



FRANCE

ACTIVITY REPORT 2015





PRESENTATION

**ASSOCIATION FRANÇAISE DES TUNNELS
ET DE L'ESPACE SOUTERRAIN**

**FRENCH TUNNELLING
AND UNDERGROUND SPACE ASSOCIATION**

Association registered under the 1901 Act

804 members (collective 132- individual 672)



2015 - FUNCTIONING

COMMUNICATION COMMITTEE

Bimonthly technical magazine, technical recommendations, website

EDUCATION COMMITTEE

Post-graduate specialised Master' degree

TECHNICAL COMMITTEE

24 active working groups - 320 active members

UNDERGROUND SPACE COMMITTEE

National Research Project Ville10D - Base documentary

CONGRESS ORGANISATION COMMITTEE

LYON October 13-15th, 2014 - PARIS November 13-15th, 2017

PLANT-EQUIPEMENT-PRODUCTS COMMITTEE

Know-how abroad - WTC 2015 in Dubrovnik

REGIONAL DELEGATES

Conferences and visites : 16 conferences - 1470 present subscribers



2015 - ACTIVITIES

Work groups :

GT3 : Use of explosives

GT4 : Mechanized tunneling

GT6 : Rock bolting technology

GT6A : Concrete projection

GT8 : Grouting works for soils and rocks

GT9 : Waterproofing

GT12 : Rescue service organization and associated means

GT14 : Method to assist in asset management for underground structures

GT16 : Consideration of excavating effects on the neighboring constructions

GT24 : Forward probing for tunnel boring machines

GT25 : Economic control and contractualization

GT26 : Environment of the construction site in rural areas

GT27 : Ventilation of underground works during construction



2015 - ACTIVITIES

Work groups :

GT30 : Bolting design

GT32 : Geological and geotechnical uncertainties and risks

GT35 : Management and re-use of excavation materials

GT36 : Geometry, concrete, formwork and concreting of tunnel linings

GT37 : Fire resistance of railway tunnels

GT38 : Design, dimensioning and execution of precast steel fibre reinforced concrete arch

GT40 : Rail tracks and track beds in tunnels

GT41 : Underground works and sustainable development

GT42 : Consideration of the radon in the conception

GT43 : Application of the new geotechnical engineering standard to the underground

GT44 : Asbestos bearing rocks



2015 - ACTIVITIES

Training :

- Post-graduate specialised Master' degree

TUNNELS AND UNDERGROUND STRUCTURES from design to operation

90 professional speakers and professors

One semester of coursework (October to February) - One semester of internship (March to July)

- . 4th Promotion 2014-2015 : 11 graduates of 6 nations
- . 5th Promotion 2015-2016 : 9 students of 4 nations
- . 6th Promotion 2016-2017 : <https://www.insa-lyon.fr/fr/mastere-ouvrages-souterrains#0>

- Short intermediate training courses in the Master's degree



2015 - ACTIVITIES

POST-GRADUATE SPECIALISED MASTER' DEGREE



THEORETICAL AND PRACTICAL TRAINING IN GEOLOGY



2015 - ACTIVITIES

Publications :

- **Bimonthly technical magazine : 'Tunnels et Espace Souterrain' T.E.S.**

N° 247-248-249-250-251-252

(More than 30 technical articles - 70 pages by TES)

