Information Security in Crisis Management System

Ummul Khair Israt Ara
M.Sc. Student
ummul@student.chalmers.se

Fang Chen
Associate Professor
fanch@chalmers.se

STATEMENT OF TOPIC

Information Security in Crisis Management Systems

SIGNIFICANCE AND RELEVANCE

Information Security is an important part of almost any kind of Information System. In a CMS, Expert Systems share potentially sensitive data, which needs to be secure in any kind of crisis situation. The level of security required depends on the type of crisis situation, a security system needs to be able to dynamically change to meet the needs of the current situation. Terror attacks are an example of a crisis situation where high system security is needed.

ABSTRACT

Information security is an important part of almost any kind of Information System. Crisis Management Systems (CMS) are a type of Information System that deals with information which needs to be secure. No matter what kind of crisis, natural disasters, man-made crisis or terrorist attacks, the CMS security should not be compromised.

There are many challenges regarding exchange of qualified information and interoperability between various Expert Systems and the CMS. It is important to have strong security in terms of technology, skills, security requirements, sensitivity of information and trust-worthiness (Vural, Ciftcibasi and Inan, 2010). Depending on the type of crisis situation, different sets of security components should be triggered, since the security requirements vary between situations. For example, a terrorist attack has different security requirements in the system compared to a natural disaster or a medical emergency.

In this paper, the importance of Information Security in CMS will be discussed. Methods for secure exchange of qualified information are analyzed and a secure and dynamic Crisis Management Information Security System (CMISS) design is introduced.

REFERENCES

1. Vural Y., Ciftcibasi M. E., and Inan S (2010) Information Security in Maritime Domain Awareness; *RTOMP-IST-091 - Information Assurance and Cyber Defence;* Tallinn, Estonia