



Autoridad Regulatoria Nuclear  
PRESIDENCIA DE LA NACIÓN

[www.arn.gov.ar](http://www.arn.gov.ar)

CTBT:  
SCIENCE AND  
TECHNOLOGY  
2017 CONFERENCE

## **ARN's experience in operating and maintaining RN01 and RN03 towards the installation of RN02**

*Ms. Natalia FERRO - Mr. Andrés PANTIN  
June 2017*

## ARN AT A GLANCE

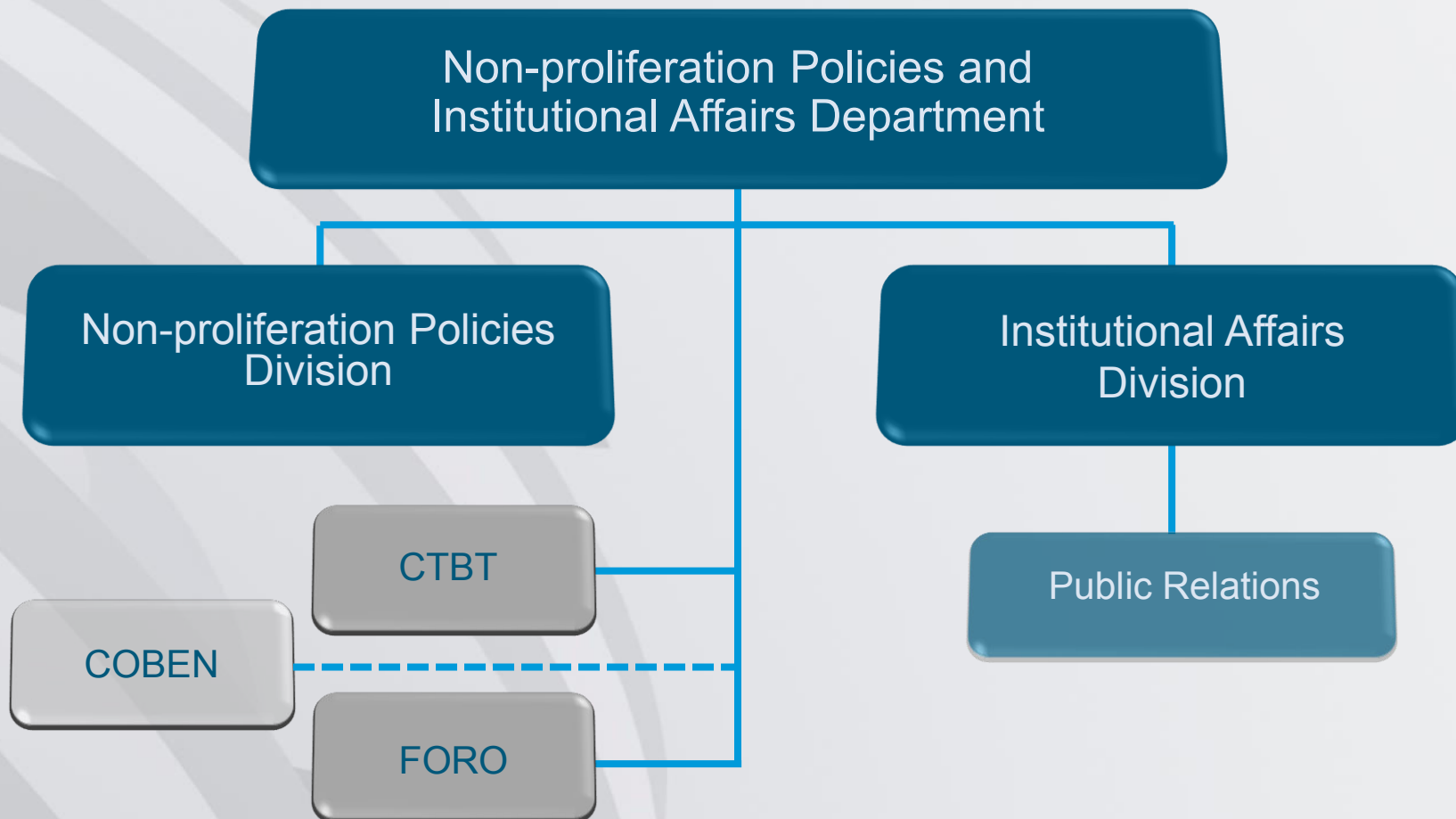


The **NUCLEAR REGULATORY AUTHORITY (ARN)** was established as an autonomous body reporting to the Presidency of Argentina by Act 24804 known as the Nuclear Activity National Act, which came into force on April 25, 1997, and is empowered **to regulate and control the nuclear activity** with regard to radiation and nuclear safety, physical protection and nuclear non-proliferation issues.

