Interactive comment on "Data interoperability software solution for emergency reaction in the Europe Union" by R. Casado et al.

Referee - Gisèle Bambara

GENERAL COMMENTS

This study is really interesting. It improves coordination between the different stakeholders in emergency situation. It allows managing a crisis despite differences between stakeholders (cultural, semantic and linguistic). In the present context this type of tool is really needed. For this reason, this paper is appropriate for the journal NHESS. Some specific remarks will improve the paper. The context must be presented based on the literature. Further, NHESS is not a review specializing in computer language. So I think that the different acronyms must be automatically clarified. Indeed, I am not a specialist in computer language. I had to search for meanings.

SPECIFIC COMMENTS

Section 1 Introduction

Generally speaking and particularly in paragraph 1, it would be good to give the context with references on emergency management. For instance, (line 5) "time is the number one quality parameter" why? References? This remark is valid for the whole of your introduction; your article would be greatly improved if you gave more examples and references to submit your problematic.

P 6005 line 11 – Please define "ICT". Acronyms should be defined the first time they appear in the text.

P 6006 line 7 - Could you explain "the vertical and the horizontal axis"? I don't quite understand what that is.

P 6006 line 25-26 – "However, message mapping … vehicle types." This is an important choice that must be explained.

Section 2 – Technical solution overview

P 6008 line 17 - Please define "API". Acronyms should be defined the first time they appear in the text.

P 6009 line 16 – Please define "REST".

Section 3 – The EMERGEL ontology

P 6009 – line 20 – "EMERGEL (EMERgency ELements)": It is necessary to define EMERGEL the first time it appears in the text. Although it is defined in the abstract.

P 6009 – P6010 line 25 at 27 and line 1 at 5 - This paragraph should be placed rather in the introduction section. It also must be added references.

P6010 – Please define "DOLCE" and "RDF"

P6011 – line 3 – What is it "tOWL"?

P6011– Please define "FOAF", "WAI", "W3C"

P 6013 – line 4 at 7 - How did you formalize the expert knowledge? References? [1]
How do you define an expert? References?[2]

P 6013 line -15 - What is it "IT crisis"?

Section 4 – The DISASTER software architecture

P 6014 line 22 – Acronym of "Web Service" has already been used. It should be used directly

P 6014 line 24 – Change "Figure" 3 by "Fig. 3" for NHESS

Section 5 – Validation

Section 5.1 - Would you have references on this experience feedback?

TECHNICAL CORRECTIONS

P6030 – Figure 4 - The level of quality of this figure is to improve. Especially, the green background is too dark.

P6031 – Figure 5 - The font size of the text too small.

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[1] Corinne Curt, Laurent Peyras, and Daniel Boissier, "A Knowledge Formalization and Aggregation-Based Method for the Assessment of Dam Performance," *Computer-Aided Civil and Infrastructure Engineering* 25, no. 3 (avril 2010): 171–84, doi:10.1111/j.1467-8667.2009.00604.x.
[2] Gilles Zwingelstein, *Diagnostic des défaillances: théorie et pratique pour les systèmes industriels* (Hermès, 1995).