



Montage projet Européen,

Bruno Godart



Ministère
de l'Écologie,
du Développement
durable
et de l'Énergie

01/10/2015



Towards an integrated approach of concrete structures durability design and monitoring

The service life duration of concrete structures is an important parameter of the sustainability of these structures. The lack of durability for reinforced concrete buildings and current structures involves high repair and maintenance costs and reduces the service life. **The crack control provisions are presently inappropriate** for large structures. As a consequence, there is a critical demand for consistent rationally-based provisions both for new structures and for old ones that need to be rejuvenated.

Moreover, for a growing number of large concrete industrial facilities, there is a **combined demand for durability and tightness**. Adequate provisions are desirable for optimized steel and concrete consumption and rationally-based safety assessment.

- ▶ **Couplage fissuration – durabilité**
 - Relié aux évolutions de la réglementation
 - Bcp d'équipes possibles en Europe et en France (trop?)
- ▶ **Couplage fissuration – confinement**
 - Sujet plutôt spécifique nucléaire (peut-être aussi réservoirs)
 - ANR MACENA (en partie)
 - Sujet plus original >> moins d'équipesTitre 1

Cadre H2020

- Réunion préparatoire le 15/09/2015

► Organisation d'un workshop IFSTTAR 15/09/2015

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EGIS (France) P. Bisch

3SR (France) J. Mazars

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TC 250 SC2 (Europe) H. Ganz

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U. Patras (Greece) M. Fardis

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U. Cardiff (United Kingdom) T. Jefferson

U. Bochum (Germany) G. Meschke



Maquette et Benchmark VerCors



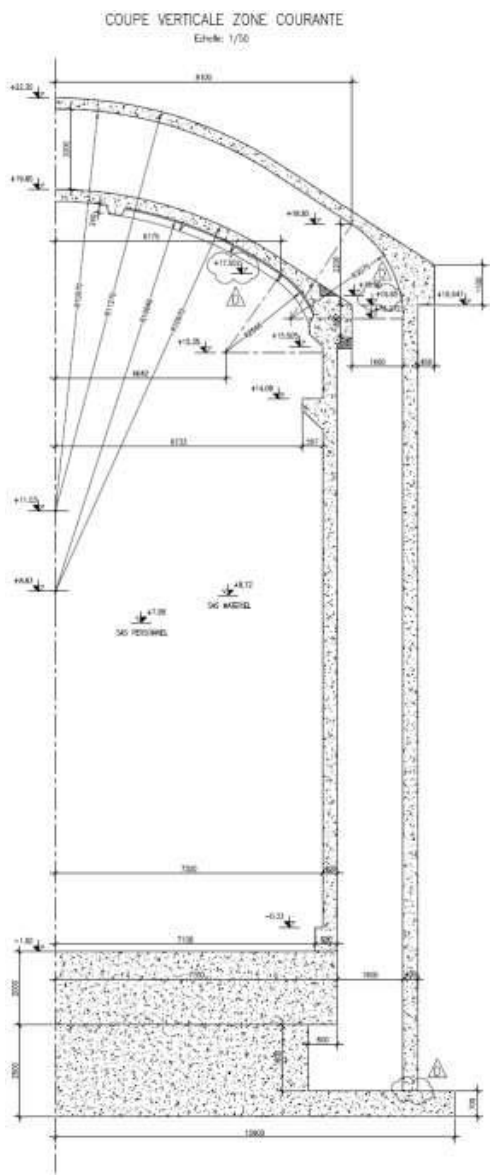
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Nappe intrados

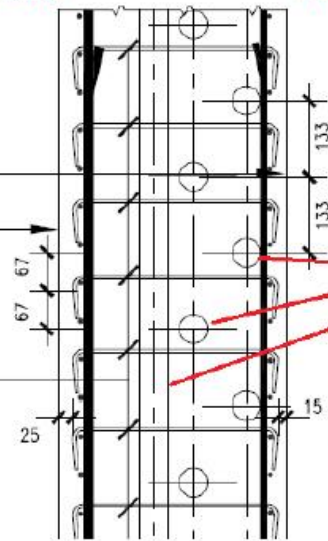
Nappe Extrados

R=7700

R=7300

R=7147

Epingles HA5
maille courante



Tubes

18/04/2014





Chantier maquette VerCORS
Avancement semaine 14



► Lancement d'un benchmark international

<http://fr.amiando.com/EDF-vercors-project.html>



VeRCoRs Project	VeRCoRs NEWS	Benchmark VeRCoRs 2015	Pre-Registration	Restricted Access
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Preliminary stage

Note that the restitution for the preliminary stage is due for the **30th of April**.

Benchmark 2015 - Description

*Benchmark and workshop
VeRCoRs*

Prestressed concrete at early age and aging

EDF proposes in 2015 a first benchmark dedicated to early-age, mechanical and leaktightness behaviors.

For this first benchmark, the **themes** are:

- Theme 1 : early age
- Theme 2 : containment history
- Theme 3 : leakage

All the details are in the [document](#) below. Any question at contact.vercors@sfen.org

The teams have the choice to contribute to all or part of the benchmark.

The **key dates** are:

Contributions: Key dates

January - August 2015 > **Benchmark Period**

April 30, 2015 > **Preliminary Report**

August 31, 2015 > **Final Report**

January 31, 2016 > **Complementary work before Workshop**

February 2016 > **Workshop**

Benchmark Pre-Registration

[Click here](#)

