Rapid installation of Tensar Mechanically Stabilised Layer (MSL) allowed for accelerated construction and reduced potential downtime.

Roads, Pavement & Surfaces
№ **466**

Gong Kedak Military Airport

Kelantan, Malaysia

CONSTRUCTED IN 2022

Benefits

No downtime
during post-construction

Differential settlement mitigation
reduces maintenance costs

Taxiing with confidence

An active airbase suffering from localised pavement subsidence required frequent maintenance against differential settlement mitigation. It was also important to reduce downtime during rehabilitiation and increase operation by stabilising with Tensar geogrids.

CLIENT'S CHALLENGE

Localised soft soil on the taxiway caused differential settlement, which resulted in reocurring pavement distress. Frequent maintenance has led to significant disruption of airforce operations as well as increasing maintenance and operation costs. Seeking a more permanent solution, the forensics department of the public works department of Malaysia (JKR) sought out Tensar for a mechanically stabilised solution.

TENSAR SOLUTION

Rather than simply resurfacing the pavement and raising the pavement to the original level, Tensar proposed that a deep rehabilitation of the pavement with suitable transitional detailing would be a more effective solution. Within the affected area, a two-layer Tensar Mechanically Stabilised Layer (MSL) was proposed over the subgrade level and the top layer of the MSL was extended further to provide a gradual transition of the stabilised area to mitigate future differential settlement.

