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COST Action ES1006 - Evaluation, improvement and guidance for the use of local-scale emergency prediction and response tools for airborne hazards in built environments

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Releases of hazardous agents in complex built environments pose a tremendous challenge to emergency first responders and authorities in charge, due to the large number of casualties potentially involved and to possible the damages to ecosystems and infrastructures. Air motions in built-up areas are very complex and adequate modelling tools have to be applied properly in order to predict the dispersion of hazardous materials with sufficient accuracy within a very short time. Different types of tools are applied; however, it is not always clear what the advantages and limitations of individual model approaches are. Therefore, it is of exceptional interest to compile a detailed inventory of the different models and methodologies currently in use, to characterize their performance and to establish strategies for their improvement. A consensus on reliable, efficient and suitable model approaches for given local threats and their scientific advancement is imperative. COST Action ES1006 (www.elizas.eu) is aiming for a substantial improvement in the implementation of local-scale emergency response tools.
By characterizing threat scenarios, compiling dedicated test cases, revealing model limitations and improving model approaches, COST Action ES1006 is delivering guidance for a reliable application of local-scale emergency response tools. COST Action ES1006 is a first cross-community initiative to join, to coordinate and to harmonize European efforts in threat assessment and reduction for local-scale airborne hazards.
A summary of the status report that is compiled at present and an outlook of the Action's tasks are presented.