



R3 INPP – Conceptual Design and EIAR Development of D&D Unit 1&2 Reactor R3 and RWS storage Lithuania

S.Korolyov, M.Oliver, S Nothvogel,

18 October 2018





Framatome at a glance

For 60 years, Framatome's teams have been involved in developing safe and competitive nuclear power worldwide by:

- designing nuclear power plants,
- supplying nuclear steam supply systems,
- designing and manufacturing components and fuel assemblies,
- integrating automation systems,
- and servicing all types of nuclear reactors.

- **Original Equipment Manufacturer of 92 nuclear power plants**
- **14,000 employees serving more than 250 reactors worldwide and**
- **generating a turnover of €3.3 billion in 2017**

Framatome today



75,5%

framatome



5%



- Stock-listed company
- Majority shareholder: French state

100%

Framatome Inc.

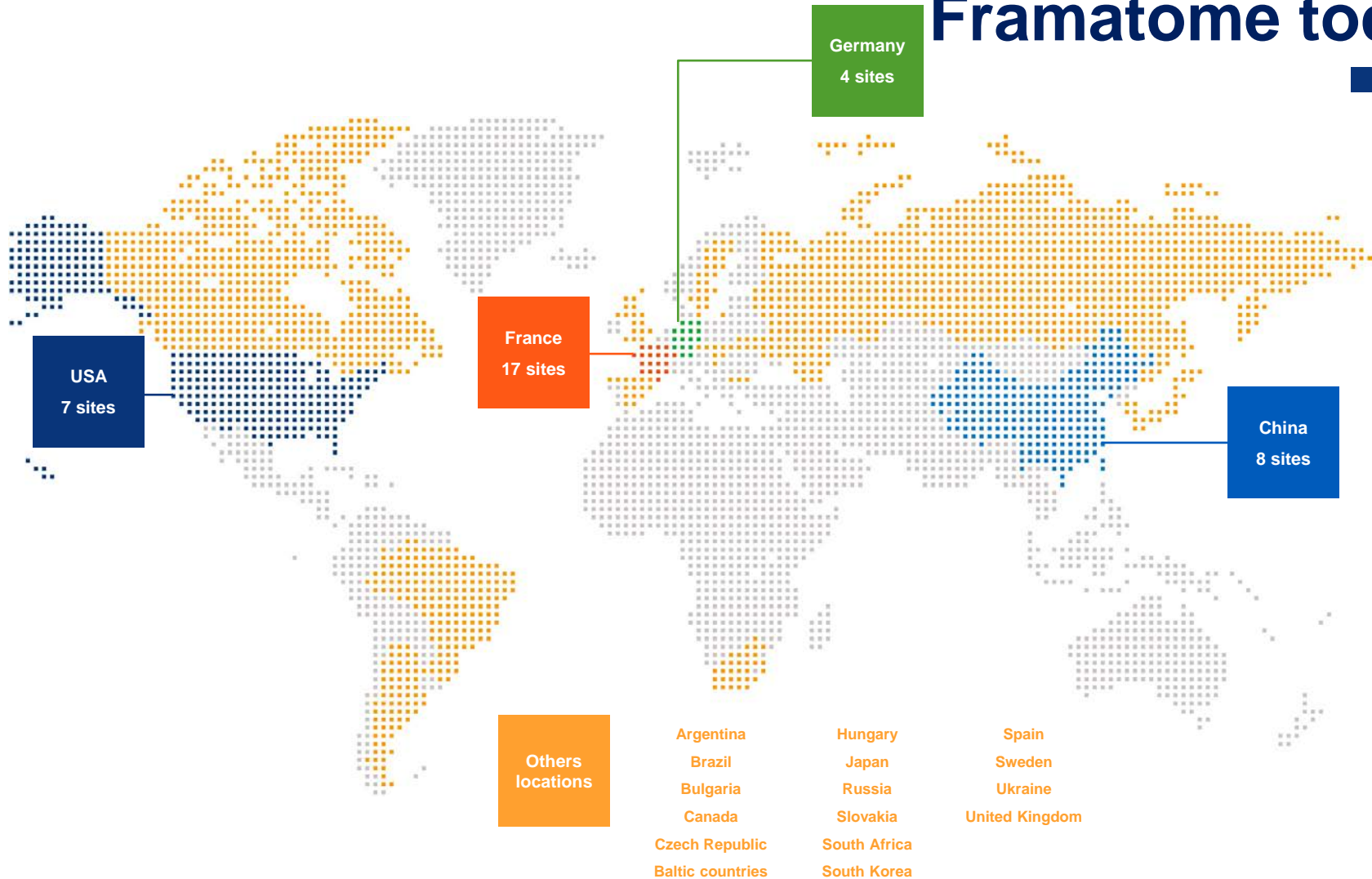
Framatome GmbH

Other subsidiaries

Framatome Inc.
subsidiaries

Framatome GmbH
subsidiaries

Framatome today



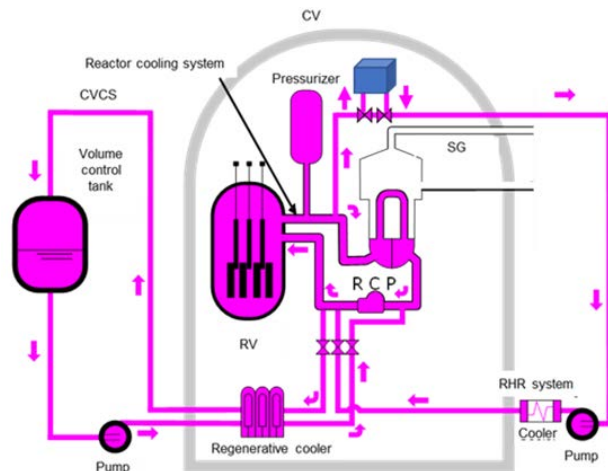
■ **14 000 employees working on more than 250 reactors worldwide at 58 locations in 18 countries**

