## Recommendations from the Product Development Subcommittee

**Participants:** The subcommittee met virtually on October 13, 2021. Attended to the meeting: Jonathan Garro, Yuichi Ono, Chiara Proietti, Shiomi Yumi, Julio Serje

### Introduction

The following is a summary of the recommendations for potential new features that could be implemented in the GLIDEnumber website. These recommendations target the User Interface (UI), including administration and public sections and the current rules governing the generation of GLIDEnumbers, and include the suggestions coming from the API subcommittee (Recommendations 1 and 2, detailed in the corresponding report).

The ordering of the recommendation does not imply a higher priority recommended, rather the order in which they were discussed in the subcommittee meeting. Prioritization of the implementation should be decided by the Steering Committee taking into account availability of resources and importance/impact of the recommendation.

### Recommendation 1: More powerful Hazard management

Please see the API subcommittee report. It proposes several enhancements including the possibility of associating a record to more than one hazard, the creation of ‘families’ of hazards for the purposes of searching, and others.

### Recommendation 2: More flexible Extension of GLIDEnumbers

Please see the API subcommittee report. It proposes several enhancements including the possibility of extending records to different hazards than the original, be it on a different country or within the same country to allow a hierarchy of disasters, or cascading disasters.

### Recommendation 3: Better Linkage with other databases/websites

There are now many websites and databases that make use of GLIDEnumbers. The current implementation of ‘related’ information for each GLIDEnumber doesn’t have the power to ‘discover’ these web pages. A review and enhancement of this functionality should be made so that when users open a GLIDEnumber detail page they effectively find links to other sites that have coded their information with the respective GLIDEnumber.

An important case of this is a possible linkage with EMDAT (see Recommendation 5 for additional information on this), by also storing the EMDAT identifier of the disaster, and linking the GLIDE records to EMDAT records in the area “Related Information”.

### Recommendation 4: Crowd sourcing of disaster reporting

This recommendation has been given by users and SC members several times. It will allow non-participating institutions and users all over the world to inform the GLIDEnumber database that a disaster has happened that is not currently posted on the website.

This functionality would encompass a data capture facility, which should include the ability to upload documents, (reports, pictures, videos) and links to credible sources required to confirm the veracity of the information about the disaster; it would also include a moderation functionality that allows the GLIDE team to ‘approve’ a crowd-sourced posting and generate the corresponding GLIDEnumber.

### Recommendation 5: Review current loss indicators, adjusting to Sendai Monitor

The current implementation of the website allows for several loss indicators, namely number of people killed, injured, affected and homeless as well as the number of destroyed houses. It has been suggested by users and stakeholders that these indicators are made public (and used for reports and statistics), and on the other hand augmented to align the system with the Sendai Framework Monitoring. Examples would be the economic loss indicators, agricultural losses, etc.

This decision has a deep impact on the system, but it would definitely improve the way the system can support governments in the process of reporting to the Sendai and SDG’s monitoring systems.

In many cases GLIDEnumbers are issued very early in the disaster life cycle, when most of these indicators are not yet available. Deciding to make them public (and augmenting them) would imply a process by which disaster data is reviewed at a later stage to ensure correct (or better) loss data is included in one record, probably retrofitting the database with past disaster data, and a mechanism for quality control, all of which should be properly documented as SOP’s.

One good way of obtaining some of these indicators is to link with EMDAT, which could be of great benefit for both systems. Some of the linkage could be done automatically, but there would be manual work to match disasters that are reported differently in both systems. This recommendation is aligned with recommendation 3.

### Recommendation 6: Improvement of GIS capabilities and linkages to GIS systems

Currently the system uses a single marker to point to the location or centroid of the area affected by the disaster. It would be very convenient if the system could have additional mechanisms (polygons, etc.) that would help to describe the footprint of a disaster. This could be done using either an interface to GIS systems (import of maps) or the usage of something similar to Open Street Maps to interactively create the geographical shapes. An example of this is Missing Maps (Mapping vulnerable communities) at https://www.missingmaps.org.

### Recommendation 7: Implement exporting search results/ get results as excel

This feature would allow the use of GLIDE system in other applications. The results of the search and other products of the system (statistics, reports) could have this facility.

### Recommendation 8: conduct formal usability tests to improve User Experience UX

The system has not yet undergone a formal usability testing, which is a formal process that could shed light on how to improve the user experience. In a usability-testing session, a facilitator asks a participant to perform tasks, usually using one or more specific user interfaces. While the participant completes each task, the researcher or a hardware system ‘observes’ the participant’s behavior and obtains feedback as the user completes the task, identifying areas difficult to understand, or interactions tha are not clear, etc.

It normally involves using specialized software tools and a careful design of the test itself.

### Recommendation 9: Improve the Help online

The current Online help pages are very brief and could be improved greatly with screen shots, graphics and possibly videos.

### Recommendation 10: Allow longer comments

The current system has a limit of 4,000 characters for the report. It could be increased to a much larger field, or even a field with no practical limit, so long texts and reports could be entered (with large binary objects BLOBs).

Reporting and search results would need some adjustments to support this feature, in addition to the change required in the database itself.

### Recommendation 11: Allow multilingual data (comments)

Currently reports are being entered in the native language of those who report. Records in French and Spanish can be found in the dataset.

It would be very useful to enter this data in more than one language. In particular would be very useful to have always an English version of the data.

### Recommendation 12: Improve the sections on statistics and charts.

This section could be highly improved if loss indicators are made public. Please see recommendation 7, it could also include a way export these statistics to excel.

### Recommendation 13: Use Google analytics to obtain statistics of user usage

Complementing the Usability tests, adding Google analytics to the site could shed light on how the site is used by the public, and therefore improving those areas that are the most requested features of the system.

### Recommendation 14: Allow upload of documents, links, videos, pictures and other media

Users will obtain a much richer amount of information.