ARN's **objective** is to **establish, develop and enforce a regulatory system applicable to all nuclear activities** carried out in Argentina.



# NON-PROLIFERATION POLICIES AND INSTITUTIONAL AFFAIRS DEPARTMENT



## ARGENTINA AND THE CTBT

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During the negotiation of the Treaty, ARN participated as **technical advisor**.

- 1999 ARN was designated by Argentina as PoC for the installation and operation of the **radionuclide** stations, the **infrasound** stations and the **laboratory**.
- 2004 The **Facility Agreement** between the Government of the Republic of Argentina and the PTS entered into force.



# ARN AND THE CTBT

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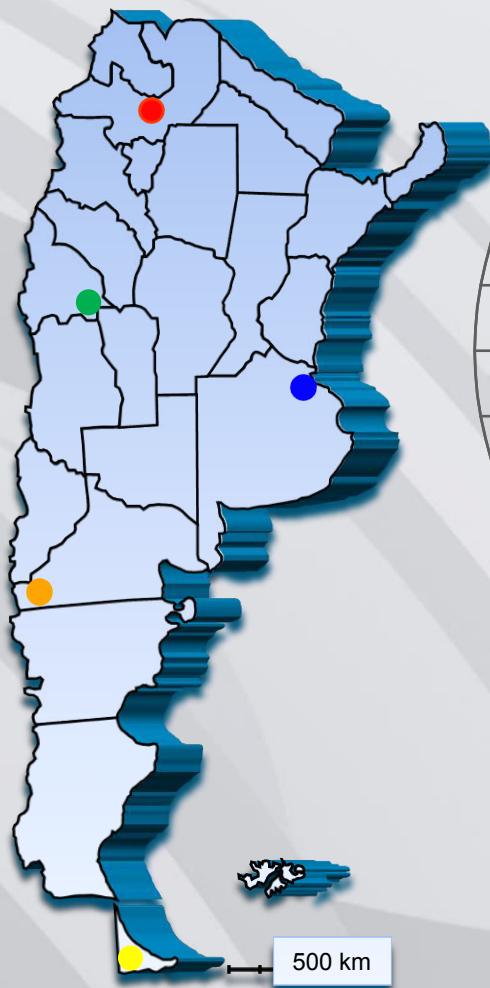
**Key role** in connection with monitoring stations under its responsibility:

