MIKROSIMULACIJA PETLJE VOGOŠĆA	
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Sažetak:	U radu je kreiran mikrosimulacijski model petlje Vogošća i okolnih raskrsnica u softveru PTV Vissim te je analizirano odvijanje saobraćaja na tom lokalitetu. Dio potrebnih podataka prikupljen je terenskim snimanjem iz zraka pomoću dva drona, a preostali dio podataka dobijen je brojanjem saobraćaja. Video snimci su se obradili u softveru DataFromSky. Na osnovu obrađenih podataka kalibriran je model tako da odgovara realnim uslovima odvijanja saobraćaja te na osnovu kalibriranog modela dobijeni su rezultati o dužini repa, vremenu putovanja i nivou usluge na razmatranim privozima. Razmotren je utjecaj izgradnje buduće I transverzale i simulirana su varijantna rješenja priključka na istoj koja su uključivala semaforizirani i nesemaforizirani priključak, dvotračni kružni tok i turbo rotor. Na modelu najpovoljnijeg rješenja od prethodno navedenih simulirano je i rješenje proširenja postojećeg dvotračnog mosta u četverotračni. Poređenje dobijenih rezultata modela postojećeg stanja i modela varijantnih rješenja izvršeno je na kraju rada.
Ključne riječi:	mikrosimulacije, PTV Vissim, kružni tok, petlja, DataFromSky

MICROSIMULATION OF INTERCHANGE VOGOŠĆA	
Summary:	In this thesis, a microsimulation model of Vogošća interchange and surrounding intersections was developed using PTV Vissim software. Part of the required data was collected by aerial survey using two drones and the remaining part of the data was obtained by counting traffic. The videos were processed in DataFromSky software. The model was calibrated using processed data to accurately reflect real traffic conditions. Based on the calibrated model, results were obtained regarding queue lengths, travel times and service levels at the analyzed approaches. The impact of constructing the future I transversal was considered and variant solutions for its three - leg intersection were simulated, including signalized and non-signalized three - leg intersection, two-lane roundabouts and turbo roundabouts. For the optimal solution identified from these simulations, an expansion of the existing two-lane bridge into a four-lane bridge was also simulated. Finally, a comparison of results between the existing microsimulation model and variant solution models was conducted at the end of the thesis.
Keywords:	microsimulations, PTV Vissim, roundabout, interchange, DataFromSky