Summary of Decisions of the Structural Engineering Committee SEC 6/2007 held on 19.12.2007

(a) Case 6/2007

Issue:

Use of Tyfo UC55 Composite Laminate to upgrade the Swire Bridge Deck for SLS compliance under HA loading for internal access road and EVA usage required in current Highway's Standard

Recommendation:

To accept the use of the TYFO UC55 Composite Laminates to upgrade the Swire Bridge of HKU to comply with SLS check (crack control) under HA loading with reference to current Highway Standard.

Decision:

Members endorsed the recommendations subject to the following conditions:

- (a) the implementation of pre-construction material tests, specialist experience and quality control on workmanship, post-installation verification tests, and load tests of the bridge deck before and after the strengthening works;
- (b) the provision of an undertaking from the Estate Office of the owner for regular monitoring, inspection, and maintenance of the Typo AFP coating and Typo UC55 composite laminate to ensure their satisfactory performance during the service life of the bridge; and
- (c) the above-mentioned undertaking should include a manual proposed by the RSE covering the frequency and methodology for monitoring, inspection, and maintenance. It should also provide a requirement for special inspection in case the bridge has been subjected to a fire. The above-mentioned undertaking and manual should be submitted and agreed by BD before consent to commence the work is granted.