

## 1 Public Executive Summary

This deliverable describes the prototypes for fulfilling the pre-processing tasks for object redetection, namely feature point tracking and segmentation. Based on requirements from other tasks in WP5, i.e. audio rendering and 2D-3D conversion, the work of coarse motion segmentation of feature point trajectories has been complemented by an interactive tool and work on camera motion estimation, and an algorithm yielding pixel precise spatial segmentation results have been implemented. Nonetheless these methods are useful as pre-processing steps for object redetection fulfilling different sets of requirements in terms of precision and runtime performance.

In particular this deliverable presents the work on GPU accelerated feature point tracking, which is the prerequisite for the estimation of camera motion from an image sequence and motion clustering of feature point trajectories in order to efficiently obtain a coarse segmentation of moving objects. It then describes the work on segmentation of image sequences for supporting 2D-3D conversion. The conclusion outlines links between the presented results as well as other applications.