All major event organizers face great challenges in safety, capacity and commerce. Analyze pedestrian flows to overcome these challenges!

**EVENTS CROWD SIMULATION**

Crowd Safety, capacity management and commerce are important issues in preparation for and during the execution of large-scale events. The area should be set-up in the right way in order to: cope with the maximum number of visitors, maximize sales by making Food & Beverage- and Merchandise stands easy accessible and in case of emergency the area should be evacuated safe and quick. Also, emergency services and local authorities need to be convinced of safety plans and risk scenarios. In addition, proper planning of facilities (how many ticket booths, lockers, toilets, etc. and where should they be located?) and staff (guards, traffic controllers, stewards, etc.) are important for the logistic flow and safety of visitors.

The challenges mentioned are all linked to one goal: satisfied visitors. A satisfied visitor is after all a returning visitor. The simulation software of INCONTROL helps overcome these challenges.

**TECHNICAL KEY FEATURES**

- Simulate up to 100,000 individuals
- Quick & easy modeling
- Applicable to every kind of infrastructure & venue
- Analyze an area up to two square kilometer
- Realistic crowd movements with unique agent properties
- Amazing 3D visualization
- Detailed output results
- Import drawing & models based on industry standards
Simulation software is the solution for simulating pedestrian flows in complex infrastructures and can be used to evaluate the performance and safety of an environment. With the help of simulation software you can:

- Save time and money by testing the performance and safety of the event site during the concept phase;
- Determine commercial attractive locations on the event site;
- Evaluate and compare emergency scenarios such as the in- and outflow of visitors, evacuations, etc.;
- Develop evacuation- and contingency plans for organization and emergency services;
- Present the event site in a 3D visualization to your stakeholders;
- Map the complete infrastructure, pedestrian flows and bottlenecks (risks);
- Develop the most optimal infrastructure and planning of facilities and staff;
- Understand what impact an event (for example a marathon) has on a city.

Simulating pedestrian flows gained ground the last few years. The most important reason is that safety and security of visitors has become one of the main issues during large scale events. In addition it provides answers to complex, logistic issues related to capacity management and commerce during events. Many different parties, such as event organizers, architects, authorities, emergency services, etc. are already using simulation software to support their mission. INCONTROL offers its own simulation platform Pedestrian Dynamics.

The experience of projects and knowledge of the INCONTROL developers and engineers are used for the ongoing development of the software. Together with network of INCONTROL, which will be used optimally at all times and made available for every customer, INCONTROL offers state-of-the-art simulation solutions. Examples of projects include: Study for pedestrian flows and capacity analysis for the City of Amsterdam during the abdication of the Queen, April 30, 2013: What is the capacity of the different routes, where can we expect bottlenecks, which actions should be taken to avoid overcrowding?

Simulate any desired event infrastructure and gain insight into the visitors density through graphs.