

**Ingeniería 2014** Latinoamérica y Caribe Congreso - Exposición

Construyendo un Futuro Regional Sostenible

4 al 6 de Noviembre de 2014 - Centro Costa Salguero - Buenos Aires - Argentina

Comissão Nacional de Energia Nuclear - CNEN

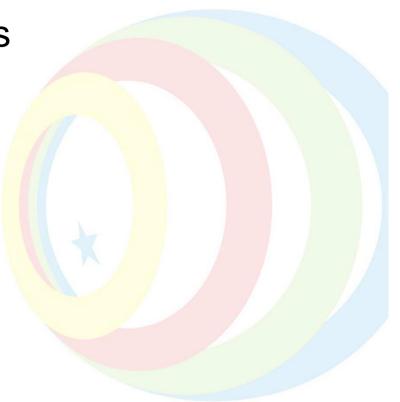
Argentina-Brazil Nuclear Cooperation

> Isaac José Obadia R&D Director



# Topics

- COBEN Main Facts and Actions
- RA-10 / RMB Cooperation
- COBEN On Going Projects
- Learning Comments
- Other Cooperation in Place







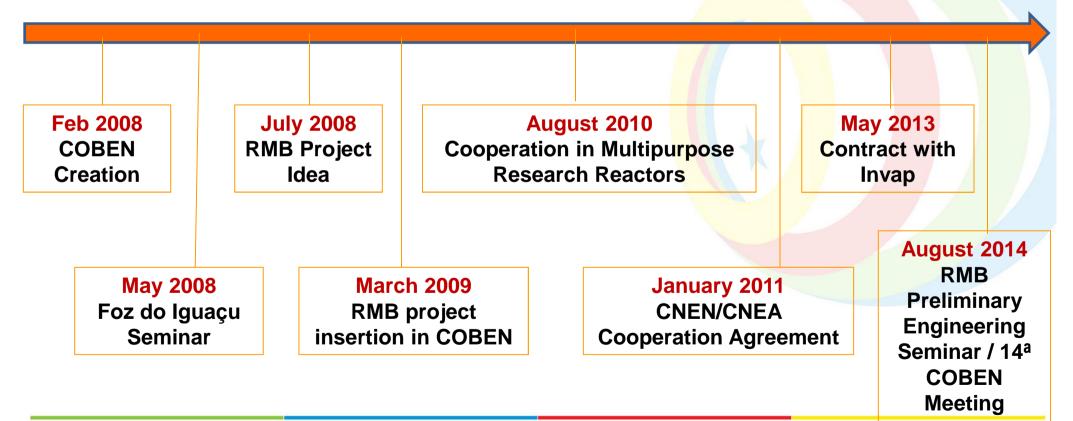




# COBEN

Argentinean-Brazilian Bi-National Commission on Nuclear Energy

**Main Facts and Actions** 







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## **COBEN Main Facts and Actions**

#### 1. COBEN Creation – February 22, 2008

 Joint Declaration of the Argentinean (Cristina Kirchner) and Brazilian (Lula) Presidents. Buenos Aires, February 22, 2008.

### 2. Foz do Iguaçu Seminar – May 26 to 28, 2008

- Approximately 60 representatives from each country
- 74 proposals in four groups: (GI)Applications and Education (30), (G2) Nuclear Regulation (14), (G3) Reactors and Radioactive Waste (8), and (G4) Nuclear Fuel Cycle (12).
- From these, 27 became a COBEN Project







## **Cooperation on Research Reactors (RA-10 / RMB)**

#### 4. RMB Insertion within COBEN

- RMB Project start up on September 2008.
- Definition of OPAL (INVAP design) as the RMB reference reactor
- March 2009: COBEN (G3) meeting on research reactors at CNEA: discussion about RMB (Brazil) and RA-10 (Argentina) Projects.
- RMB and RA-10 Cooperation incorporated to COBEN

#### 5. Cooperation on Multipurpose Research Reactors

- Joint Declaration (Kirchner / Lula) San Juan, August 03, 2010
- "emblematic projects of the bilateral strategic relationship and of high visibility, such as the joint development of a multipurpose research reactor".



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## **Cooperation on Research Reactors (RA-10 / RMB)**

- 6. Draft of the CNEN-CNEA Cooperation Agreement on RMB and RA-10 Preliminary Engineering Design
- COBEN/Group III Meeting in Bariloche, August 2010, about RMB and RA-10 Reactors Similitudes

- 7. Signature of the CNEN-CNEA Cooperation Agreement on the project of a New Multipurpose Reactor, in January 31, 2011.
- Joint Declaration (Kirchner / Dilma) Buenos Aires, January 31, 2011.



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## **Cooperation on Research Reactors (RA-10 / RMB)**

#### 8. Contract with Invap – May 06, 2013

- Preliminary Engineering Design of RMB nuclear items and systems. To be concluded by November 2014
- 9. CNEN/INVAP Seminar on the RMB Preliminary Engineering – August 12, 2014, at CNEN, Rio de Janeiro

#### **10.** Perspective

RMB Reactor Detailed Engineering Design by INVAP









# Remarks on RA-10 / RMB Cooperation

"RMB Project Development within COBEN has provided a High Technical Quality to its Nuclear Systems Preliminary Engineering Design"

"Cooperation on RA-10 and RMB Projects within COBEN is symbolic and pioneer in terms of cooperation between Argentina and Brazil in the nuclear field"









## COBEN Status as per 14<sup>th</sup> Meeting (Aug 2014)

COBEN GROUP	Projects Going On	New Proposals	Projects Concluded	Projects Stopped	Main Counter- parts
Group I Applications and Education	2	2	-	-	CNEA / CNEN
Group II Nuclear Regulation	6	-	1	-	ARN / CNEN
Group III Reactors and Radioactive Waste	1	2	1	5	CNEA / CNEN
Group IV Nuclear Fuel Cycle	5	1	-	6	CONUAR / INB

# **Learning Comments**

- Many proposals were not at the point to be formulated as a COBEN project
- 2. Argentina and Brazil did not establish specific financing resources nor a funding mechanism for the COBEN projects
- Projects which effectively contribute to the solution of real problems of both countries are more likely to be approved and be funded through the countries funding mechanisms (Ex: RA-10 and RMB)









# **Other Cooperation in Place**

- CNEA Supply of the Radioisotope Molibdenum-99 (Mo-99) to Brazil (CNEN)
  - A 5 year contract (2010-2015) now being extended for 5 years more (2015 2020)
- 2. ABACC Argentinean-Brazilian Agency for Control and Accountability of Nuclear Material
  - Safeguards of both countries nuclear material according to a quadripartite agreement: Argentina, Brazil, ABACC, IAEA
- 3. NASA-Eletronuclear cooperation on the interchange of technical people during NPP maintenance stops.







# Thank You

# isaac@cnen.gov.br





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