

	Year 1												Year 2												Year 3												Year 4																																			
Project Months (in T0+ notation)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48																								
Milestones	MS1												MS2												MS3				MS4				MS5												MS6																											
Integration & Testing Weeks													◊ Review								◊ Review								◊ Review								◊ Review																																			
Project Reviews													◊ Review												◊ Review												◊ Review												◊ Review																							
WP1: Application Requirement Spec. & Data Acquisition																																																																								
T1.1End-user needs and requirements analysis				◊ D1.1												◊ D1.2									◊ D1.2																																															
T1.2Application analysis and requirement specification				◊ D1.1												◊ D1.2									◊ D1.2																																															
T1.3Definition and specification of system architecture				◊ D1.1												◊ D1.2									◊ D1.2																																															
T1.4System hardware and software components specification				◊ D1.1												◊ D1.2									◊ D1.2																																															
WP2: Vehicle Infrastructure																																																																								
T2.1Vehicle platform setup					◊ D2.1												◊ D2.3																																																							
T2.2Drive by wire functionality					◊ D2.1												◊ D2.3																																																							
T2.3Low-level data acq., proc. & comm. framework					◊ D2.1												◊ D2.3																																																							
T2.4High level system debugging l& maintenance framework									◊ D2.2												◊ D2.4																																																			
T2.5Calibration & data integrity validation of the sensor system									◊ D2.2												◊ D2.4																																																			
T2.6Reference sensor integration									◊ D2.2												◊ D2.4																																																			
T2.7Vehicle maintenance and update																																																																								
WP3: Cloud Infrastructure																																																																								
T3.1Setup of project-wide development infrastructure	◊ D3.1																																																																							
T3.2Setup of hardware stack			◊ D3.2(i)																																																																					
T3.3Design and impl. of the devel. and deployment tool chain					◊ D3.3																																																																			
T3.4Setup and implementation of a communication framework							◊ D3.4																																																																	
T3.5Setup and implementation of the bulk data storage service									◊ D3.5																																																															
WP4: Perception																																																																								
T4.1Specification and design of on-board sensing					◊ D4.1(i)																◊ D4.1																																																			
T4.2Spatio-temporal and appearance based low level rep.																	◊ D4.2(i)								◊ D4.2																																															
T4.3Perception adaptation to adverse visibility conditions																	◊ D4.2(i)								◊ D4.2																																															
T4.4Road infrastructure perception																	◊ D4.3(i)								◊ D4.2																																															
T4.5Real-time 3D terrain perception																	◊ D4.3(i)																																																							
T4.6Road users perception & signaling detection																	◊ D4.3(i)																																																							
T4.7Sensor fusion based perception refinement																	◊ D4.3(i)																																																							
WP5: Lifelong Mapping																																																																								
T5.1Mapping frontend				◊ D5.1																																																																				
T5.2Internal map representation				◊ D5.1																																																																				
T5.3Internal map storage				◊ D5.1																																																																				
T5.4Highly accurate metric localization																◊ D5.2																																																								
T5.5Classification and aggregation of semantic data																◊ D5.2																																																								
T5.6Map management and summarization																◊ D5.2																																																								
WP6: Scene Understanding																																																																								
T6.1Long-term semantic scene understanding				◊ D6.1																																																																				
T6.2Scenario based scene understanding				◊ D6.1																																																																				
T6.3Scene prediction				◊ D6.1																																																																				
T6.4Self-assessment				◊ D6.1																																																																				
WP7: Decision-making and Navigation																																																																								
T7.1Route planning				◊ D7.1															◊ D7.2																																																					
T7.2Tactical planning				◊ D7.1															◊ D7.2																																																					
T7.3Trajectory planning				◊ D7.1															◊ D7.2																																																					
T7.4Trajectory control				◊ D7.1															◊ D7.2																																																					
T7.5Mission executive				◊ D7.1															◊ D7.2																																																					
WP8: System Integration and Evaluation																																																																								
T8.1Integration plan							◊ D8.1																																																																	
T8.2System-wide data acquisition							◊ D8.2																																																																	
T8.3Integration and test tools and processes													◊ D8.3																																																											
T8.4System integration																																																																								
T8.5System evaluation and validation																																																																								
WP9: Dissemination and Exploitation																																																																								
T9.1Management of knowledge			◊ D9.2																																																																					
T9.2Dissemination																																																																								
T9.3Exploitation																																																																								
Spiral Life Cycle Phase	Specification		Research & Development										Integration & Evaluation										Specification		Research & Development										Integration & Evaluation																																					