



## SHIELDS HALF-WAY THROUGH

### TUNNEL CONSTRUCTION NEARS COMPLETION IN BUDA

**Following the northern tunnelling shield of Budapest's Metro4 line, which reached the Szent Gellért tér station several weeks ago, the southern shield is set to arrive in the next few days.**

The northern shield has already "broken" into the station, or more precisely into the platform tunnel that forms part of the station's construction. The southern shield will also reach the station within a few days, although the inner walls of the station and platform tunnels primarily for safety considerations must still be completed prior to their arrival. With this, the tunnels of the first 7.5-kilometre section of the Metro4 line will be 50% complete, and tunnel construction on the Buda side essentially finished. Plans call for the huge mechanical monsters to begin work beneath the Danube from mid-March. Work beneath the river can be expected to last one month, until mid-April 2009.

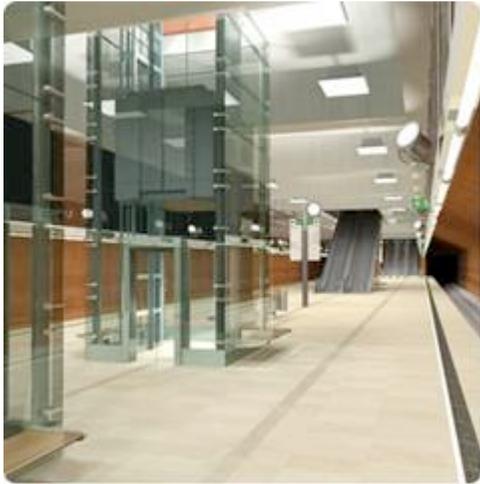


## "PLEASE LOOK OUT: TRAIN APPROACHING!"

### NEW METRO CARS TO BE DELIVERED TO BUDAPEST

**The Budapest Transport Company (BKV) is purchasing almost the same type of trains for the new Metro4 as for the already operating Metro2. The trains are manufactured by ALSTOM. The prototype Metropolis metro cars manufactured for the Metro2 line will be transported to Hungary over the period of one week from the end of January.**

One metro train consisting of five cars is being transported to Budapest, where tests on the new trains will begin. Alstom Transport is building a total of 22 trains for Metro2, each consisting of five cars, and another 15 trains, each consisting of four cars, for the Metro4 line, at a total cost of 215 million euros. More than 3,000 Metropolis metro cars are currently in circulation in 45 cities of the world, transporting tens of millions of passengers daily. The exteriors and interior fittings of the trains are always adapted to the local needs of the given city: in Budapest's case, this means evoking the appearance of the Millennium Underground, the continent's first underground railway, naturally while applying 21st century technological standards. Passenger comfort is assured with built-in air conditioning, among other features, and orientation guaranteed by the most modern available passenger information system. Passengers can pass through all cars along the entire length of the train without needing to exit. According to plans, the trains on Metro4 will be able to operate fully automatically, and will thus be able to run without a driver.



## 100% ACCESSIBILITY

### ENTIRE LENGTH OF LINE TO BE FULLY ACCESSIBLE TO ALL

**Budapest's newest metro line, currently under construction, will conform to the expectations of the 21st century in every regard. This means not only fulfilling engineering and technological requirements to the highest level, but also ensuring that the metro conforms to the expectations of society at large.**

All stations of the Metro4 line will be built to allow unhindered access to everyone. For those with disabilities, using the metro will become much more simple and convenient. Lifts located next to the escalators will allow not only wheelchair-bound passengers easier access, but will also help those travelling with baby carriages or bulky items. The lifts will transport passengers from street or underpass level to the train platforms below, and will be in constant operation at all stations. Sight-impaired or blind passengers will be helped on their way by means of special "touch and hear" information tools, making both orientation and travel easier. Among other things, these tools will indicate the direction in which escalators are running and the position of doors on arriving trains. The Metro4 line will ensure rapid and comfortable journeys for all. Possible problems can be addressed immediately with the help of a closed-circuit surveillance system.



## METRO4 THE GREEN LINE

### AN ENVIRONMENTALLY AWARE INVESTMENT

**Metro4 will be green not only in the colour of its logo, as it is entirely fair to say that the metro is a "green" investment in terms of quality as well. This is not only because the building of the line in itself helps alleviate numerous harmful environmental factors (noise, smog, traffic congestion), but also because extraordinary attention has been paid to protection of the environment during the construction phase.**

In order to protect thermal springs at Gellért tér for example, the original path of the metro line was altered in order for tunnels to pass at a safe distance from the thermal waters, fully conforming to the requests of civil organizations. The thermal springs are constantly monitored by means of several dozen probes and an observation well some 300 metres in depth. In the course of construction, experts also used state-of-the-art technology to replant several dozen protected trees so that these would not need to be cut down when building the stations. The excavation method used in constructing a portion of the Rákóczi tér station, for example, was chosen to safeguard protected plane trees on the surface.

Again applying state-of-the-art technology, the future trains running on the line will recycle energy otherwise wasted in braking, thus reducing energy consumption and the knock-on burden on the environment. Moreover, experts have begun examining the possibility of reutilizing the heat energy generated in the metro, hitherto regarded as waste or energy loss.



## SUNSHINE UNDERGROUND

### HUGE GLASS CUPOLA OVER THE STATION

**One of the most striking stations of the Metro4 line will be the Tétényi út stop on the Buda side, which will not only further enhance the area's character as a district centre, resulting in the appearance of new shops and services, but will offer an architecturally unique and genuinely people-centred solution.**

An enormous glass cupola will be built over the station structure, providing the platforms with natural light by which passengers will be able to pass underground during the day. The station is located at the edge of a park, at the centre of the district's largest housing estate. The stop will be built some 15 metres deep, with access for passengers provided via six escalators and two lifts.