This objective focus on adaptation and dynamic self-expression patterns and mechanisms.

The intention is to study and develop a catalogue of innovative mechanisms and patterns by which service components and service-component ensembles can dynamically adapt their behaviour and structures (based on available knowledge and on selected levels of self-awareness) so as to accommodate contingencies and changes in resources usage and environmental characteristics, also by dynamically changing the expressed interaction and adaptation models.

A key result will be to find ways to smooth the tension between top-down and bottom-up approaches to self adaptation, and between individual and collective self-adaptation.

Work package 4 will address these challenges.