



## ERASMUS+ - Small-scale partnerships in adult education (KA210-ADU)

### Project RESCUE NET

#### Needs Analysis

##### 1. Executive Summary

This Needs Analysis has been developed within the RESCUE NET project to understand how people with disabilities experience emergency situations and how civil protection volunteers and professionals currently respond to their needs. The study was designed as the foundation for the co-design of inclusive emergency protocols (WP2.2) and the development of accessible training materials and digital modules (WP2.3). Data were collected between months 2 and 7 of the project through structured questionnaires disseminated in Italy and Turkey.

A total of 175 individuals participated in the survey. In Italy, 73 civil protection volunteers and professionals contributed, along with 3 adults with hearing disabilities. In Turkey, fifty-four volunteers and professionals participated, along with forty-five people with disabilities, including individuals with physical, sensory, cognitive and psychosocial impairments. This provides a diverse and sufficiently representative sample for a small-scale Erasmus+ partnership working in the field of adult education and civil protection.

Across both countries, the data reveal a consistent pattern of limited accessibility in emergency communication, a general lack of preparedness among people with disabilities, insufficient disability-related training among volunteers, and an absence of standardized inclusive procedures. Respondents with disabilities reported not knowing what to do during emergencies, not receiving accessible instructions, and rarely participating in training or drills. Volunteers, on the other hand, described communication as the central difficulty in supporting people with disabilities and repeatedly highlighted the need for further training, clearer protocols and stronger collaboration with disability organisations.

Despite the challenges, the results also underline an encouraging level of motivation. Almost all volunteers expressed willingness to participate in inclusive simulations, and people with disabilities stated that they would be open to taking part in future exercises. This confirms that RESCUE NET has the necessary conditions to introduce co-designed protocols, training modules and practical simulations in the following stages of the project.

The Needs Analysis therefore provides a robust evidence base for the upcoming activities of WP2 and a clear justification for the project's focus on improving accessible communication, enhancing the preparedness of volunteers, and strengthening the involvement of people with disabilities in all phases of emergency planning.



## 2. Methodology

The data were collected through two structured questionnaires. One questionnaire was addressed to people with disabilities and examined their personal experiences in emergency circumstances, their access to information, their knowledge of procedures and the type of support they would require. The second questionnaire targeted civil protection volunteers and professionals and examined their prior interactions with people with disabilities, the obstacles they encountered, the training they had received, and their readiness to adopt inclusive practices.

The questionnaires combined quantitative closed-ended questions with open-ended items that allowed respondents to describe their experiences in more depth. This made it possible to apply a mixed-methods analysis, integrating statistical trends with qualitative insights.

The surveys were disseminated by the Municipality of Pescara, Puzzle Social Enterprise and the Kapaklı Municipality. All responses were anonymous and processed in accordance with data protection principles.

## 3. Sample Overview

A total of 175 people participated in the Needs Analysis.

In Italy, seventy-three volunteers and professionals from civil protection groups and local authorities completed the questionnaire. These respondents generally had many years of experience, with the majority belonging to the 41–60 or 60+ age groups. The Italian sample also included three people with disabilities, all aged between 41 and 60 and all with hearing impairments. They all lived independently and had prior experience with emergencies.

In Turkey, fifty-four volunteers and civil protection actors completed the questionnaire. Compared to the Italian volunteers, many of the Turkish respondents had more limited experience in the field, although almost all expressed high motivation to engage in training and inclusive practices. The Turkish sample of people with disabilities consisted of forty-five individuals of various ages and disability profiles, including physical, visual, hearing, cognitive and psychosocial disabilities. Most lived with their families, and a significant proportion had already experienced emergencies such as earthquakes, fires or health-related crises.

This combined sample offers a rich perspective, allowing the Needs Analysis to capture differences in national contexts as well as shared challenges that appear across both countries.



#### 4. Context Analysis

Emergency preparedness systems in Europe aim to protect all citizens during crises, but people with disabilities continue to face significant barriers related to communication, mobility, and access to emergency services. International frameworks such as the UN Convention on the Rights of Persons with Disabilities (UNCRPD) and the Sendai Framework emphasize the need for accessible, inclusive, and non-discriminatory emergency management.

