of radioactivity in the sea, an action that leads to creation of the IAEA Marine Environment Laboratory.

Global Events: At a time when atmospheric testing of nuclear bombs averages more than one explosion per week, States adopt the Antarctic Treaty, the first nuclear-weapon-free-zone, albeit in an area uninhabited by people.

1962
In June, the IAEA Board approves the Agency's "Basic Safety Standards for Radiation Protection," upon which countries base their national standards and regulations.

Global Events: In October, the Cuban missile crisis rivets international attention on the proliferation dangers of the nuclear age, and initiates talks among Latin American countries for denuclearizing the region.

1963
The US and Soviet Union, in the aftermath of the Cuban crisis, accelerate steps for nuclear arms control. The Partial Nuclear Test Ban Treaty is negotiated, co-sponsored by the US, Soviet Union, and UK. It bans nuclear tests in the atmosphere, underwater, and in outer space.

Nuclear Proliferation: In a speech in March 1963, US President Kennedy warns of a nuclear arms race: "Personally, I am haunted by the feeling that by 1970, unless we are successful, there may be ten nuclear powers instead of four, and by 1975, fifteen or twenty.... I see the possibility in the 1970s of the President of the United States having to face a world in which fifteen or twenty or twenty-five nations may have these weapons. I regard this as the greatest possible danger and hazard. "

Nuclear Safeguards: The IAEA safeguards system is extended to large reactors, an important step in the internationalization of bilateral safeguards agreements.

1964
The IAEA expands capabilities in areas of technology transfer, setting up its department for technical cooperation and a joint division with the Rome-based Food and Agriculture Organization (FAO) of the United Nations.

In Trieste, Italy, the IAEA inaugurates the International Centre for Theoretical Physics, which serves as a research and training centre for scientists from developing countries.

In Geneva, the *Third UN International Conference on the Peaceful Uses of Nuclear Energy* convenes in August.

In the US, nuclear power orders start to pick up and interest in nuclear electricity generation rises globally. The IAEA tracks plans and projections, some of which see 1000 nuclear plants by the year 2000.

Nuclear tests: In October, China tests a nuclear bomb, becoming the fifth nuclear-weapon State, alongside France, Russia, the United Kingdom, and the US.

1967

The Tlatelolco Treaty for the Prohibition of Nuclear Weapons in Latin America opens for signature in Mexico. It seeks a nuclear-weapon-free zone covering Latin America and the Caribbean. Requires all State parties to accept IAEA safeguards.

1968

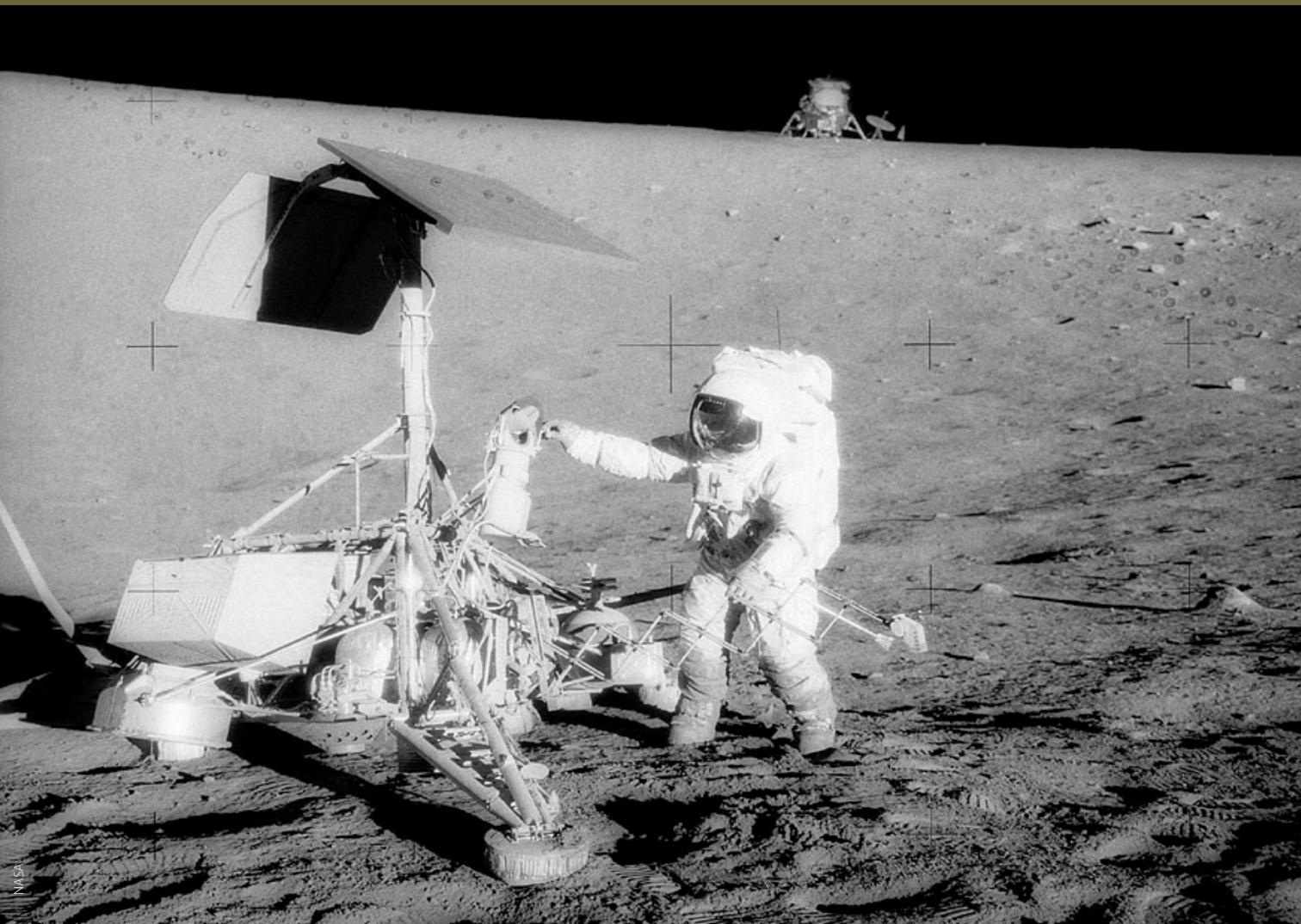
Mexico becomes the first country to place its entire nuclear programme under IAEA safeguards in accordance with the Tlatelolco Treaty.

