

Regulations, Codes and Standards WG: 2019 Projects and Targets

with Technology, Workforce, Sustainability and all Industry Sector WGs.

- 1 Gaps and barriers identified by reviews undertaken by Southampton U., NPL, and BSI.
 - Work with regulators and industry to adapt or develop regulations, codes and standards based on performance attributes to enable greater use of composites, while highlighting generic aspects.
- 2 Need for design codes for composite structural usage clearly identified for light-weighting (Auto. Const.)
 - Support particularly Eurocode 10 drafting; following FRP Bridge design publication by UK team
 - Validation of procedures to create confidence in design codes through case studies/demonstrators
- 3 Clear need for standardised composites qualification and data procedures (UK led ISO 20144:2019)..
 - Promote ISO 20144 to reduce cost and increase access to qualification test data across sectors
 - Investigate centralisation of databases, with initial population by donated, quality assessed data
- 4 Standards needed for key topics such as process related measurements (reviewed by NPL/NCC).
 - Develop standards for permeability of preforms (ISO NP), 3D fabric and accelerated durability
 - Support areas that lack appropriate test methods or usage of them, e.g. fire, smoke and toxicity
 - Review/update ISO standards for application to a wider range of materials (c.f. aero prepregs)
- 5 Guidance needed on through-life aspects, including maintenance, repair, end-of-life and recycling etc.
 - Publish as ISO documents new procedures for NDE for thick sections/large volume manufacture
 - Establish mentoring support on data for designing with composites and whole-life-cycle costing