Italy and Turkey both follow these principles but face different challenges. Italy has a well-established civil protection system based on strong coordination between institutions and volunteers. However, accessibility measures for Deaf and Hard of Hearing individuals, such as sign language interpretation, visual alerts, subtitles, and inclusive emergency drills, remain insufficient and inconsistently implemented.

Turkey has strengthened its disaster management system in response to frequent natural disasters, with a strong focus on volunteer engagement and public awareness. Nevertheless, disability inclusion is still limited due to inadequate training, scarce accessible information, and weak mechanisms for identifying and supporting people with disabilities during emergencies. The 2023 earthquakes highlighted these shortcomings, particularly regarding communication barriers and inaccessible infrastructure.

Although both countries increasingly recognize the importance of disability inclusion in civil protection, significant gaps remain between policy and practice. The RESCUE NET project addresses these challenges by developing inclusive tools, protocols, and training programmes in collaboration with volunteers and people with disabilities.

#### 5. Findings: People with Disabilities in Italy

The Italian sample included three Deaf or Hard of Hearing adults who had experienced emergencies such as earthquakes, fires, or the COVID-19 pandemic. Despite the small sample size, their responses revealed common challenges related to emergency communication and accessibility.

All participants reported difficulties understanding emergency situations due to inaccessible information and communication barriers. Most felt unsafe or insufficiently informed, and the lack of sign language interpretation was identified as a major obstacle. Respondents described uncertainty and limited access to warnings and instructions as particularly stressful during emergencies.

Preparedness levels were generally low. Only one participant had previously taken part in an emergency drill, and none felt fully confident about how to respond in a crisis. Emergency information in their local areas was considered poorly accessible, with limited availability of sign language, subtitles, visual alerts, or adapted instructions.



All respondents identified sign language as the most important accessibility requirement and expressed interest in training on emergency procedures. They recommended more accessible videos, subtitles, visual communication tools, and broader dissemination of information tailored to Deaf individuals. All participants were willing to take part in future inclusive emergency simulations.

Overall, the findings highlight significant gaps in emergency communication and preparedness for Deaf people in Italy, underlining the need for accessible training materials, sign language support, visual tools, and clear instructions within the RESCUE NET project.

## **6. Findings: Civil Protection Volunteers and Professionals in Italy**

The Italian sample included 73 volunteers and civil protection professionals, most of whom had extensive experience in emergency response. While nearly 40% had previously assisted people with disabilities during emergencies, the majority had little direct experience in this area.

Respondents described supporting people with disabilities as both meaningful and challenging, particularly due to communication difficulties and the need to adapt assistance to individual needs. Communication barriers, especially with people who have sensory impairments, emerged as the main challenge, alongside structural obstacles such as inaccessible facilities and evacuation routes.

A significant finding was the lack of specialised training on disability inclusion. Around two-thirds of participants had received no formal training, and many felt insufficiently prepared to communicate effectively with people with disabilities during emergencies. Existing training and emergency procedures were often considered inadequate or lacking accessible formats.

Despite these limitations, volunteers showed a strong commitment to improving their skills. Almost all respondents considered disability-inclusive emergency planning important, and over 90% expressed interest in receiving further training. Many also highlighted the importance of collaborating with disability organisations and conducting joint emergency drills involving both volunteers and people with disabilities.

Overall, the findings reveal a highly motivated and experienced volunteer workforce that lacks the specific knowledge and tools needed to provide fully inclusive emergency assistance. The results highlight the need for targeted training, practical guidance, and accessible emergency protocols, which are key objectives of the RESCUE NET project.

## **7. Findings: People with Disabilities in Turkey**

The Turkish sample included 45 people with different types of disabilities, including physical, visual, hearing, cognitive, and psychosocial impairments. Most participants had experienced emergencies such as earthquakes, fires, health crises, or evacuations.



The findings show that most respondents did not feel adequately informed or safe during emergencies. Many reported difficulties understanding instructions, accessing information, and knowing how to respond. Emergency communication and preparedness measures were generally rated as poorly accessible, particularly for people with sensory or cognitive disabilities.

