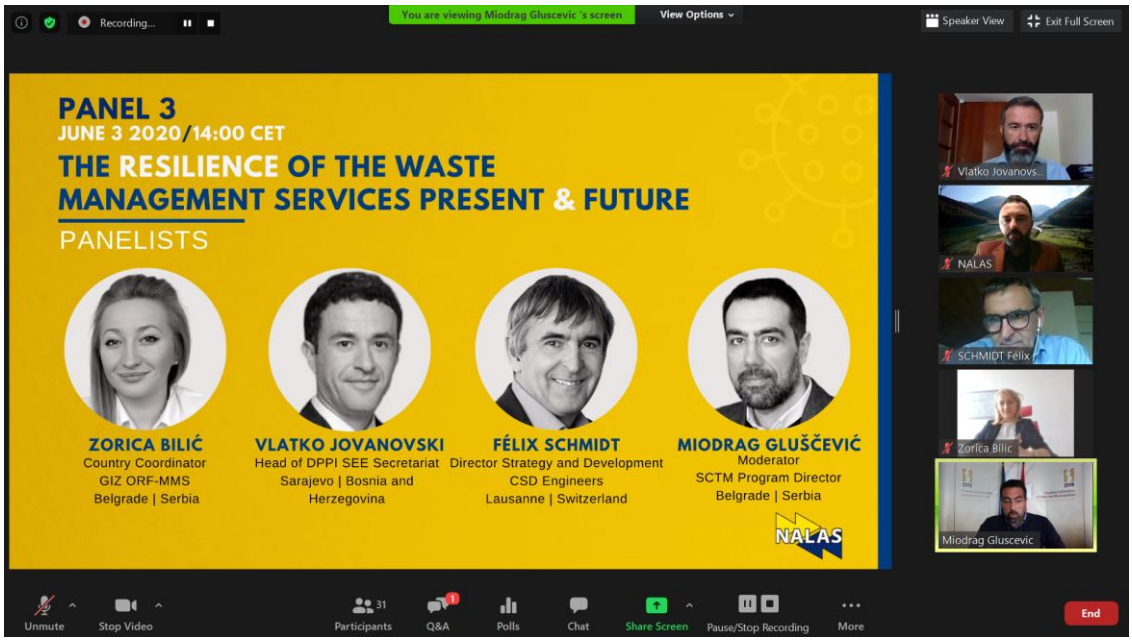
Panel Discussion 3, June 3, 2020

The resilience of the waste management services, present, and future



- Conclusions -

Panel discussion 3 was focus on the different resilience aspects of the waste management services including infrastructure (state, investments needs, asset management), coverage (coverage rate, urban-rural rate), technical and human capacities (need for upgrade and capacity development), cooperation with the local self-government and citizens, planning (existence of contingency plans, short, mid, and long term planning, goals), readiness for the climate change, etc. The COVID-19 pandemic served as the driver of the conversation, but the discussion was not exclusively based on this type of crisis and included other natural and man-made hazards.

Speakers for the Panel discussion 3 were:

- Ms. Zorica Bilić, GIZ ORF MMS Country Coordinator, Serbia
- Mr. Vlatko Jovanovski, Disaster Preparedness and Prevention Initiative SEE, Bosna & Herzegovina
- Mr. Felix Schmidt, Strategy end Development Director at SCD Engineers, Switzerland

Main conclusions of the discussion

- In disaster management and prevention, the role of risk assessment is crucial. It is the most important pillar in preparedness and prevention policies. All of the countries in the region have done disaster risk assessments or are in the process of updating those assessments;

