

# KEY FINDINGS OF THE RSSB - PCAT AOBR PROJECT



Precast Advanced Track



PCAT – SMART Track Installation video link

<https://vimeo.com/223103178>

Removal of ballast using a Wirtgen milling machine, and insitu recycling proved that over **400m /day** can be constructed when lowering / and or upgrading ballasted track to PCAT system

The high strength slab and HBM foundation saves **547mm (49%)** of the depth of track construction

The PCAT approach reduced excavation and disposal by **over 70%** and need for imported materials by **over 79%**

Testing carried out by AECOM shows that PCAT met sleeper end stiffness for **24t** axles and critical Velocity for **HS Rail** applications

AECOM noted that PCAT made LCC savings of over **400%** compared to ballasted track construction

# KEY FINDINGS OF THE UKTRAM - LILR PROJECT



The high strength PCAT precast slabs reduces construction depth by **over 50%**

The shallow voided slab avoids clashes with and reduces pressure on utilities allowing them to stay in place

Pre casting off site and delivery “just in time”, minimises working space and reduces the number of construction activities and quantity of imported materials by **over 50%**.

Mechanised construction and rates of slab installation of **100m a day** **dramatically cuts project time** by **over 500%**



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If needing to replace utilities, slabs can be **easily removed** and repairs done.

Uniquely PCAT slabs can be reinstalled quickly and **rails replaced** without causing long delays to tram services