UNECE contribution to the

Integration Segment of the Economic and Social Council (ECOSOC), 1-3 May 2018

Innovative communities: leveraging technology and innovation

to build sustainable communities

Cities account for an increased share of the population worldwide. This trend can be observed including in regions, such as the UNECE, which already have a high degree of urbanisation. The management of urban centres, including the identification and prevention of multiple risks, is therefore critical for enhancing nationwide resilience. **In highly populated centres, the impact of the materialisation of risks, including natural disasters, is higher and, therefore prevention and appropriate identification of these risks, including, for example, seismic events, flooding or landslides, is essential.**

Human interventions are also an independent source of risk, like industrial accidents, or compound the impact of natural disasters. It is therefore important to improve the resilience of buildings to both natural and human-generated hazards through safety planning, design and construction. In addition, the UNECE Convention on the Transboundary Effects of Industrial Accidents, takes a broader view, helping parties to prepare for, and respond to, accidents if they occur.

Spatial planning and infrastructure development, in particular, have a critical impact on the environment and the resilience to disasters. The Geneva UN Charter on Sustainable Housing acknowledges the need to promote and monitor integrated urban development and regeneration, while taking into account potential dangers and hazards and increasing resilience to climate change. Appropriate risk assessment and disaster forecasting are necessary to adopt preventative measures. UNECE carries out Country Profiles on Housing and Land Management which assess different aspects related to housing, urban development and land administration systems in order to identify existing challenges and provide policy recommendations. The

outcomes of these participatory policy assessments are sometimes incorporated in national action plans, as in the recent Country Profile of Armenia.

Technology is offering new possibilities for the management of urban operations, enhancing resilience and advancing sustainability. In particular, the integration of information and communication technologies (ICTs) in the monitoring of key developments and the provision of public services increases efficiency and improves foresight capacities. UNECE, together with the International Telecommunications Union, launched the United for Smart Sustainable Cities (U4SSC) initiative, which has been joined by many other partners afterwards. The work under this initiative has explored the potential of ICTs to improve public services and new forms of smart governance. A major focus is placed on encouraging public-private collaboration to develop smart sustainable city projects and promote innovation. A number of key performance indicators (KPI) for smart sustainable cities have been developed under this initiative.

UNECE, together with the Organization for International Economic Relations (OiER), is implementing a multi-stakeholder programme which aims to support medium-sized cities in assessing and improving their performance in areas related to smart urban development. This includes the exchange of best practices and knowledge transfer among different actors. Smart Sustainable City Profiles, prepared using KPI for Smart Sustainable Cities, will include a number of recommendations that will be incorporated into a strategic city action plan.

Innovation has not only a technological dimension. It includes also changes in practices and organizational models. UNECE has championed a broad understanding of innovation that includes both technological and non-technological aspects. At the same time, its programme of Innovation for Sustainable Development Reviews, which offers policy recommendations to national governments, has emphasised the critical importance of the dissemination of innovation, both across and within countries, as opposed to a narrower focus on the generation of innovation. This is particularly relevant for middle income countries within the "technology frontier". Innovation – its generation, absorption and dissemination- is the result of a complex interaction between multiple actors and therefore a systemic approach taking into account these interrelations is required when considering policy options.

Advancing sustainability and enhancing resilience requires long-term action that integrates different policy areas. However, experiences shows that governments alone cannot tackle multiple environmental threats and address existing risks. There is a need to coordinate different government levels but also, critically, to involve society at large. Partnerships involving multiple actors are critical to identify potential options and implement the necessary actions. Access to information is necessary to provide a solid foundation for these partnerships and to ensure that decisions take on board public concerns. The UNECE Aarhus Convention and its Protocol empower people with the rights to access easily information and participate effectively in decision-making in environmental matters.