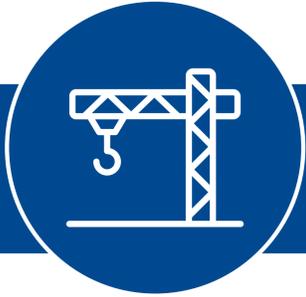
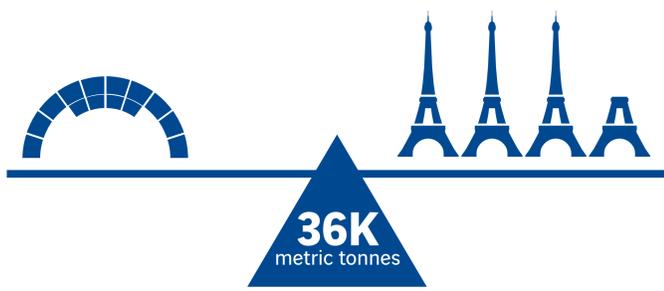
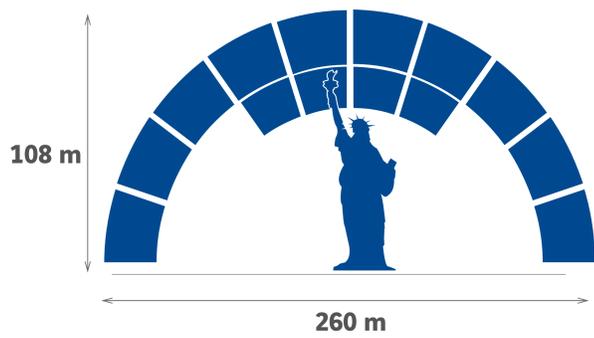


# CHERNOBYL'S NEW SAFE CONFINEMENT: UNPARALLELED WORLDWIDE



## WHAT IT IS

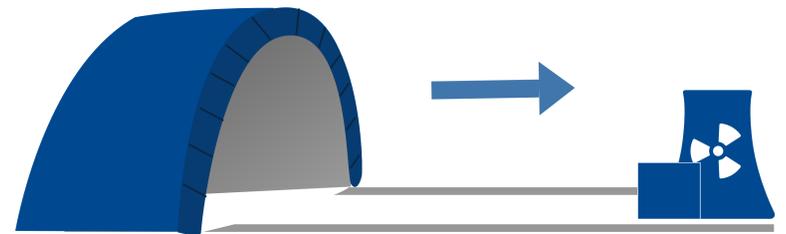


The world's largest mobile metal structure, to confine Chernobyl's reactor #4 for 100 years and then dismantle it.

An unprecedented scale: weighs 3.5 times as much as the Eiffel Tower, is big enough to house the Stade de France and the Statue of Liberty.



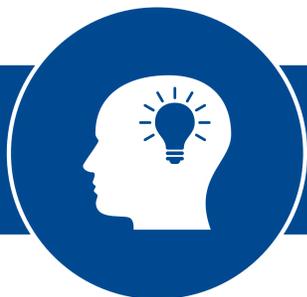
## HOW IT WORKS



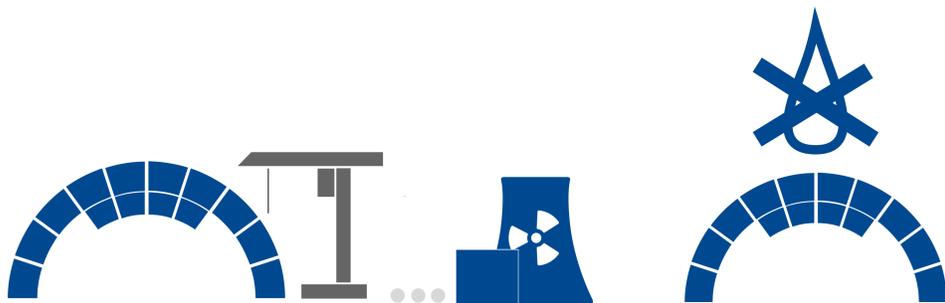
### CONSTRUCTION AT A SAFE DISTANCE

The arch was built to the west of the damaged reactor, on two concrete beams, and then slid into position over the existing shelter. This construction method was devised specifically to protect workers from radiation.

The technical solution will keep crews 100% safe when they dismantle the existing shelter and handle the radioactive material.