Nuclear Non-Proliferation Treaty (NPT): The global NPT is finalized and opens for signature. It essentially freezes the number of declared nuclear-weapon States at five (US, Soviet Union (now Russia), UK, France, China), who are obligated to make "good faith" efforts toward disarmament. Other States grouped as non-nuclear weapon States, who are required to forego the nuclear weapons option and to conclude comprehensive safeguards agreements with the IAEA on their nuclear materials. The Treaty provides for these States to receive assistance for the transfer of technology for peaceful applications of nuclear energy.

1969

In April, the Tlatelolco Treaty enters into force.

Nuclear power serves as an energy source during the historic Apollo missions, as three astronauts place an atomic generator on the moon.



Nuclear power serves as an energy source during the historic Apollo missions in the 1960s.

1970s
The Dual Challenge

1970

The IAEA sets up a Safeguards Committee chaired by Austria's Kurt Waldheim to advise on safeguards responsibilities under the NPT, which enters into force in March.

In May, the IAEA begins operating the bibliographic reference database, the International Nuclear Information System (INIS), which covers the world's nuclear literature.

1971

The Zangger Committee is formed, composed of NPT States engaged in major exports of nuclear plant equipment or materials, to interpret NPT provisions related to exports of nuclear material. A trigger list covers items whose export would require IAEA safeguards.

The IAEA Safeguards Committee completes its work, which includes a model comprehensive safeguards agreement for non-nuclear-weapon States party to the NPT. Finland becomes the first country to sign an NPT safeguards agreement with the IAEA.

In Geneva, the UN convenes the *Fourth International Conference on the Peaceful Uses of Nuclear Energy*.

1972

UN Conference on the Human Environment is held in Stockholm, with IAEA involvement. Far-reaching discussions include nuclear energy, greenhouse effect, and radiation issues.

The IAEA launches its first agreement for standing regional technical cooperation in the nuclear field, the Regional Cooperative Agreement (RCA) for Asia and the Pacific.

In London, a Conference under the auspices of what today is the International Maritime Organization (IMO) adopts a convention banning sea dumping of wastes.

1973

A global energy crisis arises when oil supplies from members of the Organization of Petroleum Countries (OPEC) are restricted and prices quadruple. Nuclear power prospects initially brighten, then wane as high energy prices change economic conditions.

Nuclear Safeguards: In April, the IAEA and Euratom sign an agreement for the implementation of safeguards provisions under the NPT, a major step forward in international verification.

1974

In May, India conducts what it describes as a "peaceful" nuclear explosion.

The US moves to reinforce the non-proliferation regime and policy on nuclear exports, a process leading to review of nuclear fuel cycles from the standpoint of proliferation risks they may pose.

The IAEA begins studying the possibility of regional nuclear fuel cycle centres for reprocessing nuclear fuel and for waste management.

1975

In May, States meet at the first review conference of the NPT, whose membership then stands at 91 parties.

In London, the US and other major suppliers of nuclear materials meet to draw up new rules for nuclear exports.

When oil supplies from OPEC member countries are restricted — quadrupling oil prices by 1974 — the shock produces chaos in the West. In the US, the retail price of a gallon of gasoline rose sharply and imports of oil from the Middle East dropped from 1.2 million barrels a day to a mere 19,000 barrels. During that period, the US suffered its first fuel shortage since World War II.

At the IAEA's Seibersdorf Laboratories, special facilities are built for the Safeguards Analytical Laboratory, the coordinating centre of a global network of analytical laboratories for analyzing samples of plutonium, uranium, and other materials.

1976

Jointly with the World Health Organization (WHO), the IAEA establishes a global network of dosimetry laboratories for promoting global standards for the safe use of radiation sources in medicine, industry, and other fields.

1977

In September, the Nuclear Suppliers' Group reaches agreement on export controls of sensitive nuclear technology, issuing a list called the "London Guidelines" that the IAEA later publishes. In Vienna, the International Nuclear Fuel Cycle Evaluation (INFCE) begins a multi-year assessment of problems associated with peaceful uses of nuclear energy and any risk they may pose of further proliferation.