- **Before** installation
- During the **construction**
- During **operation**

Active participation in CTBT education activities



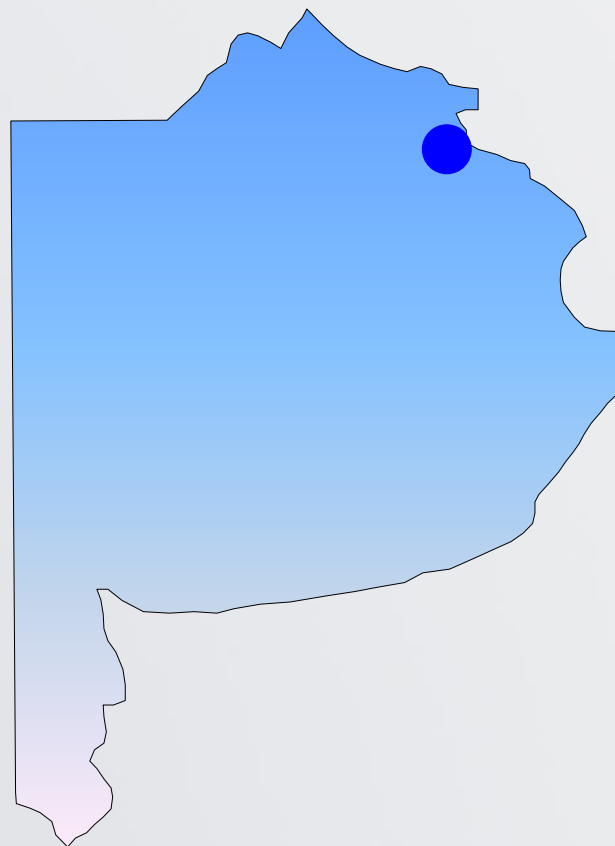
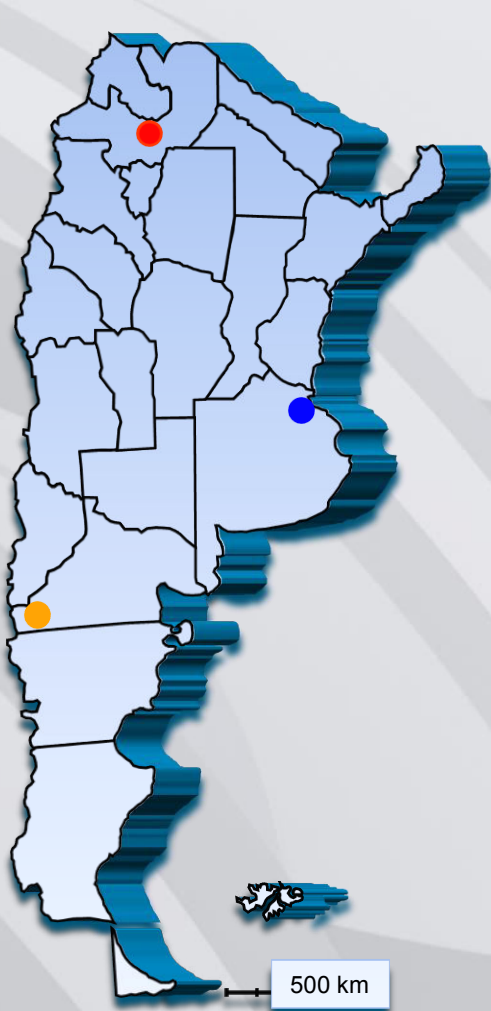
# FACILITIES FORESEEN IN ARGENTINA



- RL01 BUENOS AIRES
- RN01 BUENOS AIRES
- RN02 SALTA
- RN03, IS01 and PS01 **BARILOCHE**
- IS02 and AS02 USHUAIA
- AS01 SAN JUAN



# RN FACILITIES OF THE CTBT IMS IN ARGENTINA



- RN01 Buenos Aires
- RL01 Buenos Aires



## RN01- Buenos Aires

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- 2001      The station was **designed and built by the ARN**.  
Equipped with **noble gas** monitoring technology (Russia's ARIX),  
it operates since March 2001.
- 2002      The station was **certified** by the PTS, becoming the  
tenth radionuclide station in the world and the **first one in  
America**.  
The main characteristic of this station is that it was built with a  
**redundancy criteria**. Almost all equipment is duplicated.
- Present    RN and NG equipment is **being updated** for standardization.  
This process includes the provision of a new NG system (France's  
SPALAX)



