

Annual Report 2007

Article VI.J of the Agency's Statute requires the Board of Governors to submit "an annual report to the General Conference concerning the affairs of the Agency and any projects approved by the Agency".

This report covers the period 1 January to 31 December 2007.

Contents

<i>Member States of the International Atomic Energy Agency</i>	iv
<i>The Agency at a Glance</i>	v
<i>The Board of Governors</i>	vi
<i>The General Conference</i>	vii
<i>Fiftieth Anniversary of the Agency</i>	vii
<i>Notes</i>	viii
<i>Abbreviations</i>	ix

Overview	1
----------------	---

Technology

Nuclear Power	17
Nuclear Fuel Cycle and Materials Technologies	21
Capacity Building and Nuclear Knowledge Maintenance for Sustainable Energy Development	24
Nuclear Science	27
Food and Agriculture	31
Human Health	36
Water Resources	40
Assessment and Management of Marine and Terrestrial Environments	43
Radioisotope Production and Radiation Technology	45

Safety and Security

Incident and Emergency Preparedness and Response	51
Safety of Nuclear Installations	53
Radiation and Transport Safety	56
Management of Radioactive Waste	59
Nuclear Security	62

Verification

Safeguards	67
Verification in Iraq Pursuant to UNSC Resolutions	74

Management of Technical Cooperation

Management of Technical Cooperation for Development	77
---	----

Annex	81
Organizational Chart	109

Member States of the International Atomic Energy Agency

(designation as of 31 December 2007)

AFGHANISTAN	GREECE	NORWAY
ALBANIA	GUATEMALA	PAKISTAN
ALGERIA	HAITI	PALAU
ANGOLA	HOLY SEE	PANAMA
ARGENTINA	HONDURAS	PARAGUAY
ARMENIA	HUNGARY	PERU
AUSTRALIA	ICELAND	PHILIPPINES
AUSTRIA	INDIA	POLAND
AZERBAIJAN	INDONESIA	PORTUGAL
BANGLADESH	IRAN, ISLAMIC REPUBLIC OF	QATAR
BELARUS	IRAQ	REPUBLIC OF MOLDOVA
BELGIUM	IRELAND	ROMANIA
BELIZE	ISRAEL	RUSSIAN FEDERATION
BENIN	ITALY	SAUDI ARABIA
BOLIVIA	JAMAICA	SENEGAL
BOSNIA AND HERZEGOVINA	JAPAN	SERBIA
BOTSWANA	JORDAN	SEYCHELLES
BRAZIL	KAZAKHSTAN	SIERRA LEONE
BULGARIA	KENYA	SINGAPORE
BURKINA FASO	KOREA, REPUBLIC OF	SLOVAKIA
CAMEROON	KUWAIT	SLOVENIA
CANADA	KYRGYZSTAN	SOUTH AFRICA
CENTRAL AFRICAN REPUBLIC	LATVIA	SPAIN
CHAD	LEBANON	SRI LANKA
CHILE	LIBERIA	SUDAN
CHINA	LIBYAN ARAB JAMAHIRIYA	SWEDEN
COLOMBIA	LIECHTENSTEIN	SWITZERLAND
COSTA RICA	LITHUANIA	SYRIAN ARAB REPUBLIC
CÔTE D'IVOIRE	LUXEMBOURG	TAJIKISTAN
CROATIA	MADAGASCAR	THAILAND
CUBA	MALAWI	THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
CYPRUS	MALAYSIA	TUNISIA
CZECH REPUBLIC	MALI	TURKEY
DEMOCRATIC REPUBLIC OF THE CONGO	MALTA	UGANDA
DENMARK	MARSHALL ISLANDS	UKRAINE
DOMINICAN REPUBLIC	MAURITANIA	UNITED ARAB EMIRATES
ECUADOR	MAURITIUS	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
EGYPT	MEXICO	UNITED REPUBLIC OF TANZANIA
EL SALVADOR	MONACO	UNITED STATES OF AMERICA
ERITREA	MONGOLIA	URUGUAY
ESTONIA	MONTENEGRO	UZBEKISTAN
ETHIOPIA	MOROCCO	VENEZUELA
FINLAND	MOZAMBIQUE	VIETNAM
FRANCE	MYANMAR	YEMEN
GABON	NAMIBIA	ZAMBIA
GEORGIA	NETHERLANDS	ZIMBABWE
GERMANY	NEW ZEALAND	
GHANA	NICARAGUA	
	NIGER	
	NIGERIA	

The Agency's Statute was approved on 23 October 1956 by the Conference on the Statute of the IAEA held at United Nations Headquarters, New York; it entered into force on 29 July 1957. The Headquarters of the Agency are located in Vienna. The IAEA's principal objective is "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world".

