

Key issues

The following key issues will be addressed in the three main research areas of T'nD:

- in the field of *haptic technology* an extended version of FCS HapticMaster will be used as basic platform, equipped with a strong and stiff 6 D.O.F device carrying simulated clay modelling tools.

- in the field of *shape modelling techniques*, the emerging technologies that T'nD will further investigate and develop include sweep-based and voxel-based techniques. The major open issue concerns the definition of an appropriate theory allowing discrete schemes to support fine quality shape generation.

- in the field of *cognitive ergonomics*, usual ergonomics criteria and principles will be extended with new aspects that will be developed analyzing T'nD designer's cognitive process. The new principles will then be adapted to the specifications of T'nD haptic and shape modelling systems.

Technical approach

The project work plan includes three main phases: the first phase planned in the first year is dedicated to identify, set and consolidate the research of technological backgrounds in the area of haptics, geometric and shape modeling, cognitive psychology and to define the system requirements; the second phase, mainly planned across the second and third year, is dedicated to the specifications, development and testing of the T'nD system where "intelligent" shape manipulation operators are integrated to haptic devices based on full hand interaction; the last phase planned in the third year is focused on the evaluation of the system and of project results, with the industrial partners of the project and also with external users.

Consortium

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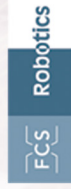


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Touch and Design



SIXTH FRAMEWORK PROGRAMME
 PRIORITY 2
 Information Society Technologies

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