

A wide-angle photograph of the Piazza del Duomo in Milan, Italy. The Piazza is a large, open square with a paved surface. In the background, the Duomo di Milano is visible, a large Gothic cathedral with a prominent spire. The square is surrounded by trees and buildings. The text "MILAN CIBIX WORKSHOP" is overlaid in large, white, bold letters.

MILAN CIBIX WORKSHOP

CiBiX Series on Delivering Resilience Resilient Cities Congress 26-28 June 2019 Bonn, Germany

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How can cities improve their readiness to respond to emergency situations? For Milan, their current challenges lie in increasing the coordination of stakeholders, collecting the data needed at the different response levels and finding new partnerships and tools to support this. Join ICLEI's City-Business Collaboration Accelerator (CiBiX) Ideator workshop to co-develop ideas on disaster response with Milan, solve partnership challenges and share your expertise.

City Overview

As part of its 2030 City Master Plan, Milan is determined to improve its connection to and collaboration with the wider metropolitan area, which consists of 88 diverse neighborhoods. A vital aspect will be strengthening and scaling-up the city's resilience work on effective and efficient disaster planning and response.

In Milan, the frequency and impact of emergency situations are being exacerbated by climate change. Now more than ever the city needs to be ready to respond quickly to resilience emergencies primarily linked to flash floods and extreme heat waves and cold periods. Other existing resilience stressors, such as an aging population and old infrastructure, provide additional complexity and risk for resilience planning.

At present, Milan's major disaster response strategies and actions are outlined and elaborated in the city's Emergency Plan. This plan has been developed together with key stakeholders including the municipal operative center, civil protection department and the local crisis unit. Two additional plans include the "Piano anticaldo", an emergency plan for extreme heat situations, particularly for senior citizens, as well as the "Piano antifreddo", a strategy which supports homeless individuals to find shelter when temperatures drop to low levels. All of these plans require swift response mechanisms and rely on the collective action of multiple stakeholders to ensure effective implementation.

A photograph of a flooded street in Milan. A person wearing a bright orange raincoat and a yellow hood is walking through the water. The water is murky and has a small waterfall effect as it flows over a low barrier. In the background, there are trees, a blue parking sign, and a red building. The text "© Legambiente - www.cittaclima.it" is overlaid in the top right corner.

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Delivering Resilience in Milan

To enhance Milan's resilience in order to be prepared for future challenges that stem from social environmental and economic changes, the city will need to expand disaster prevention blue and green infrastructures, but also invest in new technologies, partnerships and projects that aids emergency monitoring and response. The city's current disaster response and preparedness capacity is impacted by the challenges related to the coordination of multiple actors involved in emergencies and the limited ability to foresee and respond immediately to all potential situations. This is due to 1) missing knowledge and real time information on all existing risks across the city, 2) appropriate risk mitigation plans and interventions for diverse scenarios, 3) rapid response capacity and 4) efficient recording, monitoring and learning from previous incidents.

To improve coordinated and effective action for disaster response, Milan is interested in developing its own Emergency Management Information System (EMIS). The system will enable Milan region, specifically the Civil Protection Department to harness digitalization to overcome the challenges it has identified above. The idea would be for the system to provide real-time visual feedback and response cues for emergency situations; support integrated action and enable information sharing amongst stakeholders involved in disaster response services. However, developing and managing such a system is complex. The success of the project will require vast amounts of data as well as novel partnerships. Milan is already involved in initiatives which could support the proposed EMIS project including Safer Places, a ClimateKIC project that supports cities with the installation of sensors for hydrological monitoring and risk assessment, giving Milan more detailed data to work with. For emergencies linked to heat waves, Milan has started a partnership with the NOA (National Observatory of Athens) to involve the city in the Extrema project, which provides residents with information through an App on where the closest cooling centers are located.

During Resilient Cities 2019, Milan will lead a workshop aiming to engage stakeholders to explore the opportunities and potential challenges regarding the development of an EMIS, and discuss how to strengthen the city's future resilience as part of its 2030 Master Plan.

Identified Challenges and Opportunities

For Milan, learning from others' experiences, establishing new partnerships and co-creating innovative solutions to managing emergency situations and alleviating impacts of climate change is essential. The workshop will focus on the following opportunities:

Data Collection for Emergency Management - As part of emergency management, Milan is looking into innovative ways to collect data on traffic, routes and travel times in emergency situations. The city is eager to learn about experiences in developing and operating information technology components to collect data, as well as to explore opportunities of data sharing partnerships.

Data Integration and Use – Milan's EMIS project will need a constant flow of real-time data from diverse sources. Hence, the city is interested in discussing best practices for standardizing, integrating and analysing data for decision making in emergency situations. Insights on how to use an EMIS to share data to facilitate coordinated action among different stakeholders and services is also highly valuable.

Connecting Climate Change and Emergency Response – According to national regulation, Milan will need to begin to combine disaster emergency planning with prevention and climate change mitigation. This will help Milan to understand how to adapt their disaster preparedness and response plans to climate change risks and responsibilities.

Novel Partnerships for Resilience – The future of resilience planning will require Milan to not only work with existing providers of emergency services, but also collaborate with new actors involved in urban mobility, digitalization and Industry 4.0 as well as change consultants. Connecting these actors to discuss needs and barriers for partnerships related to urban resilience will also drive the cities future initiatives forward.

Workshop Details

26 June 2019 - 14:00 - 15:30
Resilient Cities Congress - Bonn, Germany