1978

The US amends its 1954 atomic energy law and enacts the Nuclear Non-Proliferation Act, setting restrictions on exports of nuclear technology and requiring full-scope IAEA safeguards.

1979

In the US, headlines report a nuclear power plant accident on 28 March at the Three Mile Island (TMI) site, near Harrisburg, Pennsylvania. A Hollywood movie called "The China Syndrome" about a frightening nuclear plant accident is playing in theatres at the time. The TMI accident causes no loss of life or injury, but leaves the nuclear unit destroyed, with cleanup costs estimated at exceeding US$1 billion. An IAEA expert group is formed and establishes international guidelines on emergency planning and response.

1980s Transboundary Stakes

1980

In Geneva, the *Second NPT Review Conference* is deadlocked, achieving no final declaration. Two contentious issues dominate: nuclear supplies and a nuclear test ban.

At the IAEA, States create the Committee on Assurances of Supply to examine global nuclear commerce and cooperation of transfers for peaceful uses in line with non-proliferation aims.

1981

In June, Israel attacks the French-built Tamuz nuclear research reactor in Iraq on the suspicion that it was being used for nuclear weapons research. The reactor was under IAEA safeguards. The attack draws harsh international criticism, and IAEA Board action. In November 1981, IAEA Director General Eklund reports to the UN Security Council on the Tamuz matter.

IAEA Leadership: In September, States appoint Dr. Hans Blix, former Minister of Foreign Affairs in Sweden, as IAEA Director General for an initial term of four years beginning in December 1981.

1982

The UN General Assembly holds special session on disarmament at which China, France and the USSR update their unilateral declarations regarding security assurances to non-nuclear-weapon States. Global nuclear cooperation advances through a regional agreement called ARCAL for promotion of nuclear science and technology in Latin America.

1983

A landmark IAEA conference is convened in Seattle, US, at which international experts agree that the technology is at hand for the safe disposal of radioactive waste.

1984

China joins the IAEA, as part of its policy of opening to the international community.

1985

At the *Third NPT Review Conference*, Parties adopt a final declaration urging expansion of nuclear-weapon-free-zones and progress on nuclear disarmament.

In November, the first summit meeting takes place between newly elected leader of the Soviet Union, Mikhail Gorbachev, and US President Ronald Reagan. Among outcomes is an initiative on international cooperation to design a nuclear fusion machine, called ITER, involving the US, the European Union, Japan and the USSR under IAEA auspices.

1986

On 26 April, a disastrous nuclear power plant accident at the Chernobyl site in the USSR destroys unit-4 of the reactor, causes deaths and injuries, and releases radiation across national boundaries; it is first internationally detected and reported by experts in Sweden and Finland. In August, the IAEA becomes the site for post-accident review conference, which provides the world's first authoritative account of the accident.

In September, IAEA Member States adopt two international safety conventions on early notification of a nuclear accident and emergency assistance and response, and endorse an expanded nuclear safety programme. An Emergency Response System is set up.

NWFZ: In December, the Rarotonga Treaty enters into force for establishing a nuclear-weapon-free zone in the South Pacific and requiring IAEA safeguards.

1987

China gains a seat on the IAEA Board of Governors. The Convention on Physical Protection of Nuclear Materials enters into force. It requires protection of nuclear materials during international transport.

In November, the IAEA moves to help Brazil cope with the consequences of a serious radiological accident at Goiânia involving an old abandoned radiation source.

