

Press Release  
November 2021

7<sup>TH</sup> EDITION OF THE ITA TUNNELLING AWARDS  
FROM THE 29<sup>TH</sup> OF NOVEMBER TO THE 2<sup>ND</sup> OF DECEMBER  
3 FINALISTS FOR THE PROJECT OF THE YEAR  
BETWEEN 50 AND 500 M€ CATEGORY  
FOCUSED ON MANAGING URBAN EXPANSION

Since 2015, the international competition "ITA Tunnelling and Underground Space Awards" aims to reward the most ground-breaking innovations and outstanding projects in underground construction. Due to the recent global pandemic which impacted international travels, this edition will be held online through a dedicated platform, from the 29<sup>th</sup> of November to the 2<sup>nd</sup> of December, where the winner will be elected.

Through 8 categories, this competition aims to identify the most important ongoing underground works and technologies that help cities change and enable habits and ways of life to evolve in order to build smart and sustainable urban areas.

One of the categories of the competition is focused on rewarding the **Project of the Year (between 50 and €500M)**. Amongst all of the projects submitted for this category, the panel of judges identified **3 finalists** that seem to pursue one common goal : **managing urban expansion**.

Global growth impacts large-scale urban regions, in particular their attractiveness. However, land expansion occurs at the edge of existing urban areas, and cities have to adapt and change by investing in transports infrastructures in order to mitigate their urban expansion. Whether they entail high-speed railways or urban tunnels, transports infrastructures projects are at the core of mega suburbs, and the 3 finalists give further evidence of current major projects undertaken around the world.

**NOVELTIES FOR 2021 :**

Over the past years, underground space has been identified as a crucial lever to build resilient urban environments and tackle impacts of climate change. Sustainability and Ethic have become the driving forces behind all underground projects, and through this new edition, ITA Tunnelling and Underground Space Awards has at heart to demonstrate the evolution of the industry to meet these new challenges, and especially with the new category « Beyond Engineering: Making underground works projects even better ».

## PROJET OF THE YEAR (BETWEEN 50 AND 500 M€) CATEGORY AND ITS FINALISTS

- **Large-diameter shield tunnel engineering project in karst strata of sea area, in China**



As a full-line control project of Dalian Metro Line 5, the large shield tunneling project between the railway station and the Barracuda Bay South Railway Station is the key to breaking the barrier of the bay from Qingniwa, Barracuda Bay and even Ganjingzi old district. The 30-minute travel time on both sides of the gulf has been shortened to less than 3 minutes, thanks to this tunnel.

With a total length of 2,882m, this tunnel construction

has many positives impacts. In line with the development direction of the national urban rail transit construction, the tunnel improves the industry's complex stratum shield manufacturing and construction technical capabilities. The tunnel on the sea-crossing section of Dalian Metro Line 5 traverses the karst development area.

**Engineering firm(s) :** China Railway Group Co., Ltd

**Cost :** 132.4 Million Euros

- **Ping'an Tunnel on Chengdu Lanzhou Railway in China**

Chengdu-Lanzhou Railway is an important part of China's medium and long-term planning of railway network. Connecting both Chengdu, Sichuan and Lanzhou, Gansu, it is at a national grade an electrified railway with a design speed of 200km/h.

The excavation section is about 80 square meters, and the effective area above the rail surface is 52 square meters. The tunnel passes through multiple fault fracture zones and is close to the source center of Diexi Earthquake, that happened in 1933. During the construction, the major adverse geology included high ground temperature, rock burst, water burst and large deformation. Meantime, the Tunnel runs across Baodinggou Nature Reserve.



From design to construction, a series of technological innovations have been conducted, and finally the goals of a scientific and reasonable design, safe and efficient construction have been achieved.

**Engineering firm(s) :** CREEC (Chengdu) Consulting and Supervision Co., Ltd.

**Cost :** 534 Million Euros

- **South extension of the metro Line 14 in Paris - GC02 contract in France**



The Grand Paris Express is one of the biggest infrastructure projects of the century. It consists of building 200 km of new metro lines and 68 stations around the city of Paris. Among the four new lines, which are planned to be completed before the deadline for the Paris Olympic Games in 2024, the extension of line 14 towards Paris-Orly Airport is one of the most priority projects, as it represents the link

between the airport and the capital.

Built entirely underground in the South of Paris, the South extension of the line 14 comprises 14 km of underground tunnel, 7 stations and 12 shafts.

**Engineering firm(s) :** Setec and Systra

**Cost :** 405 Million Euros

#### 8 CATEGORIES AND THEIR FINALISTS :

- **MAJOR PROJET OF THE YEAR (OVER 500 M€)**
  - Klang Valley Mass Rapid Transit (KVMRT) Putrajaya Line Tunnels and Underground Station Works in Malaysia
  - Ismailia Tunnels under Suez Canal in Egypt
  - Shantou Bay Tunnel Project in China
- **PROJET OF THE YEAR (BETWEEN 50 AND 500 M€)**
  - Large-diameter shield tunnel engineering project in karst strata of sea area in China;
  - Ping'an Tunnel on Chengdu Lanzhou Railway in China
  - South extension of the metro Line 14 in Paris - GC02 contract in France
- **PROJET OF THE YEAR INCL. RENOVATION ( -50 M€)**
  - Long Term Recycled Water Release Plan Stage 1 – Gold Coast Seaway in Australia
  - Relocation of Shatin Sewage Treatment Works into Caverns Hong Kong in China
  - Tangjiawan Dananshan Emergency Shelter Project in China

- **TECHNICAL INNOVATION OF THE YEAR**
  - A cloud based intelligent system for fully automated realtime design of tunnel supporting system in China
  - MISSIONOS for the Shaft & Tunnel Excavation Monitoring System for the DTSS2 Project in Singapore
  - O'Dive PRO services: decompression procedures monitoring in France
  - Riachuelo Lote 3 – Innovative method for the construction of sea outfall projects - The Risers Concept in Argentina
  - Virtual Master Rings, Replacing a tradition in Germany
- **BEYOND ENGINEERING – MAKING UNDERGROUND WORKS PROJETS EVEN BETTER**
  - Is shield tunneling spoil a waste? A novel solution says no. in China
  - Xueshan No.1 Tunnel Project of Huashixia- Dawu Highway in China
- **INNOVATIVE AND CONTRIBUTING UNDERGROUND SPACES**
  - Fuxin Parking Lot of Shenzhen Rail Transit Line 14 in China
  - Lefdal Mine Data Center The Norwegian Solution where scale and flexibility meet resiliency in Norway
- **YOUNG TUNNELLER OF THE YEAR**
  - **Chiranjib Sarkar** in India
  - **Gianluca Comin** in Italy
  - **Keith Bannerman** in Australia
  - **Michael Mains** in Canada
  - **Nick Hatzibousios** in Australia
  - **Zhuanzhuan Zhang** in China

Press Contact :

Mrs. Diane Loth, Giesbert & Mandin agency

+33647277429 – [d.loth@giesbert-mandin.fr](mailto:d.loth@giesbert-mandin.fr)