http://www.aftes.asso.fr/publications_revue-tunnels.html

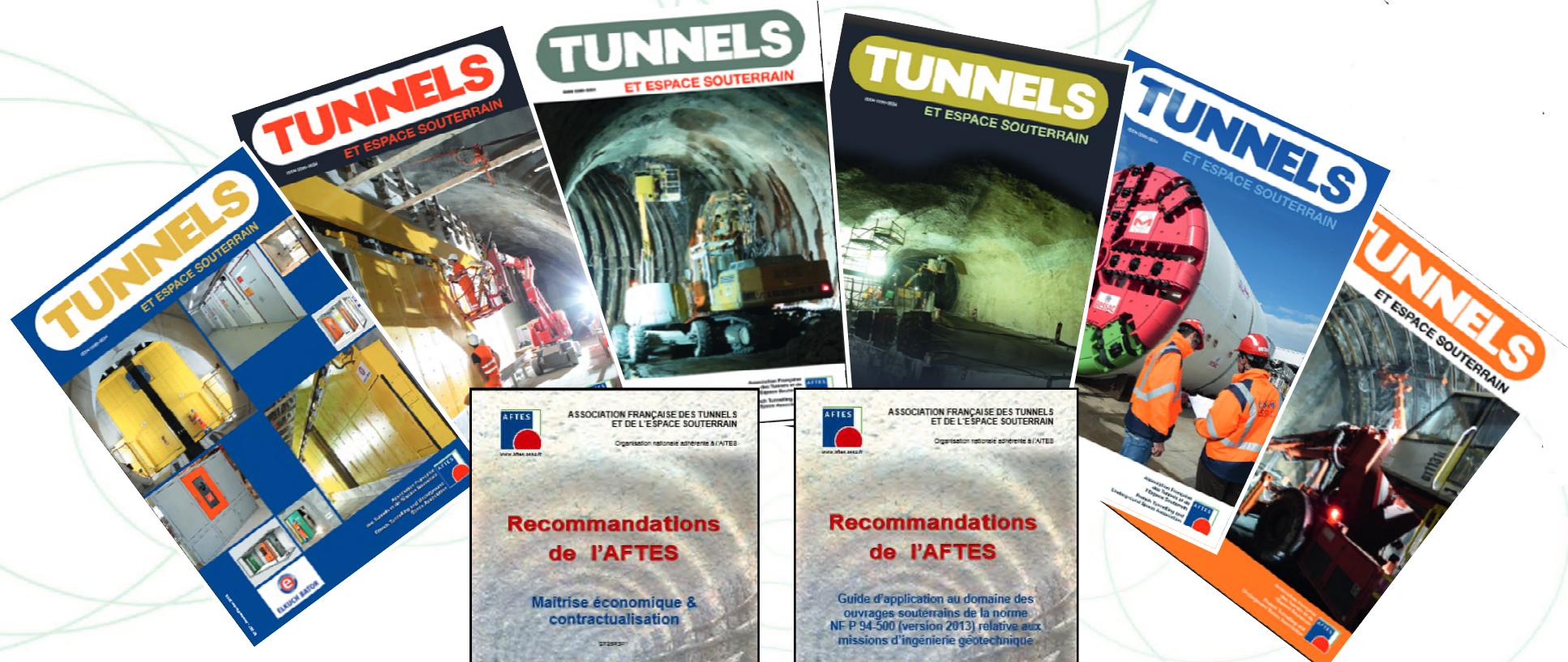
- **Technical recommendations**

GT 25 : Economic control and contractualization

GT 43 : Application of the new geotechnical engineering standard to the underground structures



2015 - ACTIVITIES

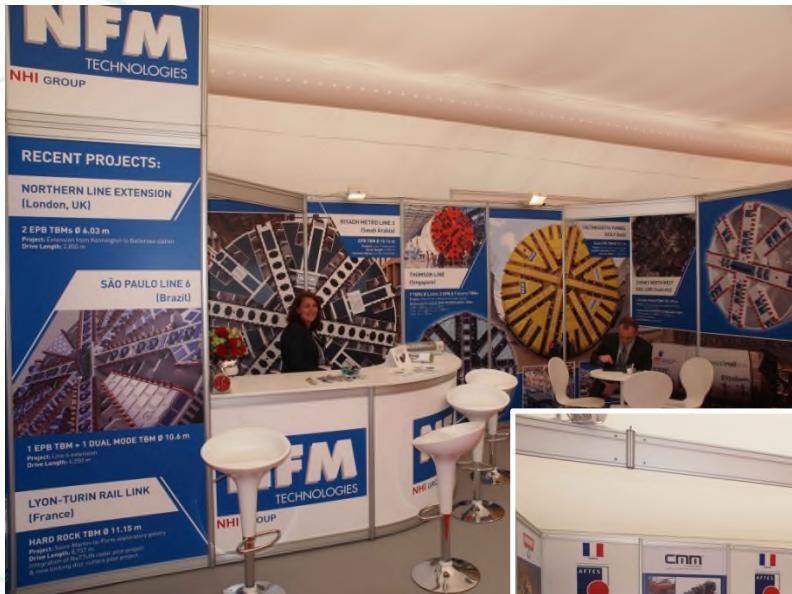


6 'Tunnels et Espace Souterrain' T.E.S. - 2 'Recommendations'



