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**DEPARTMENT OF NUCLEAR SAFETY AND SECURITY
DIVISION OF RADIATION, TRANSPORT AND WASTE SAFETY**



**EDUCATION AND TRAINING APPRAISAL
IN RADIATION PROTECTION AND THE SAFETY OF RADIATION
SOURCES**

ARGENTINA

6 to 10 November 2017

1. APPRAISAL TEAM - PARTICIPANTS

Appraisal Team

Julio Barceló	Spain (team leader, expert)
Omar García	Cuba (expert)
Andrea Luciani	IAEA (team coordinator)

List of Participants

ARN

Ana M. Larcher	1st Vice-President Board of Directors. Local EduTA Team Leader
Nora Nasazzi	President of the ARN Academic Committee,
Hugo Vicens	Former Manager of Radiological Safety, Security and Safeguards and Advisor of Board of Directors
Rubén Novo	Former Internal Auditor and Advisor of Board of Directors,
Adrián Disciaciatti	Chief Unit of Education and Training
Ana Molinari	Coordinator PGEC

Ministry of Security

Emilio L. Renda	Secretary of Civil Protection and Comprehensive Approach to Emergencies and Catastrophes
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National Atomic Energy Commission (CNEA)

Enrique Cinat	PRAMU: CNEA General Manager
Raúl Barrachina	Academic Area Manager
Juan Carlos Furnari	Ezeiza Atomic Center Manager
Carla Notari	Dean Dan Beninson Institute

Univeristy of Buenos Aires (UBA)

Gerardo Quintana	Member of the Superior Council
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Nuclear Diagnostic Centre Foundation (FCDN)

Daniel Passadore	General Manager
Gabriel Bruno	Chief Medical Director Coordinator
Christian González	Diagnostic Imaging Chief Coordinator
Mauro Namías	Head of Medical Physics
Amilcar Osorio	Medical physics
Vanesa M. Sanz	Medical physics
Alicia Coronel	Technical director
Adrián Durán	Radiopharmacy / Cyclotron
Maximiliano Iannone	Head of Technicians

Ministry of Health

Alejandro Luis Ramos	Secretary of Policies, regulation and Institutes
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Kumiko Eiguchi
Daniel Vitali
Emiliano López
Alejandro La Pasta

Undersecretary of Policies, Regulation and Control
Director of Registration, Inspection and Border Health
Telehealth Directorate
Head of Technical Area Health Radiophysics

Argentinian Centre for Non-Destructive Tests (CAEND)

Bruno E. Scholz	President
Jorge Amsler	Course director
Jorge Talmadge	Course director

BACKGROUND

In 2006 an EduTA mission was conducted in Argentina with the following objectives: *to evaluate the national infrastructure for education and training in radiation protection including: to identify the training needs; to prepare an assessment report including conclusions and recommendations for strengthening the national infrastructure for radiation protection training in Argentina.*

Following the outcomes of the 2006 EduTA mission, a long term agreement was signed between the Government of Argentina and the IAEA Technical Cooperation Department to identify and provide support to ARN as the Regional Training Centre (RTC) for education and training in nuclear, radiation, transport and waste safety in the region of America Latina.

In March 2016 the president of the ARN Board of Directors, Ing. Nestor Alejandro Masriera sent a letter to Mr Peter Johnston, Director of the IAEA Division of Radiation, Transport and Waste Safety, requesting to carry out a follow-up appraisal mission on education and training in radiation protection and the safety of radiation sources.

Once the financial support to the mission through the IAEA Technical Cooperation Programme was secured, the IAEA contact point for the EduTA mission sent the questionnaire to ARN with the request to fill out all the modules (Module A on the legal and regulatory framework for education and training; Module B on the national strategy for education and training; Module C on the Postgraduate Educational Course in radiation protection and the safety of radiation sources (PGEC)).

