

Research School for Operations Management and Logistics

## Applications of Game Theory and Location Theory to Counter-Terrorism

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Over the past years terrorism has claimed hundreds of lives in Europe and it will almost certainly claim lives in the future. Improving the protectability against terrorism is therefore an important societal concern. To address this concern, several countries decided to deploy so-called rapid-response teams. These are heavily-armed and highly-trained teams located at high-potential attack regions being capable to respond to terrorist attacks within minutes. The aim of this project is to select their position carefully and to identify how to allocate them in case of an attack. This will be achieved by building new mathematical models that optimize the position and allocation of protective resources (e.g. rapid-response teams) in a network, given a strategically behaving opponent (e.g. a terrorist). These models will be developed by combining game theory and location theory.