2015 - ACTIVITIES

AFTES IN DUBROVNIK WTC2015





TUNNELS - UNDERGROUND WORKS



GRAND PARIS EXPRESS



On the horizon 2030:

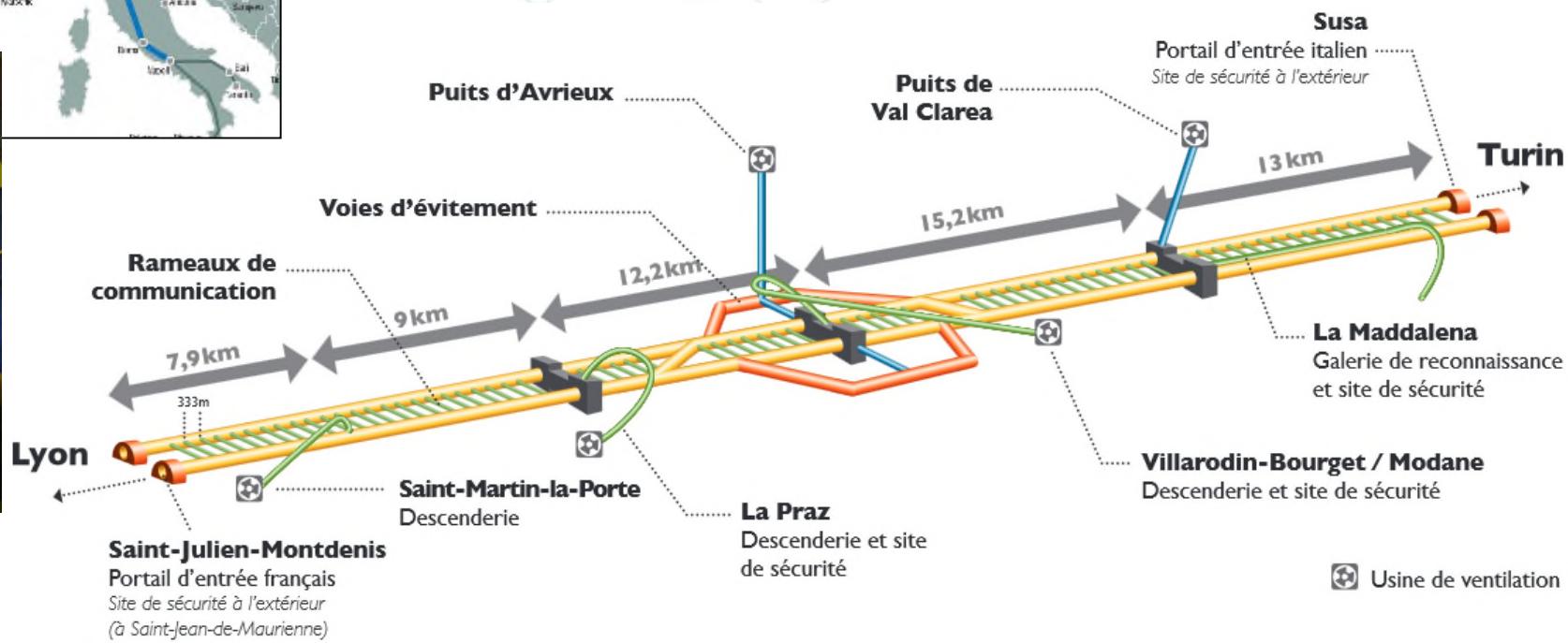
- 200 km of automatic metro will be created
- 68 new stations will connect the poles of Paris, 3 airports and TGV stations
- 2 million travelers will borrow every day this new network