The questionnaire with the responses and supporting documents was sent back to the IAEA contact point for a preliminary assessment prior to the mission being carried out. After consultation with the other members of the EduTA team, the IAEA contact point provided the ARN with guidance and suggestions on how to amend the information provided in order to properly address some of the questions. Before the mission, a new completed questionnaire with additional supporting documents was sent back to the IAEA contact point.

The EduTA mission was conducted from 6 to 10 November 2017 under the IAEA Technical Cooperation project RLA/9/075 “Strengthening National Infrastructure for End-Users to Comply with Regulations and Radiological Protection Requirements”.

OBJECTIVES AND TERMS OF REFERENCE OF THE EduTA MISSION

The general objectives of the EduTA are:

- To carry out a detailed appraisal of the status of the provisions for education and training in radiation protection and the safety of radiation sources;
- To identify areas in education and training, where the provisions should be improved to meet (i) the IAEA safety standards, (ii) the national education and training needs;
- To provide the host Member State with recommendations and suggestions for improvement;
- To provide key staff in the host Member State with an opportunity to discuss the legislative framework and the national policy and strategy in the field with the EduTA team members who have experience in the issues at stake;
- To promote the IAEA Standards and Guides relevant to the scope of the appraisal.

In this framework, the terms of reference of this appraisal mission were:

- To review, together with the counterpart, the information provided in Module A, B and C of the EduTA questionnaire on the legal and regulatory framework for education and training in radiation protection and safety and the national strategy for education and training;
- To provide an opportunity to continuously improve the provisions and overall infrastructure for education and training in radiation protection and safety.

CONDUCT OF THE MISSION

The EduTA mission was conducted according to the agreed mission programme. Representatives from different national stakeholders were met. The opening session of the mission took place at the ARN headquarters on the first day of the mission. The EduTA team was welcomed by Mr Nestor Masriera, President of the ARN Board, Ms Ana M. Larcher, 1st Vice-President of ARN and the local representatives of the Ministry of Health, Ministry of Security National Commission for Atomic Energy (CNEA) and the University of Buenos Aires.

Ms Ana Larcher provided an introductory presentation on the uses of ionizing radiation in Argentina and the relevant legal and regulatory framework. Presentations were then provided on the national infrastructure for training in radiation protection: Ms Ana Molinari (ARN) presented capabilities and activities of ARN; Mr Hernandez (ARN) focused on the training in emergency and preparedness response; Mr Emiliano López (Ministry of Health) presented the initiatives taken by the Ministry of Health, particularly on e-learning; Mr Barrachina outlined the activities for human resource development in CNEA. Two presentations on specific topics were provided: Argentina Mining Decontamination Project (PRAMU) (by Mr Enrique Cinat); and Argentinian Civil Defence System (by Mr Emilio Renda). Finally, Ms Ana Larcher provided a presentation on the initiatives taken towards the establishment of a national policy and strategy for education and training in radiation, transport and waste safety.

After the presentations, and during the week, the information provided to the EduTA team by the ARN counterparts prior to the mission was discussed in detail. Clarification on aspects of the questionnaire was provided and additional information was requested where necessary. Numerous additional documents and evidence were provided to the EduTA team.

In accordance with the mission programme, the EduTA team also visited several organizations and institutions relevant to the scope of the mission:

- Argentinian Centre for Non-Destructive Tests (CAEND: Centro Argentino de Ensayos No Destructivos);
- Faculty of Engineering of the University of Buenos Aires;
- Ministry of Health;
- Nuclear Diagnostic Centre Foundation (FCDN: Fundación Centro de Diagnóstico Nuclear);
- National Commission for Atomic Energy (CNEA: Comisión Nacional de Energía Atómica);
- Nuclear Technology Institute Dan Beninson Institute (IDB: Instituto de Tecnología Nuclear Dan Beninson).

On the last day, an exit meeting was held with the Argentinian representatives of different stakeholders at the ARN premises. The EduTA team leader presented a brief outcome of the assessment. Conclusions, recommendations and suggestions were agreed with the counterpart. An action plan was agreed identifying the responsible organizations and the time frame for addressing the recommendations.