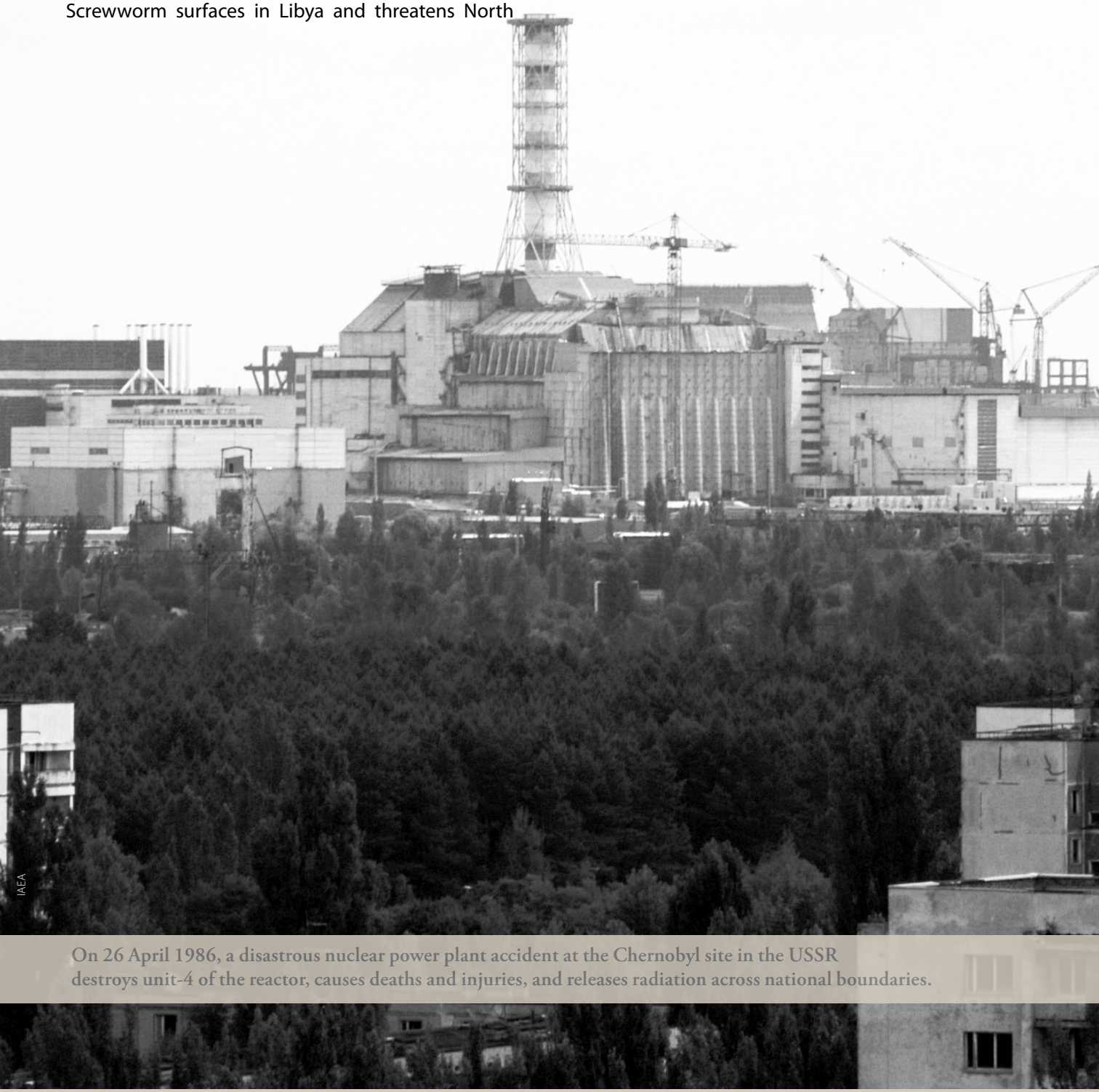
1988

A deadly livestock disease spread by the New World Screwworm surfaces in Libya and threatens North Africa. The IAEA, FAO, and other agencies join forces to rid Libya of the pest by June 1992.

1989

For the first time, the USSR issues a public report on the 1957 radiological accident at a military site at Kyshtym in the Southern Urals.

Global Events: The Berlin Wall, symbol of the Cold War, falls, opening the door to reunification of Germany.



IAEA

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1990s
New Realities

1990

The Fourth NPT Review Conference takes place in Geneva; disagreement prevents consensus on a final declaration, especially concerning conclusion of a nuclear test ban treaty.

In South America, Argentina and Brazil announce a Declaration on Common Nuclear Policy including IAEA and regional safeguards.

Technical Cooperation: A regional agreement called AFRA enters into force for African countries interested in nuclear research, development, and training.

1991

China and France, both nuclear-weapon States, announce intention to sign the NPT.

Gulf War: UN coalition of States militarily moves against Iraq to enforce UN Security Council resolutions demanding Iraq's withdrawal from Kuwait, which it invaded in August 1990. In the battles, Iraqi nuclear facilities are significantly destroyed.

In April, as part of ceasefire terms of the Gulf War, inspections are required for weapons of mass destruction. A UN Special Commission is formed and the IAEA is granted wide authority for nuclear inspections in Iraq, which begin in May. In September, international headlines are made by sixth IAEA inspection team, which is detained for four days by Iraqi authorities. Security Council is engaged to resolve dispute and team subsequently leaves with evidence of a clandestine Iraqi programme for the enrichment of uranium, including global procurement efforts.

Chernobyl Effects: Results of the International Chernobyl Project are reported that assess the radiological situation in 2225 settlements in three republics (Belarus, Russia, Ukraine), covering about 825,000 people.

Nuclear Safety: In June, an IAEA project on the safety of older Soviet-designed nuclear plants in Bulgaria, Czech Republic, Slovakia and Russia reports serious safety deficiencies at most plants compared to Western levels. Assistance is expanded through the Commission of the European Communities, World Association of Nuclear Operators, and other avenues.

Global events: In December, USSR officially dissolves; Commonwealth of Independent States is announced.

1992

The UN Security Council, in a Summit Declaration of 31 January, states that "the proliferation of all weapons of mass destruction constitutes a threat to international peace and security." It specifically underscores the "integral role" of fully effective IAEA safeguards and its members' resolve to take "appropriate measures" in case of any violation brought to the Council's attention by the IAEA.

Disarmament/nuclear security: IAEA proposes assistance in verification of nuclear materials from dismantled nuclear weapons in former USSR.

Nuclear Safeguards: The Democratic People's Republic of Korea (DPRK, North Korea) signs NPT safeguards agreement with the IAEA, which enters into force in April 1992. IAEA inspections begin in the DPRK in May 1992.

Sustainable Development: *The UN Conference on Environment and Development* — the "Earth Summit" — in Rio de Janeiro, Brazil, in June adopts Agenda 21, a document calling for action to ensure the world's sustainable development. The IAEA is made the focal point for issues related to nuclear waste.