© IAEA, 2008

The Agency at a Glance

(as of 31 December 2007)

144 Member States.

64 intergovernmental and non-governmental organizations worldwide invited to observe the Agency's General Conference.

50 years of international service.

2326 professional and support staff.

€268 million total regular budget for 2007, supplemented by extrabudgetary contributions received in 2007 amounting to **€42.2 million**.

\$80 million target in 2007 for voluntary contributions to the Agency's Technical Cooperation Fund, supporting projects involving **3546** expert and lecturer assignments, **4149** meeting participants, **2287** participants in training courses and **1661** fellows and scientific visitors.

2 liaison offices (in New York and Geneva) and 2 safeguards regional offices (in Tokyo and Toronto).

2 international laboratories and research centres.

11 multilateral conventions on nuclear safety, security and liability adopted under the Agency's auspices.

4 regional/cooperative agreements relating to nuclear science and technology.

109 Revised Supplementary Agreements governing the provision of technical assistance by the Agency.

115 active CRPs involving **1538** approved research contracts and agreements. In addition, **80** Research Coordination Meetings were held.

237 safeguards agreements in force in **163** States involving **2122** safeguards inspections performed in 2007. Safeguards expenditures in 2007 amounted to **€110.6 million** in regular budget and **€12.8 million** in extrabudgetary resources.

19 national safeguards support programmes and 1 multinational support programme (European Union).

12 million monthly hits to the Agency's *iaea.org* web site.

2.8 million records in the International Nuclear Information System, the Agency's largest database.

1.2 million documents, technical reports, standards, conference proceedings, journals and books in the IAEA Library available for Member States and **11 300** visitors to the Library in 2007.

177 publications and newsletters issued (in print and electronic formats) in 2007.

The Board of Governors

The Board of Governors oversees the ongoing operations of the Agency. It comprises 35 Member States and generally meets five times a year, or more frequently if required for specific situations. Among its functions, the Board adopts the Agency's programme for the incoming biennium and makes recommendations on the Agency's budget to the General Conference.

In the area of nuclear technologies, the Board considered the *Nuclear Technology Review 2007* and a Secretariat report on *Considerations to Launch a Nuclear Power Programme*.

In the area of safety and security, the Board considered the *Nuclear Safety Review for 2006* and it established an Agency safety standard on the safety of fuel cycle facilities. It considered the annual report on *Nuclear Security – Measures to Protect Against Nuclear Terrorism* and approved functions specifically assigned to the Agency under the International

Convention for the Suppression of Acts of Nuclear Terrorism.

As regards verification, the Board considered the *Safeguards Implementation Report for 2006*. It approved a number of safeguards agreements and additional protocols. The Board kept under its consideration the implementation of the NPT safeguards agreement and relevant provisions of United Nations Security Council resolutions¹ in the Islamic Republic of Iran. With regard to the application of safeguards in the Democratic People's Republic of Korea, the Board authorized the Director General to implement ad hoc monitoring and verification arrangements. The Board considered the Report of the Advisory Committee on Safeguards and Verification within the Framework of the IAEA Statute.

The Board considered the *Technical Cooperation Report for 2006* and approved the Agency's technical cooperation programme for 2008.

Composition of the Board of Governors (2007–2008)

Chair: H.E. Mr. Milenko E. SKOKNIC
Ambassador, Governor from Chile

Vice-Chairpersons: H.E. Mr. Mario HORVATIĆ
Ambassador, Governor from Croatia

H.E. Mr. Frank COGAN
Ambassador, Governor from Ireland

Albania
Algeria
Argentina
Australia
Austria
Bolivia
Brazil
Canada
Chile
China
Croatia
Ecuador
Ethiopia
Finland
France
Germany
Ghana
India

Iraq
Ireland
Italy
Japan
Lithuania
Mexico
Morocco
Nigeria
Pakistan
Philippines
Russian Federation
Saudi Arabia
South Africa
Switzerland
Thailand
United Kingdom of Great Britain
and Northern Ireland
United States of America

¹ Security Council resolutions 1737 (2006) and 1747 (2007).

