

TECHNOLOGY HIGHLIGHT Dynamic Crowd Solutions: SIMULATE

MOBILITY DEPARTMENT

DYNAMIC CROWD SOLUTIONS: SIMULATE

The trend to urbanisation leads to increasingly complex crowd flows in transport networks. To ensure that the design of public spaces meets human needs, planners and operators require efficient tools for analysing complex crowd movement. The multitude of questions on crowd behaviour in complex environments, however, cannot be tackled by common simulation solutions on the market.

AIT's consulting service *SIMULATE* addresses the challenges of the analysis and prediction of complex crowd movement in train stations, airports, shopping centres, sports stadiums or at event locations. *SIMULATE* is based on cutting-edge solutions for crowd simulation integrating multiple pedestrian movement models and offers multi-scale analysis: it simultaneously evaluates both aggregated crowd motion of entire public transport networks and detailed pedestrian flows in specific stations.

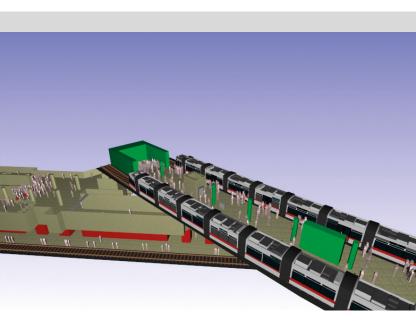




As a consulting service for assessing different infrastructure designs and operational concepts, *SIMULATE* provides quantitative data such as crowd density, walking times, levels of service, evacuation times, capacity estimations, etc.

SIMULATE can take into account existing CAD plans, already performed measurements and prior knowledge. The SIMULATE service is completed with several reporting and intuitive 2D/3D visualisation options to present and interpret the results.

SIMULATE optimises the efficiency, safety and comfort of existing or planned environments. All integrated simulation models are scientifically validated – based on AIT's long-standing expertise in crowd dynamics and comprehensive real-world datasets of crowd movements measured in several contexts.



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