December 11, 1997, Kyoto, Japan: Members of the United Nations Framework Convention on Climate Change adopt an amendment to the international treaty on climate change — called the Kyoto Protocol — which assigns mandatory targets for the reduction of greenhouse gas emissions to signatory nations.

1993

In April, the 28-member Nuclear Suppliers Group adopts stronger controls on nuclear exports, requiring comprehensive IAEA safeguards.

Radiological Assessments: The IAEA launches a four-year project with Russia and Norway to assess the effects of sea dumping of radioactive wastes in the Arctic Seas.

Nuclear Safeguards: In North Korea, IAEA inspectors find "inconsistencies" from the analysis of samples and measurements from safeguards inspections, raising the question of whether the country has more plutonium than it declared to the Agency. IAEA seeks to resolve differences with authorities, to no avail, and the IAEA Board finds North Korea in non-compliance with its safeguards agreement. North Korea in March announces its intention to withdraw from the NPT, then later suspends the move. The Security Council backs the IAEA.

In South Africa, IAEA technical teams visit former nuclear weapon sites, following the government's announcement that it abandoned its former nuclear-weapons programme before signing the NPT.

In Vienna, the IAEA Board begins consideration of a safeguards development programme called "93+2" to strengthen the effectiveness of safeguards and improve the system's efficiency, including the capability to verify the absence or existence of undeclared nuclear activities.

1994

The UN Conference on Disarmament takes steps to negotiate a Comprehensive Nuclear-Test-Ban Treaty.

Radiological Assessments: The IAEA completes a preliminary radiological assessment of the Semipalatinsk nuclear test site in Kazakhstan, urging more studies on levels of plutonium in soil and of radionuclides in drinking water.

Iraq Inspections: In February, the IAEA supervises the shipment from Iraq of the final consignment of spent fuel, which is sent to Russia under contract. The operation removes all declared nuclear-weapons-grade materials from Iraq.

North Korea Inspections: The DPRK announces its withdrawal from the IAEA; its safeguards agreement with Agency remains in force. Inspectors remain in North Korea to monitor certain operations; the IAEA states it cannot rule out the possible past diversion of nuclear material. In October, the US and North Korea conclude an "agreed framework" for nuclear development and safeguards. The IAEA establishes the continuing presence of its safeguards inspectors in North Korea.

Nuclear Safety: States adopt the international Convention on Nuclear Safety, which is the first global legal instrument that binds countries to basic safety standards for land-based nuclear power plants.

Nuclear Trafficking: In November, the IAEA brings together governmental experts on issues of illicit trafficking in nuclear materials, in response to growing concerns over reports.

1995

The NPT, under which most safeguards agreements with the IAEA are concluded, is indefinitely extended in May at the Review and Extension Conference in New York. Although Parties do not agree on a Final Declaration, they adopt a set of principles, including steps for action.

Nuclear Safeguards: The IAEA Board approves certain measures to strengthen safeguards under the "93+2" programme, including broader inspector rights of access.

Nuclear Tests: Shortly after the NPT Conference, China conducts a nuclear test, and France, in line with its stated intention to sign the test ban treaty, announces its "final" series of nuclear tests in the South Pacific.

Iraq Inspections: New disclosures emerge concerning Iraq's former secret nuclear programme, following information provided by a high-level defector, Iraqi Gen. Hussein Kamel. Revelations include that Iraq had embarked on a "crash" nuclear-weapon programme in 1990-91 but that plans were thwarted for technical and other reasons. Withheld documents and data are received by IAEA Iraq inspectors for examination.

Radiological Assessments: The IAEA agrees to France's request to conduct a radiological study of the Mururoa and Fangataufa atolls. The Marshall Islands asks the IAEA to review the radiological conditions at Bikini Atoll, former site of nuclear testing by the US.

NWFZs: New nuclear-weapon-free-zone treaties take shape in Africa (the Pelindaba Treaty), and in Southeast Asia (the Bangkok Treaty).

1996

At the IAEA in Vienna, hundreds of delegates attend the *International Chernobyl Conference* that sums up what is known about the 1986 accident's radiological consequences one decade later.

Nuclear Safeguards: The IAEA Board agrees to negotiations on a new legal instrument attached to comprehensive safeguards agreements that would grant Agency inspectors greater authority.

Nuclear Test Ban: At the United Nations in New York on 10 September, the General Assembly overwhelmingly approves the Comprehensive Test Ban Treaty by a vote of 158 to three. Vienna is to host the implementing organization.

WMD: The UN announces that the Chemical Weapons Convention will enter into force 29 April 1997.

1997

The IAEA Board approves a Model Additional Protocol to safeguards agreements. It sets out new measures through which countries would accept stronger, more intrusive inspections on their territory.

IAEA Leadership: Mohamed ElBaradei of Egypt, the Agency's Assistant Director General in charge of External Relations, is appointed IAEA Director General, succeeding Dr. Hans Blix.

United Nations: In New York, Kofi Annan of Ghana takes office as United Nations Secretary-General, succeeding Boutros Boutros-Ghali of Egypt.

In the 1990s, IAEA inspectors are among those checking the remains of facilities used for Iraq's clandestine nuclear weapons programme.

