

## **A CONCEPTUAL FRAMEWORK TO ASSESS AND MEASURE SECURITY AND SAFETY IN URBAN AREAS**

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### **Abstract – Academic paper**

Urban authorities have a leading role in improving urban security in their territories. Clear situational awareness is crucial to design effective policies in this direction. Two main knowledge gaps might prevent urban authorities from defining effective policies towards improved urban security and/or urban safety: 1. what is needed to know in order to assess and measure urban safety and/or urban security? 2. How to make practical and effective assessment and/or measurement of urban safety and/or of urban security? A conceptual framework composed by six core dimensions and related indicators is proposed as the answer to the first question, while a checklist is designed to support urban authorities in operationalising the framework. An overview of approaches and tools used to assess safety and security in urban areas highlights the relevance of data. Local, regional, and national authorities, as well as third parties, implement diverse approaches to collect data on safety and/or security to gain the situational awareness of territories. Several tools including indexes are used to analyse and synthesise these data. Although safety and security have been considered from different perspectives, most of these instruments have been designed on the basis of more or less defined conceptual frameworks. In the last decade, attempts to standardise methods to fill in knowledge gaps of urban authorities and guiding them in assessing and measuring urban safety and/or urban security have been pursued by international organisations active in the domain. Nevertheless, also ready-to-use standard instruments have been rarely adopted autonomously by more than one urban authority.

A mapping of the already adopted approaches and tools gives evidence on existing conceptual frameworks and their operationalisation. The analysis of 12 selected approaches and tools and the analysis of 10 on-going and recent EU-funded research and innovation projects offers a strong starting point to build (and make operational) a conceptual framework able to fill the urban authorities' knowledge gaps. Core features of the investigated conceptual frameworks lead to a number of dimensions to be considered (e.g., perception of insecurity, urban safety, crime, victimisation) and several indicators used to represent them. According to their type and purpose, approaches and tools may be classified into four families: surveys addressed to citizens of one urban area (SOUA); surveys addressed to citizens of more urban areas (SMUA); indexes for self-assessment (ISA) of one urban area; indexes for the ranking or benchmarking (IRB) of more urban areas. Six good practices are detailed in terms of methodology, strengths, weaknesses, opportunities and threats. The analysis of projects participated by local authorities stresses the importance of EU funding programmes (i.e., the Urban innovative Action initiative, the Internal Security Fund Police, Horizon 2020) in supporting research and innovation actions aimed at comprehensively improving urban security; protecting public spaces against terrorism; securing infrastructures and people in European smart cities; and facing crime and terrorism taking into account the societal dimension. Within such projects, some pilots of approaches and tools are of particular importance as giving evidence of practical collaborations between the actors in the domain.

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A survey, conducted by the Urban Agenda's Security in Public Spaces Partnership, investigating the experience of respondents about the assessment and measurement of safety and security in the cities for which they are answering has contributed to enrich the information on current practices in terms of data types, sources, approaches and tools to assess and measure urban safety or security. The proposed conceptual framework is the result of the evidence collected in terms of the weaknesses and strengths points of the good practices in terms of approaches and tools and of the limitations and added value of what is implemented in the research and innovation projects. Such framework aims at addressing the first knowledge gap of urban authorities: 1. what is needed to know in order to assess and measure urban safety and/or urban security? Six dimensions (i.e., quality of life, social cohesion, public space liveability, urban security, sense of safety in public spaces, background conditions) and around 200 indicators are the building blocks of a comprehensive, modular and adaptable resulting conceptual framework. A checklist is proposed to respond to the second knowledge gap of urban authorities: 2. How to make practical and effective assessment and/or measurement of urban safety and/or of urban security? This checklist includes nine questions that are meant to support urban authorities in operationalising the conceptual framework. The resulting method would be aimed to provide effective support to European cities of different size when assessing and/or measuring urban safety and/or urban security, taking into account their specific needs and their available resources.

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**Keywords:** urban safety, urban security, sense of safety, public spaces, tools and approaches for assessment and measurement, conceptual framework