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TASK 2.3.3 “MODEL VALIDATION AND UPDATING” REPORT ON METHODS AND TOOLS FOR SUPERMODEL VALIDATION AND DESIGN MODEL VERIFICATION VIA SUPERMODELS

Executive Summary

This is the second report at month 30 on progress of model validation by supermodels. It includes: (1) supermodel validation for aero-engine components and a guide for creation of ‘fit-for-purpose’ supermodels to be used in model validation; (2) correlation of a design model against the supermodel built with solid elements using correlation tools developed at Imperial College UTC and Rolls-Royce plc; (3) the first study of dynamic responses of the whole engine model joined with IMC shell/beam elements or with IMC solid elements, respectively.