## WHAT'S NEW



### CONSTRUCTION AT A SAFE DISTANCE FROM THE REACTOR

### A 100% AIRTIGHT STRUCTURE

The idea – a mobile arch – dates back to the call for tenders, which began in 2004 and Novarka won in 2007. This solution was engineered in France and is pioneering on two scores:

- 💡 The construction method (on the ground, at a safe distance to avoid exposure to radiation)
- 💡 The design (the ventilation system, seals and other components will keep the arch 100% airtight for the next 100 years)



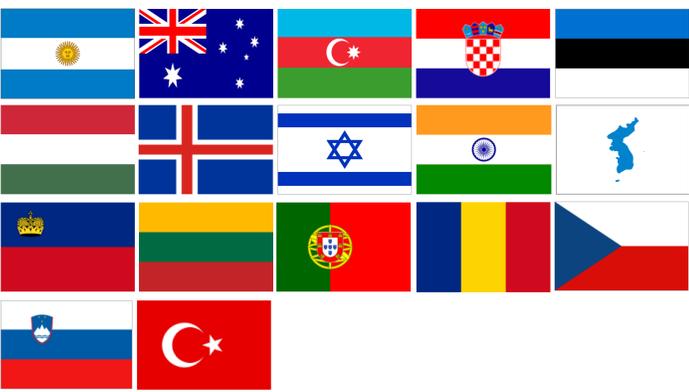
## WHO WORKED ON THE PROJECT

**FINANCING**



European Bank  
for Reconstruction and Development

and 17 donor countries



**CONSTRUCTION**



VINCI CONSTRUCTION



BOUYGUES CONSTRUCTION

**CUSTOMER**



SSE  
ChNPP

**COUNTRY**

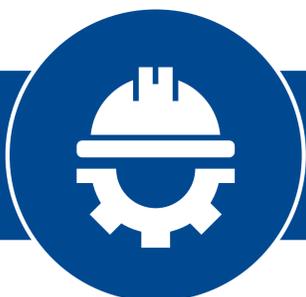


Ukraine



## HOW MUCH IT COST

**€1.5 billion**  
(construction work)



## WHY THE FRENCH SOLUTION WON

The solution from the French team – VINCI Construction and Bouygues Construction – made the most technical and financial sense.



THE SMARTEST SOLUTION FROM  
TECHNICAL AND FINANCIAL STANDPOINTS





## WHAT'S NEXT



2017 - ADD THE  
AIRTIGHT SEALS



2017 - TEST THE  
EQUIPMENT



NOVEMBRE 2017 - HAND  
OVER TO THE CUSTOMER

### What's left to do

Work in 2017 will involve adding the airtight seals between the arch and the shelter, and testing the equipment that will be used to dismantle the reactor. Final delivery is scheduled for November 2017.

### Who will handle the dismantling

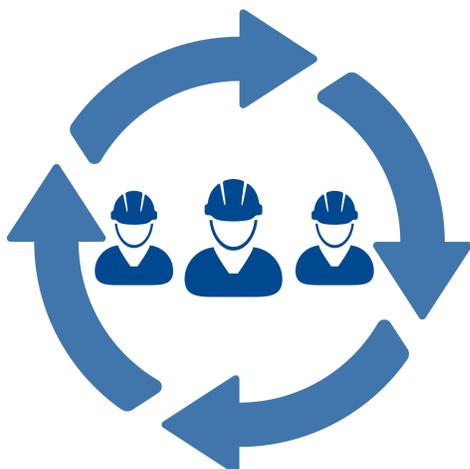
NOVARKA's contract ends with the arch's delivery. ChNPP will dismantle the reactor and shelter.



## HOW MANY PEOPLE WORKED ON THE PROJECT ?

# 1,200 WORKERS

at the worksite on an average day



10 000 people since the  
beginning of the project



# 200

engineers



# c. 20

subcontractors



# c. 30

nationalities



## 100% SAFE GUARANTEED EVEN DURING CONSTRUCTION ?



**60 people**  
working full-time on  
radiation protection



**0 radiological**  
accident since 2009

The confinement arch is packed with world-class expertise to streamline dismantling work and keep crews safe.

Staff safety was central to the project: 60 people worked full-time to keep construction crews safe from radiation, and no radiological accident has occurred since work began in 2009.



## VINCI CONSTRUCTION/BOUYGUES CONSTRUCTION: A NEWFANGLED ALLIANCE?

Saint Denis



THE NEW COASTAL HIGHWAY ON **REUNION ISLAND**, A CIVIL ENGINEERING CHALLENGE  
IN A CLASS BY ITSELF

These two leading French companies have joined forces on one-of-a-kind projects before.

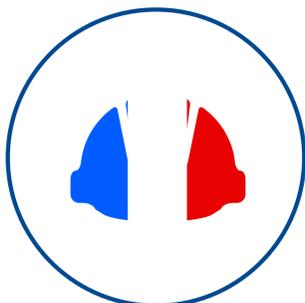


**CAIRO METRO** 30+ YEARS BUILDING AND  
EXPANDING THE NETWORK TOGETHER



## AN INTERNATIONAL AND LOCAL PROJECT

People from almost 30 countries at the worksite



FRANCE



UKRAINE



INTERNATIONAL

### MEDIA CONTACTS



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