
IAEA Annual Report 2013

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 2013.

Contents

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

The Year in Review	1
------------------------------	---

Nuclear Technology

Nuclear Power	17
Nuclear Fuel Cycle and Materials Technologies	22
Capacity Building and Nuclear Knowledge Maintenance	25
for Sustainable Energy Development	
Nuclear Science	28
Food and Agriculture	32
Human Health	37
Water Resources	41
Environment	43
Radioisotope Production and Radiation Technology	47

Nuclear Safety and Security

Incident and Emergency Preparedness and Response	53
Safety of Nuclear Installations	56
Radiation and Transport Safety	60
Management of Radioactive Waste	63
Nuclear Security	66

Nuclear Verification

Nuclear Verification	71
--------------------------------	----

Technical Cooperation

Management of Technical Cooperation for Development	81
---	----

Annex	89
------------------------	----

Organizational Chart	117
---------------------------------------	-----

Member States of the International Atomic Energy Agency

(as of 31 December 2013)

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

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".

The Agency at a Glance

(as of 31 December 2013)

- 160** Member States.
- 77** intergovernmental and non-governmental organizations worldwide invited to observe the Agency's General Conference.
- 56** years of international service.
- 2556** professional and support staff.
- €330 million** total regular budget for 2013.¹ Extrabudgetary expenditures in 2013 totalled **€62.7 million**.
- €71.4 million** target in 2013 for voluntary contributions to the Agency's Technical Cooperation Fund, supporting projects involving **3509** expert and lecturer assignments, **5331** meeting participants and other project personnel, **3041** participants in **209** regional and interregional training courses and **2005** fellows and scientific visitors.
- 124** Member States participating in the Agency's technical cooperation programme, including **31** least developed countries.
- 791** active technical cooperation projects at the end of 2013.
 - 2** liaison offices (in New York and Geneva) and **2** safeguards regional offices (in Tokyo and Toronto).
- 12** international laboratories (Vienna, Seibersdorf and Monaco) and research centres.
- 11** multilateral conventions on nuclear safety, security and liability adopted under the Agency's auspices.
- 4** regional agreements relating to nuclear science and technology.
- 121** Revised Supplementary Agreements governing the provision of technical assistance by the Agency.
- 104** active CRPs involving **1563** approved research, technical and doctoral contracts and research agreements. In addition, **74** Research Coordination Meetings were held.
 - 17** national donors, **1** multinational donor (European Union) and **1** private company donor to the voluntary Nuclear Security Fund.
- 180** States in which safeguards agreements were being implemented,^{2,3} of which **122** States had additional protocols in force, with **1971** safeguards inspections performed in 2013. Safeguards expenditures in 2013 amounted to **€122.5 million** in regular budget and **€14.5 million** in extrabudgetary resources.
 - 20** national safeguards support programmes and **1** multinational support programme (European Commission).
- 11.9 million** pages read by more than **3.6 million** people on the Agency's *iaea.org* site, and **120 000** subscribers to the Agency's social media channels on Twitter and Facebook.
- 3.6 million** records in the International Nuclear Information System (INIS), the Agency's largest database, with over **481 000** full texts and an average of **57 000** INIS searches and **4100** downloads performed each month.
- 1.1 million** documents, technical reports, standards, conference proceedings, journals and books in the IAEA Library and **14 300** visitors to the Library in 2013.
- 202** publications, including newsletters, issued in 2013 (in print and electronic formats).

¹ At the UN average rate of exchange of \$1.3245 to €1.00. The total regular budget was €346.3 million at the \$1.00 to €1.00 rate.

² These States do not include the Democratic People's Republic of Korea, where the Agency did not implement safeguards and, therefore, could not draw any conclusion.

³ And Taiwan, China.

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.

The Board appointed Yukiya Amano by acclamation to the post of Director General of the Agency for a further term of office of four years, until 30 November 2017.

In the area of nuclear technologies, the Board considered the *Nuclear Technology Review 2013*.

In the area of safety and security, the Board kept implementation of the IAEA Action Plan on Nuclear Safety, approved in 2011, under review throughout the year. The Board discussed the

Nuclear Safety Review 2013 and also debated the *Nuclear Security Report 2013* and approved the *Nuclear Security Plan 2014–2017*.