Participation in emergency drills was very low, and only a few respondents knew who to contact in a crisis. Challenges varied according to disability type: people with visual impairments struggled with navigation, Deaf individuals lacked access to visual alerts and sign language support, those with cognitive or psychosocial disabilities experienced confusion and stress, while people with physical disabilities faced mobility barriers and inaccessible evacuation routes.

Participants identified a need for accessible formats such as Easy-to-Read materials, audio resources, Braille, subtitles, and sign language. Many expressed interest in emergency preparedness training, provided it is adapted to their specific accessibility needs.

Overall, the findings reveal a significant gap between official emergency response systems and the ability of people with disabilities to access information, understand instructions, and evacuate safely. They highlight the need for more inclusive communication, accessible training, and stronger support mechanisms during emergencies.

## **8. Findings: Civil Protection Volunteers and Professionals in Turkey**

The Turkish sample included 54 volunteers and civil protection actors from municipalities, NGOs, and local organisations. Many participants had limited emergency response experience, with a large proportion involved for less than two years, highlighting the need for structured training.

Only a minority had previously assisted people with disabilities during emergencies. Those who had reported a range of experiences, from successful interactions with Deaf individuals to challenging evacuations involving people with mobility impairments. Many cited the 2023 earthquakes as a key event that exposed significant shortcomings in disability-inclusive emergency response, particularly regarding communication, evacuation support, and assistance for individuals with specific medical needs.

Most respondents had never received formal training on disability inclusion and felt inadequately prepared to support people with disabilities during emergencies. Common concerns included communication difficulties, lack of knowledge about different disabilities, fear of making mistakes, and uncertainty about providing appropriate assistance.

Participants identified several barriers to effective inclusion, including inaccessible infrastructure, limited assistive equipment, unclear procedures, and weak coordination between emergency services and disability organisations. Many noted that emergency plans are often designed for a “standard” individual and fail to consider diverse accessibility needs.



Despite these challenges, volunteers demonstrated a strong willingness to improve their skills. Nearly all respondents expressed interest in disability-inclusive training and suggested practical measures such as joint simulations, shared guidelines, closer cooperation with disability organisations, personalised evacuation plans, community volunteer networks, and accessible digital tools.

Overall, the findings reveal a highly motivated group of volunteers that lacks the training, resources, and experience needed for inclusive emergency response. This highlights the importance of the RESCUE NET project in providing targeted training and co-designed protocols to strengthen disability inclusion in emergency management.

## 9. Cross-Country Comparative Analysis

The comparative examination of the data collected in Italy and Turkey provides a valuable opportunity to identify systemic patterns that transcend national differences in civil protection structures. Although the two countries operate within different administrative and organisational frameworks, the responses gathered from both volunteers and people with disabilities demonstrate a striking convergence in the challenges encountered during emergency situations.

A first dimension of comparison concerns the profile and experience of civil protection volunteers. The Italian sample consists largely of experienced volunteers with several years of service within established civil protection organisations. Many respondents reported more than six years of experience, with a significant portion exceeding a decade of involvement. This reflects the long-standing tradition of volunteer engagement within the Italian civil protection system, where organised volunteer groups play a central operational role in disaster preparedness and response.

By contrast, the Turkish volunteer sample includes a larger proportion of individuals with relatively recent involvement in emergency response activities. A considerable number of respondents reported less than two years of experience. This difference may partly reflect the rapid expansion of disaster response networks in Turkey following recent large-scale disasters and the increasing emphasis placed on volunteer mobilisation by national disaster management authorities.

Despite these differences in experience levels, volunteers in both countries expressed similar levels of uncertainty when dealing with disability-related situations during emergencies. Communication difficulties emerged as the most frequently reported obstacle. Volunteers described situations in which they struggled to communicate instructions quickly with individuals who were deaf, visually impaired or experiencing cognitive stress. In such circumstances, responders often rely on improvised strategies, gestures or assistance from relatives present at the scene. While such improvisation demonstrates the goodwill and adaptability of volunteers, it also reveals the absence of structured communication tools within emergency response systems.