Nuclear Fuel Cycle: Nuclear power development and its fuel cycle, including issues related to the disposition of rising plutonium stocks, are examined at an IAEA symposium in June.
Water Needs: Options for the use of nuclear energy at plants for desalting seawater are reviewed in the Republic of Korea at an IAEA symposium.

Climate Change: In Japan, members of the UN Framework Convention on Climate Change adopt an amendment to the global climate change treaty. The amendment, called the Kyoto Protocol, assigns mandatory targets for the reduction of greenhouse gas to signatory nations.

1998

Russia first proposes a draft global treaty at the UN for suppression of acts of nuclear terrorism.

Nuclear Tests: In May, India and Pakistan conduct a series of nuclear tests within two weeks of each other. IAEA Director General ElBaradei expresses deep regret over the tests and the General Conference of Member States deplored the tests in a resolution.

Nuclear/Radiation Security: The IAEA and World Customs Organization join forces against nuclear trafficking. Radiation safety and security is the focus of a groundbreaking IAEA conference in France. The Cold War radiological legacy gets global attention.

Iraq Inspections: Iraq ceases all cooperation with the UN Special Commission (UNSCOM) and the IAEA. Director General ElBaradei withdraws Agency Iraq inspectors and personnel from the country in December. Up to that time, IAEA extensive inspection activities in Iraq between 1991 and 1998 resulted in a technically coherent picture of Iraq's clandestine nuclear programme.

1999

The world's first geological repository for the disposal of nuclear waste opens in the United States. The IAEA participated in an international peer review of the repository, called WIPP.

Nuclear Safety: At the Tokaimura facility in Japan, a criticality accident occurs at a fuel conversion plant. The IAEA sends a fact-finding team in October, and issues a preliminary report shortly thereafter.

Y2K Bug: Efforts step up to assist countries to prevent computer problems associated with the Year 2000 (Y2K) issue. The new year rolls into 2000 with no serious reported bugs at nuclear facilities.

Nuclear Energy: At a Scientific Forum in Vienna, world nuclear and energy authorities examine the role of nuclear power in the context of sustainable development, seeing a mixed future.

21st Century

Testing Times

2000

Dr. Sigvard Eklund, the IAEA's second Director General from 1961-81, passes away in Vienna.

Iraq Inspections: Former IAEA Chief Hans Blix is appointed to head the United Nations Monitoring & Verification Commission (UNMOVIC), the new monitoring and inspection commission for Iraq.

Non-Proliferation: The 6th NPT Review Conference adopts a final document, as countries pledge to achieve total nuclear disarmament while reaffirming the Treaty's vital role in promoting global peace and security.

Safety: The IAEA assists Georgian authorities with aerial surveys to locate and recover dangerous abandoned radiation sources. An IAEA conference in Buenos Aires finds that many more countries face problems in controlling radiation sources used in medical, industrial, and other fields.

Development: World Leaders meet at the Millennium Summit at the UN in New York. They adopt a series of goals to cut poverty by 2015, called the Millennium Development Goals.

2001

Mohamed ElBaradei is appointed to a second term as IAEA Director General. The IAEA and United Nations Environment Programme join for fact-finding missions to the Balkan region in response to concerns related to military uses of depleted uranium there.

Health & Safety: Spain hosts an IAEA conference on the radiological protection of patients, a topic of rising concern. The Joint Convention on the Safety of Spent Fuel Management & the Safety of Radioactive Waste Management enters into force in June.

Nuclear Security: In the wake of horrific terrorist attacks in the US on 11 September, the IAEA holds a special session on nuclear terrorism to forge a stronger global framework for security.

Scientific Forum: In Vienna, experts in global development issues examined ways in which countries can achieve greater benefits from nuclear science and technology.

Chernobyl: Near the accident's 15th anniversary, the IAEA works to help Ukraine safely take the Chernobyl plant out of service.

United Nations: Kofi Annan is reappointed to a second term as Secretary-General.

2002

In January, US President George Bush cites an "axis of evil" supporting terrorism and seeking weapons of mass destruction.

Nuclear Arms Control: In May, the US and Russia sign a nuclear arms treaty to reduce their respective nuclear arsenals.

The agreement for regional cooperation among Arab States known as Arasia enters into force.

Non-Proliferation: Cuba accedes to the NPT as a non-nuclear-weapon State.

The Day After: On September 11, 2001, the world wakes to the horrific terrorist attacks on the New York World Trade Center and the US Pentagon near Washington, D.C. signalling the start of a new era in terrorism.

WMD: The Group of Eight nations (G8) announce a US $20 billion partnership against weapons of mass destruction at their summit in Canada.

Water: The IAEA hosts World Water Day, coordinating global events for the UN system.

Pest Control: The IAEA and partners call for a stepped up campaign against the tsetse fly in Africa, a vector of disease and death.

Safeguards: The IAEA Board urges North Korea to comply fully with its safeguards agreement, following disclosures that the country has a programme for enriching uranium.

Iraq Inspections: Talks seek to foster Iraq's compliance with Security Council resolutions, including the return of IAEA and UN weapons inspectors to the country.

2003

In January, the Democratic People's Republic of Korea (North Korea) announces its withdrawal from the NPT. In February, the IAEA Board refers the North Korea nuclear file to the UN Security Council.

