Hazards and Disasters Visual Exhibition

Specification/Architecture

By Laura J Tilley 29.11.2018

**Purpose**

The Virtual Exhibition (VE) will be developed as an educational resource (outreach) for school pupils/students and the general public. Also teachers/lecturers should be easily able to incorporate it in to their lessons (maybe use as part of a lecture or practical’s). The purpose of the VE is to promote the importance of Earth Science museum collections that represent hazards and disasters with regards to understanding futures hazards and disasters.

The VE needs to be visually appealing/interesting, and easy to use/navigate. It will contain images, short videos and text.

This document describes the architecture of the VE and how it will function. Alongside this document is a PDF showing the initial draft design of the VE, so please refer to this as you read architecture section. On the PDF there are some annotations (in red) to guide you, but these are not actually apart of the VE.

**NOTE**: The design needs to be smoothed out by web-designers to make it look professional “Shiny looking”. There is only so much that I can do in PowerPoint.

We will also just focus on three hazard and disasters examples to begin with and then add more as we gather further information on museum collections.

**Architecture of the Virtual Exhibition**

**Home page (Slide 1 of PDF)**

* This will welcome the user and briefly explain the purpose of the VE and how it can be used. There will be links on this page giving further information about Earth Scientists, the authors/Earth Science Group, and terminology/definitions (these will be a separate page with writing and images. These extra pages will have the exact same design as the homepage.
* The main menu is on the horizontal panel along the top, it includes all the different types of hazards.
* For example if the user clicks on **Local/Regional Scale**…..

**Local/regional page (Slide 2 of PDF)**

* On the far left side, this will explain what local/regional hazards are and what they include, e.g. Impact events, which is have a link next to it (e.g. Extraterrestrial), so that they can go straight to Extraterrestrial events if they wish.
* The user can browse the different local/regional events by geological time using the geological time scale in the middle (which scrolls up and down) (time span from the Proterozoic to present day). Geological periods that have examples available will be highlighted whereas ones that do not will be faded/darkened (refer to Slide 2 PDF).
* For instance, on slide 2 the Neogene is highlighted and when the user clicks on it, all the available examples of hazards/disasters in the Neogene will be presented on the right hand side. The user can scroll through them and pick the one that they want.
* For instance the user chooses the **Ries and Steinheim impact event**…..

**Ries and Steinheim impact events (Slide 3 of PDF)**

* On the left there will be a time line showing when the event occurred, the duration and background story (the user can scroll down).
* In the middle section the user can browse the museum collection images (scroll up or down). When they click on an image (e.g. **the snail image**) an enlarged version appears with a description (e.g. Slide/Page 4).

All of the other headings on the main menu will have the same structure as the above.

**Quiz**

* These could be questions to help the user discover different areas of the VE (they can click on the clue button for help, and the check button for the correct answer).
* The quiz can be added to or changed by authors to keep it up to date.
* The quiz content will be decided once we know have the hazard case studies/examples.

**Feedback from ESG**

**Answers to (NHM Vienna) questions.**

Q1) It needs to be very clear what the VE has to offer beyond the content of the Geohazard Survey paper – at this stage (for me) it appears that it will largely be recycling content from the manuscript, publishing more or less the same content in a different format. If this really is the plan then it is hardly justified in my opinion.

1. First of all – we will encourage members of the group to give more information on the examples that we have (Photos, Videos etc.). Maybe ask PhD/Masters students to get involved and advertise it as outreach experience.  Caroline Michelle appears to be enthusiastic about adding some modern examples.

We will ask again who is willing to help expand on what we have and what resources they can promise.

Q 2)      If this is to be expanded and is intended to include examples and brief descriptions for ALL the geohazards (of ALL collections) identified in the survey, creating some kind of a visual database for this survey then it might be a useful thing to do.

A) Our intention should not be to show all collections but a representative set of good examples.

Q 3) Who is the audience for this? This is a key question in my point of view and needs to be clarified before anything else is done! If it is researchers, then the Geohazard paper alone will be sufficient and there will be no need for the VE. If it is intended for the public this is an entirely different matter. In order to make this useful for the widest possible audience it would be necessary to design this in a multilingual way, i.e. use a content management system that allows easy and efficient administration of multiple language versions of this.

A) Audience: general public and students/school pupils. We decided that it was going to be developed as an outreach resource (ESG skype meeting minutes 7th June). The main concern is that it has to be linked to the main exhibitions. Or we could use it as a resource for when people from the museums do outreach at schools and they could advertise it.

Q 4) The collections/institutions where material for the respective event is available need to be readily visible on the page describing the event (links to the institutions are needed as well, so people can find the place where they can learn more about the specific geohazard. Also – if intended for the public – it would be important to initially focus on the geohazards displayed in the exhibitions of the participating institutions, because it is only these that the wider public can access. This does not say that we cannot include geohazards documented only in our scientific collections, but I would strongly suggest to start with those that people can actually explore in the exhibitions.

A) Well we ask museums what exhibitions they currently have – which would fit the Hazard and Disaster Virtual Exhibition. We will have links for the different museums, setting links vice versa is not a problem at all, and contrary this is welcome.

Q 5) It needs also to be clarified early on, who will be responsible for the long-term maintenance of the homepage? Who will provide feedback for user contacts and requests? Remember the issue of GeoCASe – if there is a lack of commitment by the creators then homepages quickly become outdated and non-functional. It is necessary to define an intended life-span for this VE and responsibilities for maintaining it.

A) This issue must be divided between the different institutes – in terms of science content (we will have the contacts of the different institutes). We should provide a representative contact at for the institutes.

Technical maintenance – CETAFs issue if it goes to a CETAF server.