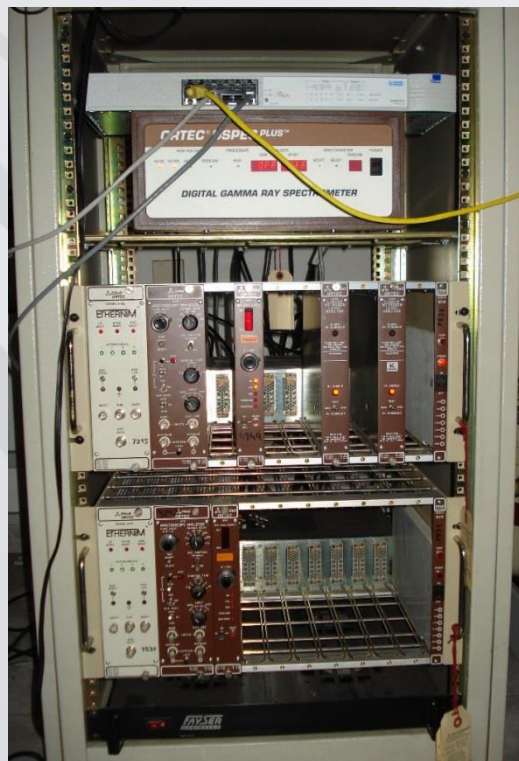
## *RN01 - Buenos Aires*



## *RN01 - Buenos Aires*



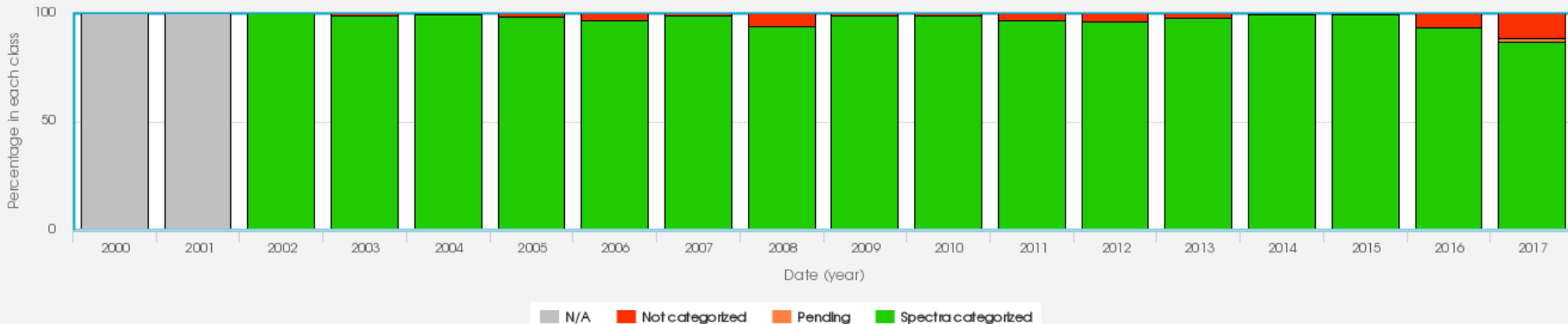
# RN01 - Buenos Aires



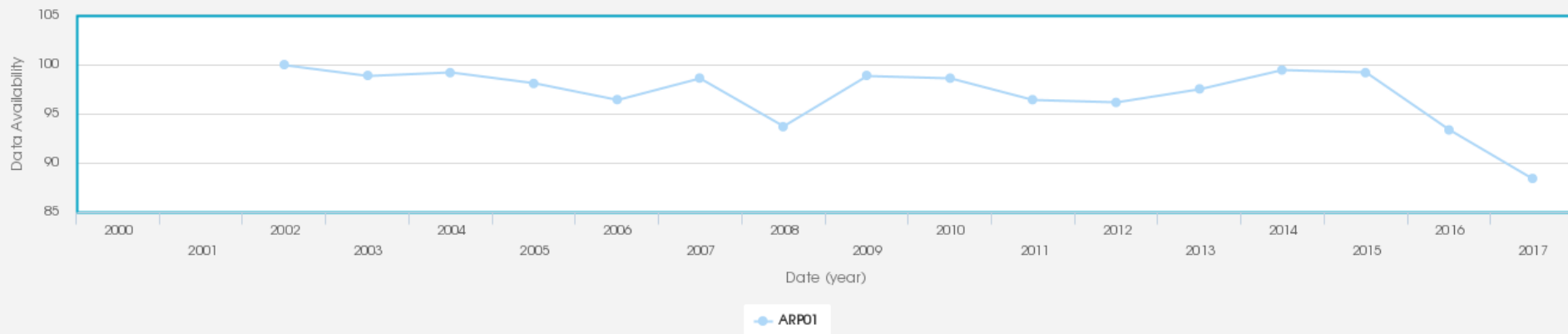
