



Web-based platforms for Accounting of Disaster Loss Data

Eva Trasforini, Tatiana Bedrina, and Marco Massabò

CIMA Research Foundation, Savona, Italy (eva.trasforini@cimafoundation.org)

In this work a short description on comparison of several web-based systems on accounting of disaster loss data on natural hazards and other catastrophes is presented. The losses accounted by analyzed systems include human victims, economic costs, loss in housing, education, health sectors, infrastructure and cultural and environmental assets.

The seven global targets and the four priorities for Disaster Risk Reduction for action are defined for the next 15 years by Sendai Framework. In order to properly reporting on disaster losses the accounting systems should have the architecture in line with the Sendai Framework requirements. The recently updated Sendai Technical Guidance for Monitoring and Reporting on Progress envisages the set of minimum standards describing a detailed international understanding of indicators and data required.

One of the most considerable disaster loss databases is DesInventar disaster loss accounting system supported by UNISDR. It includes disaster loss data of more than 90 countries worldwide. The recently updated Sendai indicators described in Technical Guidance will be embedded into the DesInventar system. The actual version includes qualitative and quantitative indicators on human loss, economic and physical loss. The extended and detailed part of economic sectors, physical damages and human loss will be included in the new version of DesInventar database.

Several loss databases developed at national level followed standards of EU Directives and may be compatible with Sendai Framework requirements.

The specification of EU Floods Directive 2007/60/EC for flood data collection were successfully implemented in the FloodCat catalog, designed by the Italian Civil Protection Department for operational use and data sharing with European Commission. This IT platform is developed in order to guarantee consistency of flood data collection at national level taking into account each flood event, its phenomena and specific damage, according to EU Floods Directive specification. It includes consequences on Human health, Environment, Cultural heritage and Economic activity.

The Government of the Republic of Slovenia through the Administration for Civil Protection and Disaster Relief uses the AJDA damage assessment instrument. The methodology is based on national cadastre system and since 2003 is used to assess the damage caused by natural and other disasters for agricultural production, property (buildings and infrastructure) and the economy.

These web-based applications provide conformity to standard, uniformity to data collection and a proper level of accounting at geographical level. The requirements on data sharing on European and international level will be satisfied in presence of common databases and specifications on data accounting. The FloodCat database and AJDA could provide loss data in line with requirements of Sendai Framework.