- Risk assessment is a scientific approach based on different methodologies for different types of risks. Still, a risk assessment should never be considered as a prognostic or forecasting tool. Including floods, forest fires, or pandemic in our national risk assessment as major risks, it doesn't mean that we know when they are going to happen. In stead risk assessments are tools to recognize what is out there and assist governments, or decision-makers in answering three basic questions: what can happen, how likely is that to happen, and what will be the impact of the risk materialized into the disaster;
- A very important role of risk assessments is to inform and raise awareness of the general public about the possible disasters. They are also used to create strategies and policies addressing the root causes of those risks and give guidance for their reduction or prevention. Finally, risk assessments are used to inform rescue units and have them better prepared for possible responses;
- All the countries in the region include pandemic scenarios in their risk assessments. Ever since the SARAS 2002 pandemic and the MERS outbreak in 2012 countries in the region are considering pandemics in their risk assessments;
  The key question for the countries in the region is not if they recognized the possible risk of the pandemic, but whether they acted on it and prepared themselves for such an event;
- Although earthquakes, floods, and forest fires are the three major hazards in the SEE region, a lot of effort is put, even on the level of the European Commission, to support the update of the risk assessments. Many guidelines, training programs, and policies have been developed to this end. On the level of the EU, member states are obliged to send to the Commission their updated risk assessment every three years to have an overview of major risks in specific regions;
- There is no unique model on how to organize civil protection, every country has its history, but in all cases, the role of local authorities is crucial for the functioning of this service;
- There are numerous definitions of urban resilience, and all of them revolve around the ability of a social or ecological system to absorb disaster shocks and retain the same basic structure and ways of functioning;
  Since there is no question about whether the disaster will strike, but how the society is prepared for it, sustainability and resilience are becoming the ground rules of future utility services;
- The resilience of the utility service is the ability to withstand and quickly recover from any potential disruption caused by the disaster;
- When it comes to waste management service resilience with the specific focus on COVID-19 pandemic there are four key factors. First is the ability of the waste management provider **to absorb the initial shock** of a hazardous situation. It is about the awareness of the utility of is vulnerability and preparedness to act in such circumstances. In this respect, the organizational capacity of the company, i.e. the existence of specific health and safety procedures or contingency plans is the key factor of resilience;
  The second resilience factor is the **ability to skillfully manage the crisis**. In other words, it is the ability of leadership or the management of the utility company not just to ensure the safety of their employees but to prevent further spreading of the epidemic to the general public;
  The third resilience factor is the **ability to recover quickly and continue with the operations**. In this case, we are speaking about the issues of liquidity, good organizational capacities, relations with local and other levels of governance;
  The fourth resilience factor is the utilities' **ability to learn and incorporate lessons** learned from past occurrences into future actions, but also to exchange and use experiences from others in the risk assessment and planning;
- When we are talking about the risks and the waste management services we need to distinguish between the long term risk to the environment, which is related to the treatment and disposal of the waste and the effects on the environment, and the risk to the continuity of the services and possible effects to the human health and society in general;
- To ensure the minimum of service during the crisis but also to be able to preserve it, in the long run, there are several critical factors of the resilience;
  Financial stability over long periods is connected to the capacity to maintain a good and accurate customer base including households and the commercial sector and industry, as well as to have a functional billing

system. This issue is also connected to the budgeting and negotiations with the local authority on the budget of the company, i.e. the price of the service and the tariff system which is always a very taff political issue;
Money or stable **financing** and **liquidity** is one of those factors. It is needed for performing regular tasks, purchasing the fuel and consumable parts such as tires for the garbage trucks, but also for the maintenance and the salaries of the waste operator employees;
Another critical resilience factor is to have enough able **workforce** and to be able to organize operations on the daily bases without interruptions;
There are also technical difficulties that companies face during the crisis in the sense of organizing **procurement** and ensuring a regular **supply** of fuel, materials, and equipment (including health and safety equipment for the workers) for smooth operations;
Additional resilience factor on the level of the waste operator is the **organization and management** of the company in terms of taking all the necessary decisions on the day to day bases, like the organization of the shifts, routs, collection frequency, etc;
Another crucial point of resilience is the **communication capacity** of the utility company. In a time of crisis there is a great need for communication with the people, the customers, workers, authorities, to define the minimum service level that has to be preserved, and all of the mentioned actors, have a specific influence and expectations in that respect. Besides that, it needs to be communicated on how the service will be conducted during the crisis and how the general population should act and contribute to the preservation of the waste management service;
Another important factor for the resilience of the service is the **stability of the management structure** of the utility regardless of whether the company is public or private. This is because waste management is not a topic that can be learned in school, nor there is formal education for the managers of such companies. Therefore, big fluctuations in management positions are not good for the resilience of companies in emergencies, since experience and good knowledge of the system are necessary to preserve the service performance;

- Related to the previous factor there is also an issue of the quality and the level of the services that need to be defined, again in negotiation with the local authority;
- Independence of the waste management company is also an important issue, especially in the sense of budgetary independence. This means that the company can make independent decisions on the procurement of the means necessary for the operations;
- There are also some legal aspects of resilience that have to do with legal requirements in terms of objectives of the waste management being too high for a certain community or the citizens to fulfill it. If the capacity of the utility but also customers to fulfill the requirements or to pay for the services is not there, it can influence the resilience of the service in the long run. Step by step approach and being realistic is a good way to obtain resilience;
- An important aspect of increasing the resilience at the local level is to change the usual scientific narrative and be able to discuss day to day issues of the service provision with political leadership but also the public using the familiar language and real-life examples.
- The resilience is all about everyone doing their part at all levels in preparedness, prevention, and response to the disasters, and this includes all the aspects of governance like sustainable development, social policies, education, civil protection, but also utility services;
- There are many good examples in the region of municipalities that have done a lot in terms of risk prevention and response. There are examples like of City of Kraljevo in Serbia, or Municipality of Debar in North Macedonia. Zagreb in Croatia is a unique case of the city in lockdown that was hit by the series of earthquakes that should be further analyzed;
- Waste management is a logistic cycle that needs a lot of planning, and if the day to day planning is well-done service can be very efficient, cheaper, and much more resilient. Likewise, planning for emergencies can ensure the continuation of the services, keep the minimum requirements, and preserve the functionality of the utility company. For this task to be successful accurate and reliable data (on routs, fuel, shifts, workers, quantities, etc.) is needed as well as the supervision and monitoring to make sound decisions;

- To build a resilient system of waste management, first, we need to make sure to optimize the existing one. This is especially important in the SEE regions where waste management systems are overburdened with structural and day to day problems. Optimizing processes, reducing inefficiencies, and increasing the sustainability of utility companies is a precondition to the resilience of the services.