TUNNELS - UNDERGROUND WORKS



TELT (Tunnel Euralpin Lyon Turin) [2 x 57 km]



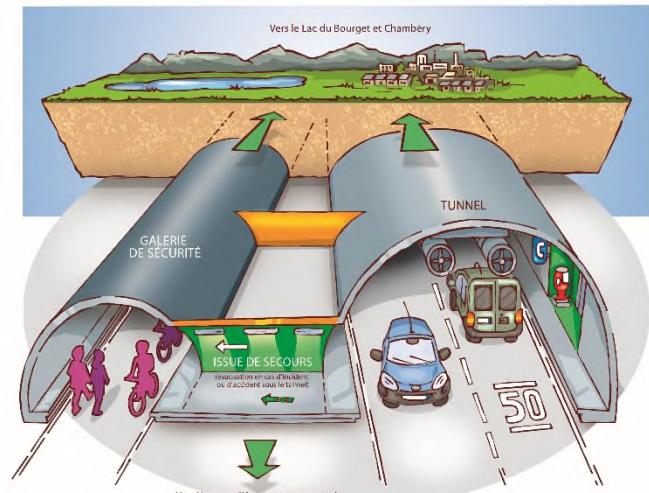
TUNNELS - OTHER UNDERGROUND WORKS

SAFETY GALLERIES IN THE "SAVOIE" REGION

Fréjus tunnel
12 km

Siaix Tunnel
1,5 km

Le Chat Tunnel
1 km

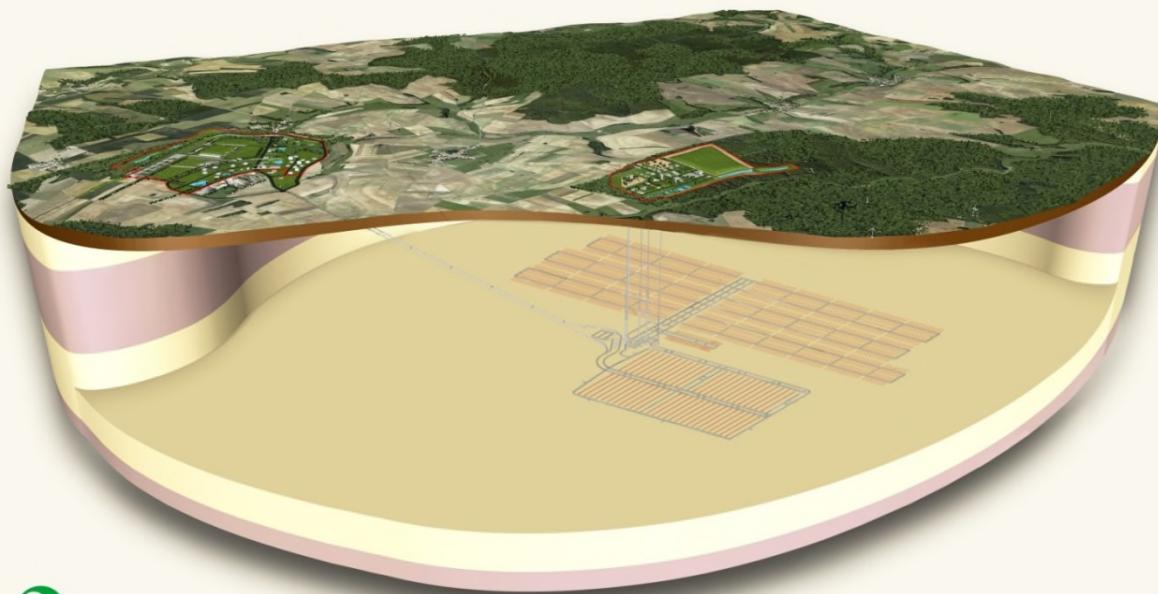




TUNNELS – UNDERGROUND WORKS PROJECTS

CIGEO/ANDRA PROJECT, BURE, FRANCE INDUSTRIAL AREA FOR GEOLOGICAL STORAGE OF NUCLEAR WASTE

2 above-ground installations
Underground installations at 500 m of depth





SOME FUTURE ACTIVITIES <http://www.aftes.asso.fr/evenements.html>

- Forecast of conferences and construction site visits in 2016

Dates	Lieux	Organisateurs	Thèmes
14 janvier 2016	Paris	CNAM	CFGI - AFTES
2 février 2016	Paris	Fntp	AFTES Comes
10 mars 2016	Paris	Chantier	AFTES IdF
17 mars	Paris	CNAM	CFMR - AFTES
8 avril 2016	Lyon	Cetu	AFTES Sud Est
20 avril 2016	Schwanau	Herrenknecht	AFTES IdF
23 au 28 avril 2016	San Francisco	WTC 2016	AITES
mai 2016	Modane	TELT Chantier	AFTES Sud est