Iraq: In March, IAEA Director General ElBaradei reports that the US government has advised him to remove IAEA inspectors from Baghdad and that similar advice was given to UNMOVIC. The war in Iraq begins 20 March.

Iran: In June, the IAEA Board discloses that Iran in the past failed to report certain nuclear material and activities as required under the NPT, and in November the Board adopts a resolution condemning Iran's pursuit of secret nuclear activities. In December, Iran signs the additional protocol to its IAEA safeguards agreement that would allow broader inspections once in force.

WMD: Libya announces dismantlement of its WMD programmes, and openness to IAEA inspections. The US launches the Proliferation Security Initiative, which other States are open to join.

History: States commemorate the 50th anniversary of the "atoms for peace" proposal in December 1953 that led to the IAEA's creation.

2004

The IAEA assists Libyan authorities with the removal of weapons-grade highly enriched uranium stored at a research reactor facility near Tripoli.

Nuclear Talks: IAEA Chief ElBaradei meets US President Bush and other officials on nuclear non-proliferation issues and Iran safeguards.

Health: The IAEA Board approves a programme called PACT to help fight cancer in developing countries.

Security: Key partners of a global nuclear security initiative meet in Vienna on the need to protect nuclear material and facilities, and to control radioactive sources.

Safeguards: The IAEA Board concludes consideration of safeguards in the Republic of Korea (South Korea) following reports of undeclared experiments. In November, the Board considers Iran's nuclear programme, adopting a resolution that notes Iran's decision to suspend all enrichment related and reprocessing activities.

Safety: The need for a single set of international standards for nuclear power plants is endorsed by safety experts from 37 countries meeting in Beijing.

Water & Oceans: In Monaco, scientists express concerns over the health of the world's oceans and freshwater systems.

2005

A high-level international panel cites the IAEA as "an extraordinary bargain" for its work, citing efforts to prevent widespread proliferation of nuclear weapons. In October, the IAEA and its Director General are awarded the Nobel Peace Prize.

Fuel Cycle: An international expert group releases findings of its extensive look at the world's civil nuclear fuel cycle, citing five approaches to strengthen controls over sensitive nuclear materials and technologies.

NPT: No agreement is reached at the 7th NPT Review Conference, as disarmament issues prove divisive.
Leadership: Dr. ElBaradei is appointed to a third term as IAEA Director General.

Iran: A new IAEA Board resolution urges Iran to re-establish full suspension of all uranium enrichment-related activities and to re-instate the IAEA seals that were removed.

India: IAEA Director General ElBaradei welcomes the US-India nuclear agreement.

Fusion: France is selected to host the US $10-billion ITER project on nuclear fusion.

Security & Safety: Countries substantially strengthen the international Convention on the Physical Protection of Nuclear Material. In the aftermath of 2004's devastating tsunami in Asia, scientists re-examine potential dangers from the standpoint of nuclear plant safety.

Food and Health: Vietnam's "ricemakers" make big strides in southern and northern villages. Health applications of nuclear medicine are advancing steadily, aiming to reach more patients in poor countries.

2006

Food & Health: Japan and the United Nations commit US $1.76 million to a joint IAEA/FAO project targeting the tsetse fly in Ethiopia. Argentina cites the IAEA/FAO's joint work helping the country achieve its goal of expanded export markets for fruit declared free of the costly Medfly.

Chernobyl: The Chernobyl Forum reports on what's known about the accident 20 years later.

Nuclear Future: An IAEA-supported study outlines possible ways forward to guarantee countries´ supplies of nuclear fuel, while minimizing proliferation risks. Nuclear power's role in the future energy mix is a focus in Asia. Leaders in Central Asia sign a treaty creating a nuclear-weapon-free zone.

Environment: Monaco´s Prince Albert and IAEA Director General ElBaradei join to open a special exhibit on nuclear technologies for the environment.
North Korea: IAEA Director General ElBaradei says he deeply regrets, and expresses serious concern, about the reported nuclear test by North Korea in October.

Leadership: Ban Ki-moon of the Republic of Korea becomes the eighth Secretary-General of the United Nations.

The IAEA and its Directors General joined distinguished company with the receipt in December 2005 of the Nobel Peace Prize.

Iran: In December, the UN Security Council adopts a resolution imposing sanctions on Iran; IAEA Director General ElBaradei says the Agency will implement the relevant parts of the resolution that relates to its work.

2007

Dr. ElBaradei calls for a "timeout" on the Iran nuclear issue, emphasizing that a long-term solution has to be based on negotiation and mutual accommodation. In February, the Director General submits two separate reports on Iran to the IAEA Board, one on IAEA and Iran cooperation and the other on the implementation of safeguards, both in light of the UN Security Council resolution.

Climate Change: The first in a series of new scientific assessments on climate change and its effects is issued by the Intergovernmental Panel for Climate Change (IPCC), a joint body of the World Meteorological Organization and United Nations Environment Programme. It links human actions more closely to global warming trends.

NWFZs: Countries meeting in Mexico mark the 40th anniversary of the Tlatelolco Treaty setting up a nuclear-weapon-free-zone in Latin American and the Caribbean.

North Korea: Following reported progress in Six Party Talks, Dr. ElBaradei welcomes the outcome and accepts an invitation from the Democratic People´s Republic of Korea (DPRK/North Korea) to visit the DPRK for talks in March that he calls "the first steps in a long process".