The experiences reported by people with disabilities also show strong similarities across the two countries. In both national contexts, respondents indicated that they rarely receive



emergency information in accessible formats and seldom participate in preparedness activities such as evacuation drills or community safety training. Many individuals reported feeling confused or disoriented during emergency situations because they were unable to understand announcements, warnings or instructions provided by authorities.

The comparison also highlights important differences related to the diversity of disability representation within the survey sample. While the Italian dataset focuses primarily on individuals with hearing impairments, the Turkish sample includes respondents with a wider range of disabilities including mobility impairments, visual impairments, cognitive disabilities and psychosocial conditions. This broader representation reveals additional layers of vulnerability during emergencies, particularly in relation to navigation, physical evacuation and sensory overload during chaotic situations.

Nevertheless, the most significant finding emerging from the cross-country comparison is the shared willingness among all stakeholder groups to improve inclusive emergency preparedness. Both volunteers and people with disabilities expressed a strong interest in participating in training programmes, collaborative simulations and awareness activities. This convergence of motivation represents a critical enabling factor for the implementation of the RESCUE NET project and supports the co-design methodology adopted within the partnership.

## 10. Gap Analysis

The analysis identified five major gaps in emergency preparedness systems in Italy and Turkey. First, emergency communication is often inaccessible, lacking sign language, visual alerts, audio formats, and simplified information for people with sensory or cognitive disabilities. Second, people with disabilities have limited preparedness and rarely participate in emergency drills or training activities. Third, volunteers and emergency responders generally lack specialised training on disability inclusion and accessible communication. Fourth, existing evacuation procedures often fail to accommodate the needs of people with mobility, sensory, or cognitive impairments. Finally, coordination between emergency services, disability organisations, and local communities remains weak, limiting inclusive planning and response.

Overall, the findings show that disability inclusion is not yet fully integrated into emergency management systems. Addressing these gaps requires accessible communication, targeted training, inclusive protocols, and stronger collaboration with disability stakeholders. The RESCUE NET project aims to respond to these needs through the development of practical, inclusive emergency protocols and accessible training materials.

## 11. Priority Needs Identified

The Needs Analysis identified five key priorities for improving disability-inclusive emergency preparedness: (1) accessible and multimodal communication, including sign language, visual alerts, simplified language, and accessible information formats; (2) increased preparedness and awareness among people with disabilities through



accessible training and emergency education; (3) structured disability inclusion training for volunteers and emergency professionals; (4) the development of practical and inclusive emergency protocols to guide communication, evacuation, and support actions; and (5) stronger collaboration between emergency services, disability organisations, and local communities.

Addressing these priorities requires practical tools, accessible resources, and coordinated action. The RESCUE NET project responds to these needs by developing inclusive emergency protocols, training materials, and accessible learning resources to strengthen emergency preparedness for all.

## **12. Pedagogical Approach for Deaf Accessibility**

The RESCUE NET training materials are designed around the communication and learning needs of Deaf individuals, who primarily rely on visual communication such as sign language, facial expressions, and body language. To ensure accessibility and effective learning, the project adopts a visual and sign language-based approach rather than relying on spoken or text-heavy instruction.

Training materials use sign language videos, visual demonstrations, and realistic emergency scenarios to explain procedures and communication strategies. This approach improves understanding, supports self-paced learning, and helps learners build confidence through repeated exposure to emergency situations.

Overall, RESCUE NET combines sign language communication, visual learning, and scenario-based training to create accessible, effective, and inclusive emergency preparedness resources for Deaf communities.

## **13. Conclusions**

The Needs Analysis identified communication barriers as the main challenge for Deaf individuals during emergencies and highlighted the lack of training and guidance available to volunteers. To address these gaps, the RESCUE NET project develops inclusive communication protocols, accessible training materials, sign language videos, and digital learning resources.

By promoting accessibility, collaboration, and active involvement of Deaf communities, RESCUE NET aims to strengthen inclusive emergency preparedness and create safer, more resilient emergency response systems for all.



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