Tools and methodology for the design and development of correct service components (SCs) and service-component ensembles (SCEs) and their verification will use formal methods.

ASCENS provides an open-source SCE workbench based on the Eclipse platform and integrated tools for continuous development, understanding and visualization of SCEs. The availability of such tools will benefit future research efforts and industrial software developers alike. We will distil the lessons learned from developing the case studies into a catalogue of patterns and best practices and provide an open-source repository of components for SCEs.

ASCENS investigates these issues in two work packages – tool integration is targeted in work package 6, while engineering and best practices for service-component ensembles will be considered in work package 8.