The General Conference

The General Conference comprises all Member States of the Agency and meets once a year. It considers the annual report of the Board of Governors on the Agency's activities during the previous year; approves the Agency's accounts and budget; approves any applications for membership; and elects members to the Board of Governors. It also conducts a wide ranging general debate on the Agency's policies and programmes and passes resolutions directing the priorities of the Agency's work.

In 2007, the Conference — upon the recommendation of the Board — approved Bahrain, Burundi, Cape Verde, Congo and Nepal and for membership of the Agency. By the end of 2007, the Agency's membership had risen to 144.

Fiftieth Anniversary of the Agency

To mark half a century of the Agency's founding and its work, there were a number of activities or events in Vienna and in Member States in 2007. Among the more notable were the following.

An illustrated history of the Agency entitled *Atoms for Peace: A Pictorial History of the International Atomic Energy Agency* was published.

An international children's painting competition was organized during 2007, and the winning entries were exhibited at the General Conference.

A photographic exhibition on the Agency's first half century was organized in April 2007 in Geneva. Also in April, the Japan Atomic Industrial Forum devoted a day in its week long meeting in Aomori to the Agency's anniversary. In May, the Government of Hungary organized a celebration meeting in Budapest. In July, the Director General attended a special conference commemorating the fiftieth anniversary hosted by the Republic of Korea in Seoul. A "Jubilee Forum" was organized in Sofia in July by the Bulgarian Government. Finally, the German Government produced a publication on the history of the Agency.

During the 51st regular session of the General Conference in September 2007, the Federal President of Austria, Dr. H. Fischer, the Austrian Government and the City of Vienna honoured the Agency with a formal gala concert and reception at the Vienna Konzerthaus, the historic location of the first General Conference. The photo shows the Austrian Federal Minister for European and International Affairs, Ms. U. Plassnik, delivering her welcome address.



(photo credit: Bernhard J. Holzner © HOPI-MEDIA)

Notes

- The *Annual Report* reviews the results of the Agency's programme according to the three "pillars" of technology, safety and verification. The main part of the report, starting on page 17, generally follows the programme structure as given in The Agency's Programme and Budget 2006–2007 (GC(49)/2).
- The introductory chapter, 'Overview', seeks to provide a thematic analysis, based on the three pillars, of the Agency's activities within the overall context of notable developments during the year. More detailed information can be found in the latest editions of the Agency's *Nuclear Safety Review*, *Nuclear Technology Review*, *Technical Cooperation Report* and the *Safeguards Statement for 2007 and Background to the Safeguards Statement*. For the convenience of readers, these documents are available on the CD-ROM attached to the inside back cover of this report.
- Additional information covering various aspects of the Agency's programme is provided on the attached CD-ROM, and is also available on the Agency's web site at <http://www.iaea.org/Worldatom/Documents/Anrep/Anrep2007/>.
- Except where indicated, all sums of money are expressed in United States dollars.
- The designations employed and the presentation of material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.
- The mention of names of specific companies or products (whether or not indicated as registered) does not imply any intention to infringe proprietary rights, nor should it be construed as an endorsement or recommendation on the part of the Agency.
- The term "non-nuclear-weapon State" is used as in the Final Document of the 1968 Conference of Non-Nuclear-Weapon States (United Nations document A/7277) and in the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The term "nuclear weapon State" is as used in the NPT.

Abbreviations

ABACC	Brazilian–Argentine Agency for Accounting and Control of Nuclear Materials
AFRA	African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology
ARCAL	Co-operation Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean
BWR	Boiling water reactor
CRP	Coordinated research project
ESTRO	European Society for Therapeutic Radiology and Oncology
Euratom	European Atomic Energy Community
FAO	Food and Agriculture Organization of the United Nations
FORATOM	European Atomic Forum
GEF	Global Environment Facility
IAEA-MEL	IAEA Marine Environment Laboratory
ICRP	International Commission on Radiological Protection
ICTP	Abdus Salam International Centre for Theoretical Physics
INFCIRC	Information Circular (IAEA)
INIS	International Nuclear Information System
IOC	Intergovernmental Oceanographic Commission (UNESCO)
ISO	International Organization for Standardization
LEU	Low enriched uranium
LWR	Light water reactor
NATO	North Atlantic Treaty Organization
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
OECD	Organisation for Economic Co-operation and Development
OECD/NEA	OECD Nuclear Energy Agency
OPEC	Organization of the Petroleum Exporting Countries
PAHO	Pan American Health Organization/WHO
PET	Positron emission tomography