

# Belgium



**Name:** ABTUS-BVOTS (Association Belge des Techniques et de l'Urbanisme Souterrains - Belgische Vereniging voor Ondergrondse Technieken en Stedebouw)

**Type of Structure:** non profit, open association

**Number of Members:** 18 individual members, 50 corporate members

## ASSOCIATION ACTIVITIES DURING 2021 AND TO DATE

In 2021 the Belgian Tunnelling Association continued to promote underground solutions to resolve congestion problems, and the crossing of waterways and sensitive areas. Unfortunately, only one site visit could be organized due to the Covid pandemic. Nevertheless, digital activities were organized instead. The Webinar on European Research in Underground Techniques and Urbanism was a successful event on the 30th of March. Our scientific prize was awarded during the webinar. In cooperation with the Flemish engineering association ie-net, we organised a second webinar on the 4th May on the Grand Paris Express. On the occasion of the World Tunnel Day on the 3rd December, the works of the new Tangent Tunnel in Mechelen were visited. We strengthened our cooperation within the EUTF regarding the interests of the European Tunnel Community with knowledge sharing objectives. We continued our close cooperation with the French Tunneling Society AFTES, with whom we share the same magazine T&ES. Our activities are visible on <https://www.abtus-bvots.com/>

## CURRENT TUNNELLING ACTIVITIES

- The renovation of the metrostation Lemonnier and the start of the new Toots Thielemans Subway station (MIVB/STIB). Construction work on the 233m long Toots Thielemans subway station, formerly known as 'Constitution', started in 2020 to be completed by 2025. The renovation and expansion of the Lemonnier tram station will follow between 2025 and 2028.
- Several mechanized tunnels:
  1. Inauguration of a new storm water basin in Woluwe-Saint-Pierre - Storm basin Avenue Grandchamp (Vivaqua), tunnel i.d. 5.2m, length 370m
  2. Installation of pipelines by pipe jacking DN1800 and 1270m long, as part of the second phase of the stormwater drainage project from Cubber & Stockis

- Lot 2 at the airport of Liège (Sowaer)
3. Wastewater networks Vliegtuiglaan (Farys), carried out by microTBM AVN2500 at a mud pressure length of 350m
4. Luxemburg Airport, technical gallery, made by MicroTBM AVN1800 with a mud pressure length of 260m under the landing strip.



*The Scheldt tunnel - this 1.8km long immersed tunnel will have two tubes for motorway traffic and a separate tube for cyclists and pedestrians.*

- In Brussels the rehabilitation of the road tunnels for the city's inner ring started. These old tunnels are being completely refurbished and will get an up-to-date control system. The most important is the Leopold II Tunnel (which is finished now).
- Renovation of the Kennedy railway Tunnel with new control and safety systems (which is almost finished).
- Start of the construction dock in Zeebrugge for the tunnel elements for the Scheldt tunnel on the Oosterweel connection (this 1.8km long immersed tunnel will have two tubes for motorway traffic and a separate tube for cyclists and pedestrians). See for the project on <https://www.lantis.be/>

## FUTURE TUNNELLING ACTIVITIES

- On the 29th of March 2022, annual seminar held on the topic 'Seminar on

Underground and Environment'.

- In May/June, a seminar on "The Fehmarnbelt Link" will be organized (in cooperation with the Flemish engineering association ie-net).
- In Brussels, the existing metro line will be adapted at the south station, so that the whole line can be upgraded into a fully automated subway system. The works have started. The tender for the extension of the metro from the north station towards the new NATO-building will begin.
- In Antwerp the works for the Oosterweel Connection (closing of the northern motorway ring) have started with the adaptation of the interchange at the left bank of the Scheldt river. The preparation works for the immersed tunnel under the Scheldt river started (works 2020-2027). The tendering for

the cut-and-cover tunnels under the Straatsburg dock will begin.

- The road tunnels for Brussel's inner ring will be further rehabilitated and will become safer.
- In the future, a second railway track from Antwerp's main shunting station towards the hinterland will be required. This will be delivered by two single track, 16km long tunnels that will underpass the Albert canal and several motorways to avoid interference with the dense urban areas on the surface.
- In Brussels the existing north-south railway link with its six tracks has reached saturation point. The link needs to be extended by four extra tracks (each in a separate tunnel some 10km long) that will be bored by TBM under the existing ones. The need is there but the funding will determine when the project starts.