# RN01 - Buenos Aires

## Data availability

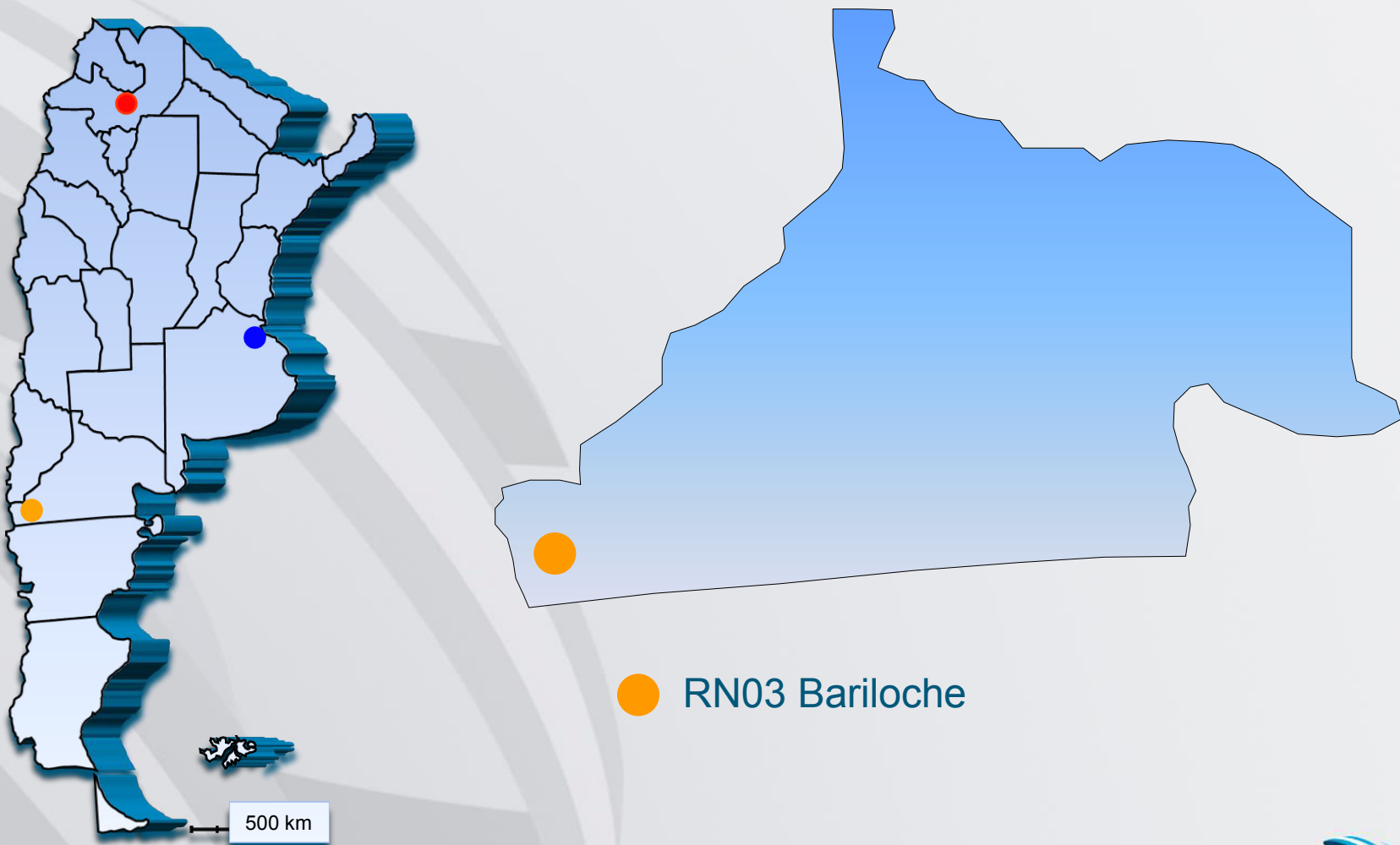
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# RN FACILITIES OF THE CTBT IMS IN ARGENTINA



