World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering Vol:8, No:12, 2014

Design Patterns for Emergency Management Processes

Authors: Tomáš Ludík, Jiří Barta, Josef Navrátil

Abstract: Natural or human made disasters have a significant negative impact on the environment. At the same time there is an extensive effort to support management and decision making in emergency situations by information technologies. Therefore the purpose of the paper is to propose a design patterns applicable in emergency management, enabling better analysis and design of emergency management processes and therefore easier development and deployment of information systems in the field of emergency management. It will be achieved by detailed analysis of existing emergency management legislation, contingency plans, and information systems. The result is a set of design patterns focused at emergency management processes that enable easier design of emergency plans or development of new information system. These results will have a major impact on the development of new information systems as well as to more effective and faster solving of emergencies.

Keywords: analysis and design, Business Process Modelling Notation, contingency plans, design patterns, emergency

management

Conference Title: ICBSDA 2014: International Conference on Business Systems Design and Analysis

Conference Location: Istanbul, Turkey Conference Dates: December 05-06, 2014