14 juin 2016	Paris	Fntp	AFTES Mardis
novembre 2016	Nice	Tram Chantier	AFTES Sud Est
4 octobre 2016	Paris	Fntp	AFTES Mardis
14 octobre 2016	Lyon	Mercure	AFTES Sud Est
3 novembre	Paris	CNAM	CFGI - AFTES
24 novembre	Paris	Fntp	AFTES Mardis
décembre 2016	Moutiers	Chantier	AFTES Sud Est
décembre 2016	Paris	Fntp	AFTES

- Participation at numerous congresses of the member nations
- Publication of recommendations and technical magazines



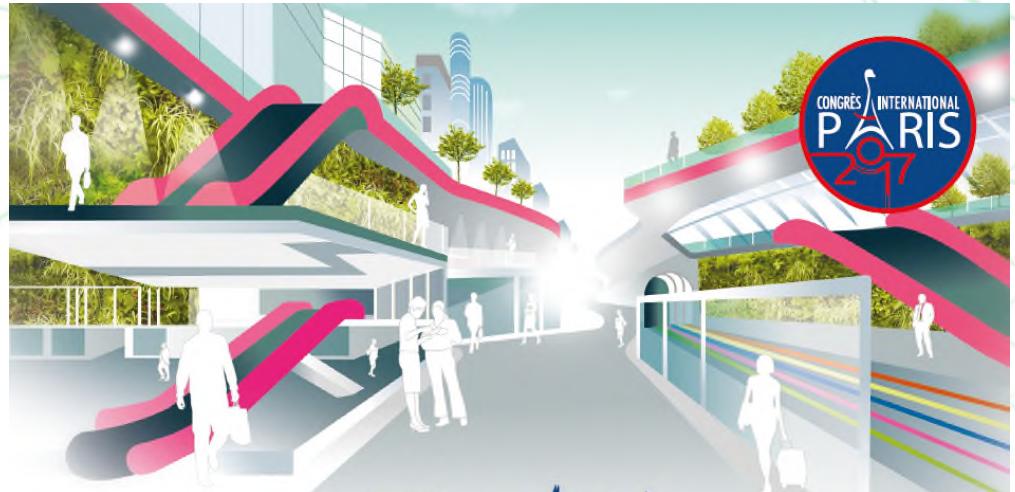
ASSOCIATION
INTERNATIONALE DES TUNNELS
ET DE L'ESPACE SOUTERRAIN
AITES



INTERNATIONAL TUNNELLING
AND UNDERGROUND SPACE
ASSOCIATION



FUTURE CONGRESS



PALAIS DES CONGRÈS
13 to 15 Nov. 2017
+16 Nov.
Shaping the future

**THE VALUE IS
UNDERGROUND**

ITA
AITES
ASSOCIATION FRANÇAISE DES TUNNELS ET DE L'ESPACE SOUTERRAIN



**AFTES TRIENNIAL CONGRESS
PARIS 2017 NOVEMBER 13-15**

PALAIS DES CONGRÈS
13 au 15 nov. 2017
+16 nov.
Construire l'avenir

**L'ESPACE
SOUTERRAIN
NOTRE RICHESSE**

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