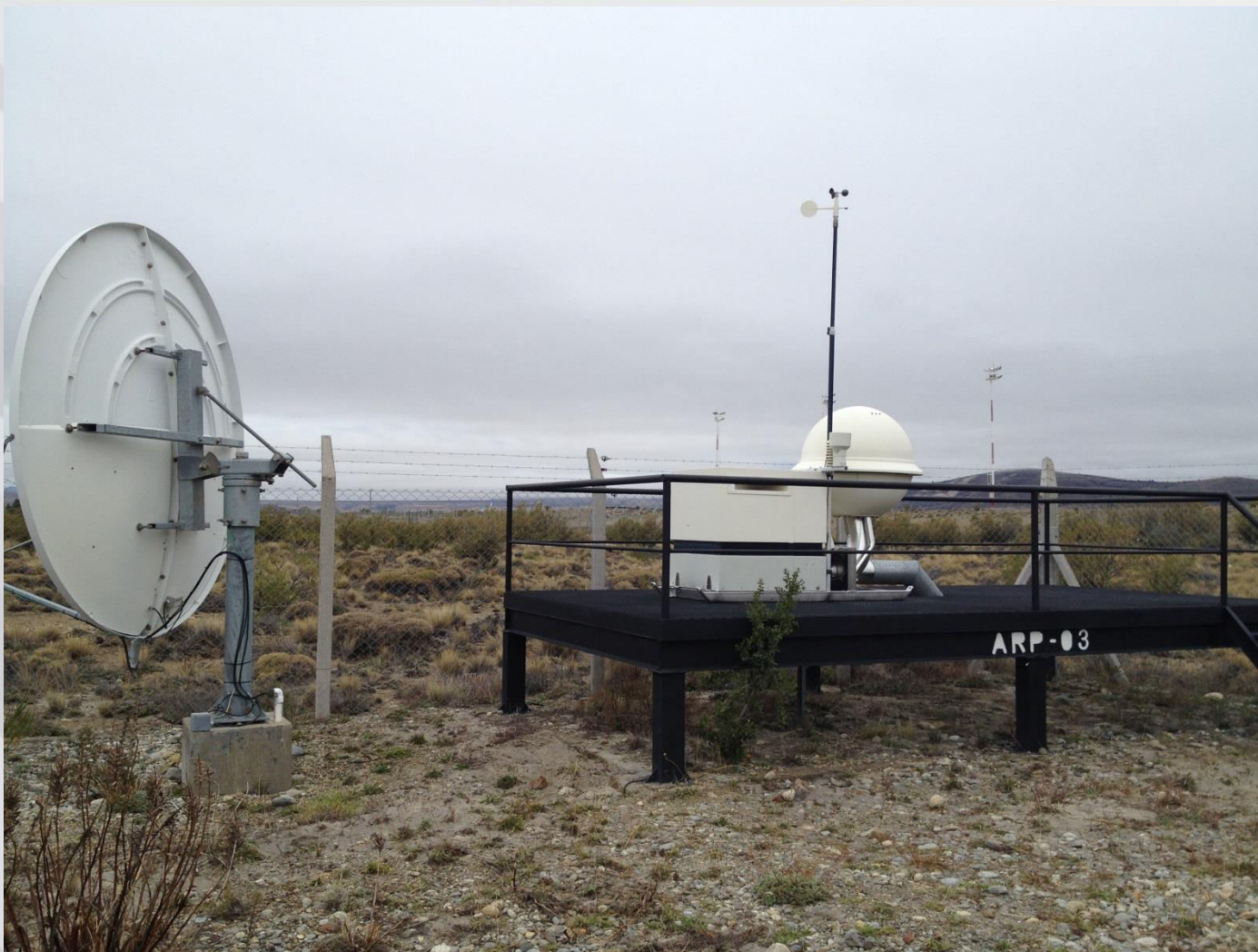
## RN03 - Bariloche

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- 1998 The ARN and the PTS jointly undertook the **Site Survey**. The site was identified. The PTS called for an international bid for its construction and installation which was won by an Argentine technological enterprise.
- 2003 The **work started** and the ARN supervised it.
- 2004 June: the station **started to operate**.  
December: the Station was **certified** by the PTS.
- 2008 May: Canberra **Cryo-Cycle I** replaced Cryo-Electric II. This new mixed cooling system was the first one on the IMS network.
- 2016 July: the PTS **upgraded** all the station with standardized equipment.