Full System Decontamination

Full System Decontamination (FSD) is reducing doses, saving time, and enhancing recyclability of wastes

FSD is an in-situ chemical decontamination enabling:

- Dose reduction,
- Flexibility in D&D planning
- Simpler D&D equipment,
- Reducing waste casks count
- Faster scheduling of D&D activities

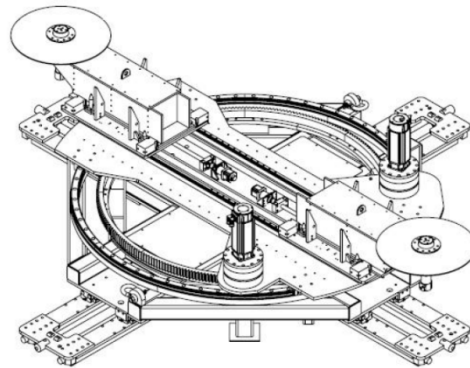


framatome

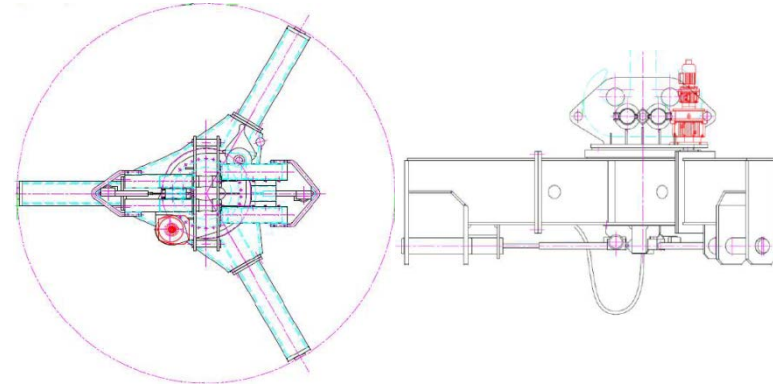
Reactor	Country	Technology	Year
BR3	Belgium	PWR/WH	1991
VAK Kahl	Germany	BWR/GE-AEG	1993
MZFR	Germany	PHWR/AREVA	1995
Wurgassen	Germany	BWR/GE-AEG	1998
Connecticut Yankee	USA	PWR/WH	1998
Stade	Germany	PWR/AREVA	2004
Obrigheim	Germany	PWR/AREVA	2007
Barseback 1&2	Sweden	BWR/ABB	2008
Unterweser	Germany	PWR/AREVA	2012
Neckarwestheim 1	Germany	PWR/AREVA	2013
Isar 1	Germany	BWR/AREVA	2015
Grafenrheinfeld	Germany	PWR/AREVA	2016
Kruemmel	Germany	BWR/AREVA	2016
Mihama 1&2	Japan	PWR/MHI	2017

Reactor	Country	Technology	Year
FR2	Germany	PWR/AREVA	1986
Gundremmingen A	Germany	BWR/GE	1989
Rheinsberg	Germany	VVER	1994
Lingen	Germany	BWR/GE	2001
Caorso	Italy	BWR/GE	2004
Trino	Italy	PWR/WH	2004
Chooz A	France	PWR/WH	2012

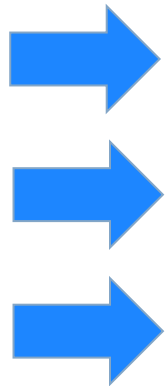
Framatome Tooling



Platform for horizontal cut



Lifting device for RPV rings



Tooling easily adaptable to different tasks

Remote controlling allowing to reduce the dose for the personal

Stability optimized to reduce vibration by cutting and avoid time lost

40 years of experience

7 reactor types

15 countries

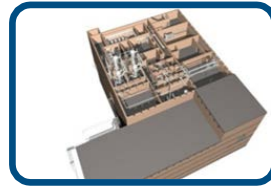
7 complete waste treatment buildings

102 solid waste treatment references

64 waste water treatment references

42 evaporator units

Waste Treatment Portfolio



Chemical Services

Waste treatment & storage Buildings

Solid Waste Treatment



Hot & Cold Laboratories

Full scope waste treatment

Liquid Waste Treatment



Radio-chemistry

Gaseous Waste Treatment



Legacy waste retrieval and cleaning






Any reproduction, alteration, transmission to any third party or publication in whole or in part of this document and/or its content is prohibited unless Framatome has provided its prior and written consent.

This document and any information it contains shall not be used for any other purpose than the one for which they were provided. Legal action may be taken against any infringer and/or any person breaching the aforementioned obligations.