Nuclear & Art: In Vienna, museum conservators apply portable X-ray technology developed at the IAEA Seibersdorf Laboratories to assess damage to the *Saliera*, a Renaissance masterpiece stolen and then recovered buried deep in an Austrian forest.

Happy Birthday, IAEA: Japan and the Republic of Korea are among countries preparing to hold special celebrations marking the IAEA's official 50th birthday, 29 July 2007.

Telling History: *We each have a personal history intertwined with the events of world history. We invite you to share with us your recollections—both those pleasant and unpleasant—of the past 50 years as they touch upon the events that shaped nuclear development and the International Atomic Energy Agency. For more information, please see: www.iaea.org.*

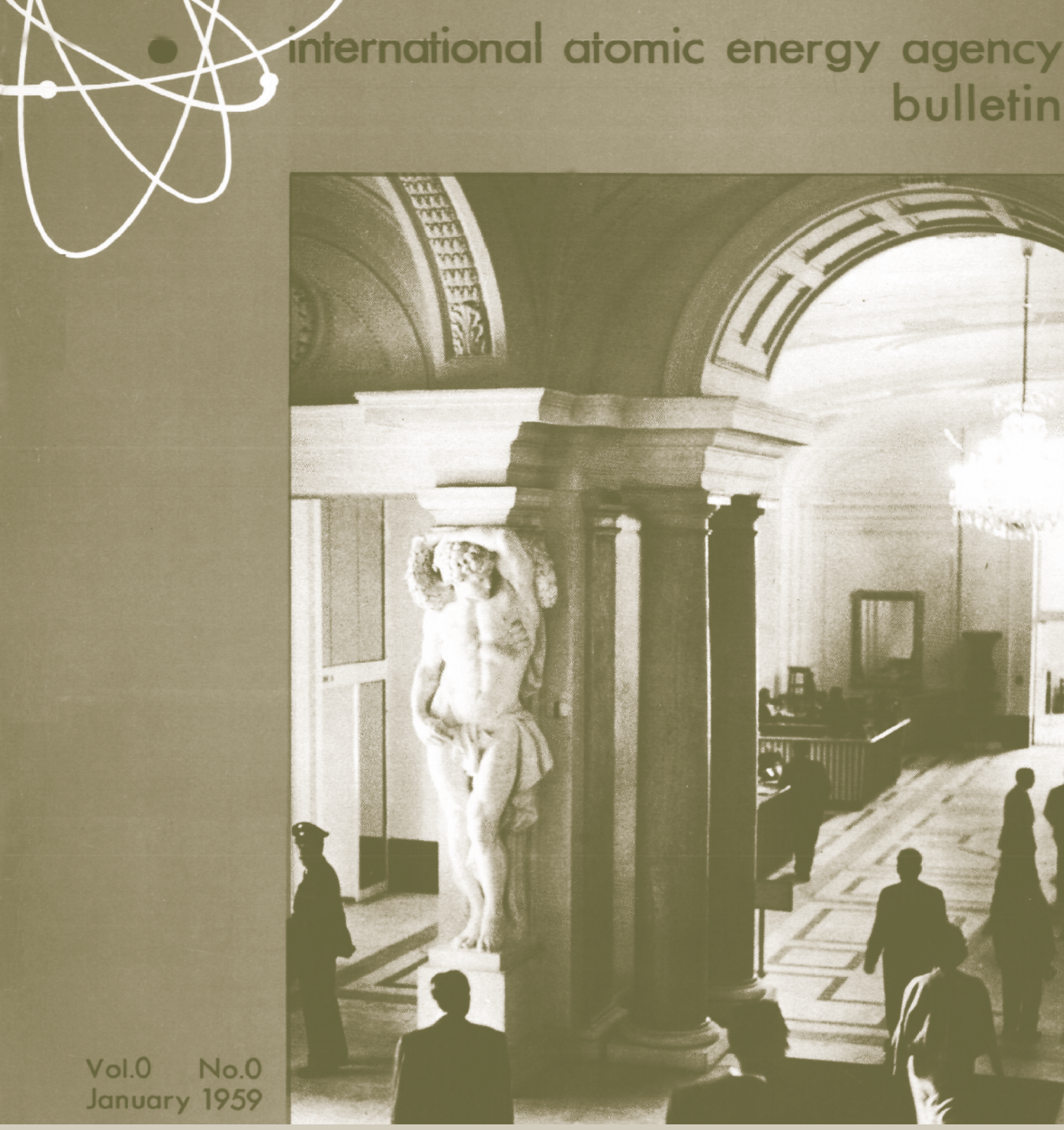

Photo: First Cover of the "IAEA Bulletin" preview edition approved by the IAEA's Board of Governors in 1959. The first official edition was launched in April 1959. The photo shows the halls of Vienna's Hofburg Palace, site of the early IAEA General Conferences.

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A special thank you to the late David Fischer, former IAEA Assistant Director General and distinguished author of the comprehensive history, ***The International Atomic Energy Agency: The First Forty Years***, published by the IAEA in September 1997. Mr. Fischer, whose death in March 2007 was mourned by the international community, stood among the IAEA's principal architects, helping to negotiate the IAEA Statute in 1954-56 and serving on the Preparatory Commission in 1957.

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