## RN03 - Bariloche



## RN03 - Bariloche



## RN03 - Bariloche



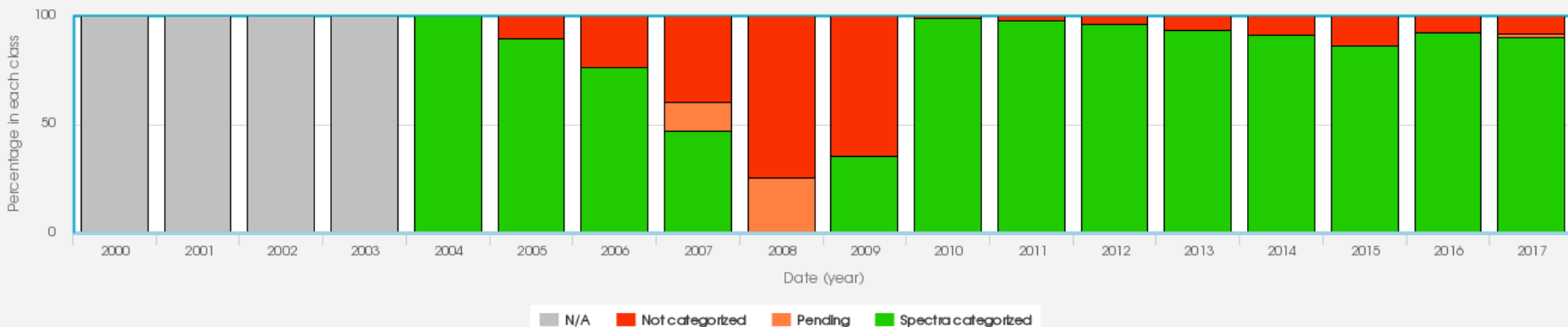
# RN03 - Bariloche



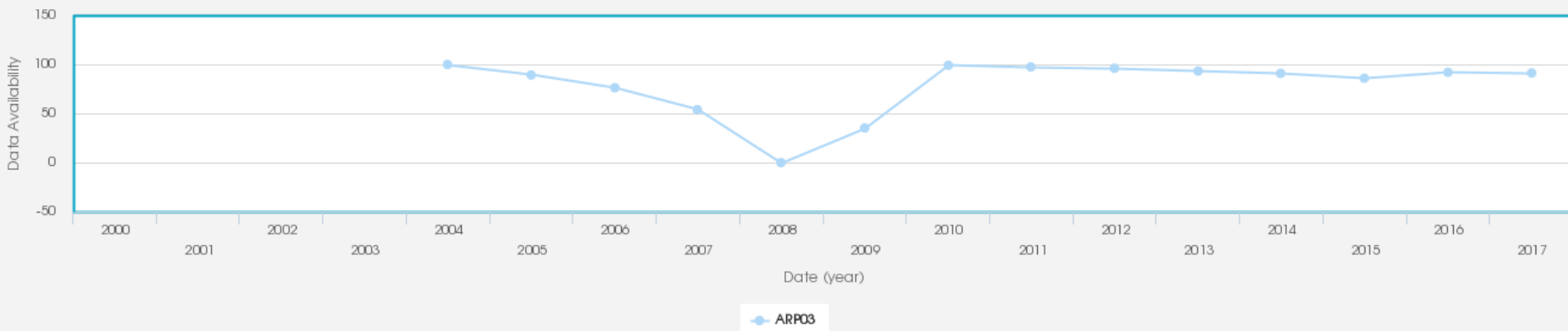
# RN03 - Bariloche

## Data availability

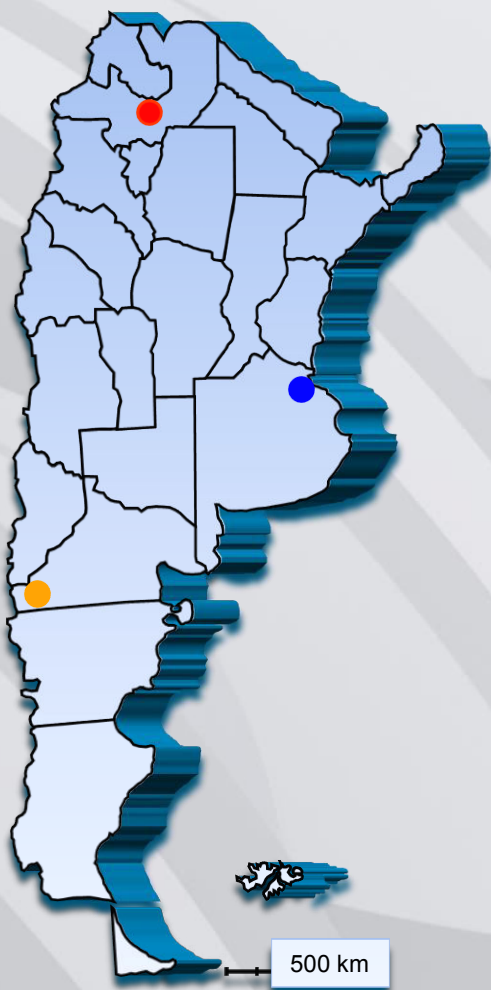
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# RN FACILITIES OF THE CTBT IMS IN ARGENTINA



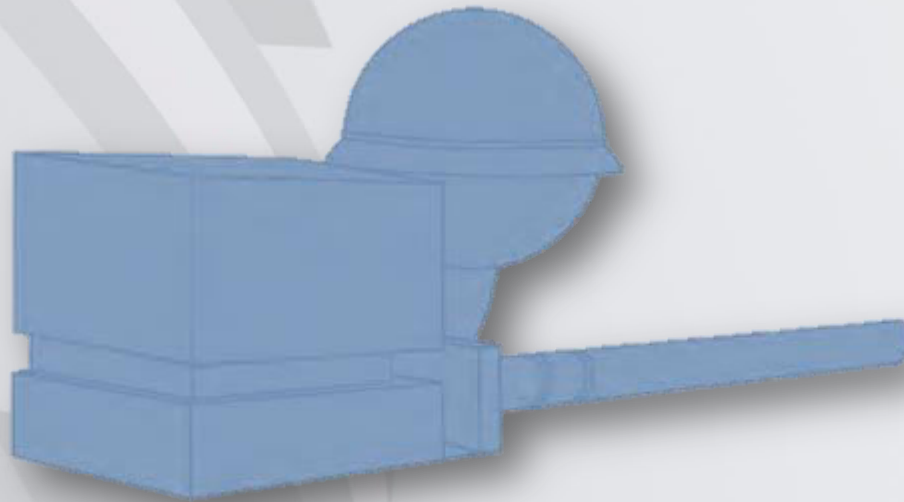
● RN02 Salta



2017 **New proposed land** at Salta's International Airport (SLA)

A **cooperation agreement** to grant the land and start to build the station is being negotiated.

We expect that the **equipment** to be provided by the PTS for this station will be standard.



## Turning words into action

- Importance of working towards the **completion of the IMS**;
- Importance of the Parties' **commitment** to the Treaty by playing its part;
- Need to **bring attention** of civil society, governments, experts and **EVERYONE** to the importance of this Treaty as regards nuclear non-proliferation and disarmament.



**To put the CTBT in place is the first step on the way to a nuclear-weapon-free world**



# Thank you!

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