As regards verification, the Board considered the *Safeguards Implementation Report for 2012*. 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 resolutions in the Islamic Republic of Iran, and the issues of the implementation of the NPT Safeguards Agreement in the Syrian Arab Republic and the application of safeguards in the Democratic People's Republic of Korea.

The Board discussed the *Technical Cooperation Report for 2012* and approved the Agency's technical cooperation programme for 2014.

Composition of the Board of Governors (2013–2014)

Chairperson:

HE Mr. Thiep NGUYEN
Ambassador
Governor from Viet Nam

Vice-Chairpersons:

HE Mr. Jan PETERSEN
Ambassador
Governor from Norway

HE Mr. Przemyslaw GRUDZIŃSKI
Ambassador
Governor from Poland

Algeria
Argentina
Australia
Austria
Bosnia and Herzegovina
Brazil
Canada
China
Costa Rica
Finland
France
Germany
Greece
India
Japan
Kenya
Libya
Nigeria

Norway
Pakistan
Peru
Poland
Qatar
Russian Federation
Slovakia
South Africa
Sudan
Sweden
Thailand
United Arab Emirates
United Kingdom of Great Britain and
Northern Ireland
United States of America
Uruguay
Venezuela
Viet Nam

The General Conference

The General Conference comprises all Member States of the Agency and meets once a year. It debates the annual report of the Board of Governors on the Agency's activities during the previous year, approves the Agency's financial statements 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 2013, the Conference approved the Board's appointment of Yukiya Amano as Director General of the Agency for a further term of office of four years, until 30 November 2017.

The Conference — upon the recommendation of the Board — approved Brunei Darussalam and the Commonwealth of the Bahamas for membership of the Agency. At the end of 2013, the Agency's membership was 160.

Notes

- The *IAEA Annual Report 2013* aims to summarize only the significant activities of the Agency during the year in question. The main part of the report, starting on page 15, generally follows the programme structure as given in *The Agency's Programme and Budget 2012–2013* (GC(55)/5).
- The introductory chapter, 'The Year in Review', seeks to provide a thematic analysis of the Agency's activities within the 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 2013 and Background to the Safeguards Statement*.
- Additional information covering various aspects of the Agency's programme is available, in electronic form only, on *iaea.org*, along with the *Annual Report*.
- 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

AFRA	African Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology
AFRA-NEST	AFRA Network for Education in Nuclear Science and Technology
ARCAL	Co-operation Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean
COP19	19th session of the Conference of the Parties (UNFCCC)
CRP	coordinated research project
Euratom	European Atomic Energy Community
FAO	Food and Agriculture Organization of the United Nations
FORATOM	European Atomic Forum
HEU	high enriched uranium
ICRP	International Commission on Radiological Protection
ICT	information and communication technology
ICTP	Abdus Salam International Centre for Theoretical Physics
IDB	Islamic Development Bank
IEA	International Energy Agency
IEC	Incident and Emergency Centre (IAEA)
INFCIRC	Information Circular (IAEA)
INIR	Integrated Nuclear Infrastructure Review
INIS	International Nuclear Information System
INPRO	International Project on Innovative Nuclear Reactors and Fuel Cycles
INTERPOL	International Criminal Police Organization–INTERPOL
IPCC	Intergovernmental Panel on Climate Change
IRRI	International Rice Research Institute
Joint Division	Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture
JRC	Joint Research Centre (European Commission)
LEU	low enriched uranium

NEMS	Nuclear Energy Management School
NESA	Nuclear Energy System Assessment
NPC	National Participation Cost
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
OA-ICC	Ocean Acidification International Coordination Centre
OIC	Organisation of Islamic Cooperation
OECD	Organisation for Economic Co-operation and Development
OECD/NEA	OECD Nuclear Energy Agency
PACT	Programme of Action for Cancer Therapy (IAEA)
PAHO	Pan American Health Organization
PUI	Peaceful Uses Initiative
RANET	Response and Assistance Network (IAEA)
RCA	Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology
RSA	Revised Supplementary Agreement Concerning the Provision of Technical Assistance by the IAEA
TCF	Technical Cooperation Fund
UNCCD	United Nations Convention to Combat Desertification
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
UPSAT	Uranium Production Site Appraisal Team
WHO	World Health Organization
WMO	World Meteorological Organization