Working Group 3: Developing an efficient Community prevention framework

Objective

On the basis of relevant experiences and approaches in risk assessment and prevention, implementation of EU legislation (e.g. the Floods, the Water Framework, or SEVESO II Directives), and relevant Community projects the working group will aim at identifying the main constitutive elements of a Community prevention framework.

Background

For the purpose of this document a hazard is defined as a natural or man-caused event capable of causing loss or severe damage to life, the environment or property. A hazard implies the potential to cause harm. Risk on the other hand, is the likelihood of harm and its severity or consequences. A consistent prevention framework typically includes most of the following steps:

1. ***Hazard/risk identification***: to systematically identify the hazards/risks in one or more geographic areas. Such inventories provide a reliable and updated base for decision-making and can be developed at local, regional, and/or national level (to base any decision on relevant, reliable and updated information about the occurrence of hazards, building upon the data-collection systems in place: databases at local, regional, and national level; databases from reliable sources (insurance, meteorological companies).

2. ***Hazard/risk analysis:*** to provide a robust understanding of the identified hazards and its likelihood.

3. ***Impact analysis****:* impact criteria (cost, disruption common life, psychological/social impact) enable analysing the impact of possible disasters, taking into account vital interests such as territorial security, physical security, ecological security, social and political stability and protection of cultural heritage.

4. ***Risk assessment****:* aims at assessing the probability and magnitude of the potential damage. This provides the basis for planning prevention measures. Risk assessment takes into consideration scenarios (anticipated and worst case), warning time, possible consequences of the damage as well as regional variations, and any interdependency between risks. In some cases, there could be the need for a coordinated and integrated approach (complex society-increased interdependence on complex systems, diffuse and changing threats and international dimension). The direct and indirect damage potential should be taken into consideration, building upon vulnerability analysis and an estimation of the value of the elements at risk.

5. ***Scenarios/risk management:*** For specific risks, it might be necessary to develop risk scenarios and proceed to a gap identification based on the socio-economic vulnerability.

6. ***Risk matrix:*** A matrix or diagram can be used to classifying risks according to their probability and consequences. The matrix shows which risks have high impact and highly probable, high impact but low probability, low impact but highly probable etc. This can be used as a decision-making tool for prioritising for example mitigating measures.

7. ***Risk map***: Risk maps show the results of calculations of the risk and are portrayed in a geographic perspective with designated zones for specific types and levels of risk. For all areas within a specified risk zone, the likelihood of occurrence of an event is the same. Therefore, a risk map portrays zones of equal level of potential risk, for example, the 100-year flood risk zone.

8. ***Essential services***: are identified which need to be maintained or quickly restored: water and food supply, transport, oil and fuel, gas, electricity, telecoms, health, financial services.

9. ***Objectives/targets*** are set in terms of maximum risk or decreased vulnerability

10. ***Building capacity/policy arrangements****:* In the light of the above information policy priority measures are identified to prevent risks and minimise damage. The latter may include preparedness and response measures. The measures may be incorporated in a disaster/risk prevention plan or programme.

11. ***Public information/consultation****:* Under certain conditions, a public consultation for risk assessment and planning may be foreseen.

12. ***Review processes*** are needed to evaluate the assessment and policies and to adapt these to any evolving situation.

Questions for discussion:

1. *What should be the overall goal of a common Community disaster prevention framework?*

2. *Which of the steps described above or supplementary steps would usefully be included in a common Community disaster prevention framework?*

3. *Would it be more effective to apply such a framework with a multi-hazard approach or to apply it to separate risk scenarios?*

4. *In addition to a multi-hazard approach which specific hazards listed hereafter would benefit from a sectoral approach?*
    a. *industrial or nuclear accidents ;*
    b. *forest fires and fires;*
    c. *storms;*
    d. *droughts ;*
    e. *extreme weather events ;*
    f. *earthquakes ;*
    g. *avalanches ;*
    h. *tsunami ;*
    i. *volcanic eruption ;*
    j. *landslides;*
    k. *terrorist attacks;*
    l. *accidents involving marine pollution.*

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