

AUS-e-STAGE MAPPING SERVICE

REPORT ON THE ALPHA 2 TESTING PHASE

| | | | |
|-------------------------|---|----------------------|------------------|
| Testing group invitees: | LIEF Grant stakeholders and associates: | | |
| | Gillian Arrighi | Bill Dunstone | Kathryn Gilbey |
| | Neal Harvey | Joon Kwok | Paul Makeham |
| | Peter Stephenson | Helen Trenos | David Watt |
| | Academic Researchers | | |
| | Stephen Carleton | Peta Mitchell | Jane Stadler |
| | Postgraduate students: | | |
| | Tim Curlevits | Katherine Fitzgerald | Rob Marchant |
| | Cath McKinnon | Fiona Sprott | Alex Vicary-Howe |
| | Aus-e-Stage Project Committee and Taskforce: | | |
| | Jonathan Bollen | Paul Coddington | Neil Dickson |
| | Jenny Fewster | Paul Gardner-Stephen | Julie Holledge |
| | Chris Marlin | Ian Maxwell | Liz Milford |
| | Wei Ren | Corey Wallis | Brad Williams |
| | Other interested parties: | | |
| | Andrew Bailey | | |

Number of respondents: 16

Testing period: May - July 2010

Summary of feedback requested:

Please visit <http://beta.ausstage.edu.au/mapping/> to look at the trial service and take 20-30 minutes to explore what you can do. You can browse a map of venues in AusStage. You can also map contributors and organisations of interest to you.

As you explore, keep notes on what you are doing and what you are seeing. When you're done, we'd like you to tell us what you did. For example...

- Which areas of the map did you browse?
- Which artists and organisations did you map?
- Did you try reloading the map using the time slider, to see trajectories, or to zoom in on a region?
 - What did the maps show you?
 - Were there any surprises?
 - Was there anything missing?
- What else would you like to do with the mapping service?
- What would you like to see in the next version?

In addition, we are working on a number of Australian Bureau of Statistics data layers which can be overlaid to the maps. For Alpha 2 testing purposes an example of these for the Australian Capital Territory can be found at <http://beta.ausstage.edu.au/mapping/absdatasets.jsp>. Please take an extra moment to view these and let us know your feedback.

The Aus-e-Stage Mapping service was released for Alpha 2 testing on 31 May, 2010. An extended response period was granted for this testing phase to enable the service revisions for the forthcoming beta release to fully incorporate the user feature requests received. In addition, examination of the newly released Google Maps Application Program Interface (API) Version 3.0 was carried out during this phase to ascertain whether migration of the service to this version should be undertaken at this stage. As a result, timelines for the Mapping Service have now been adjusted forward by approximately six weeks with Beta Testing scheduled for September and Production Release by 25 October, 2010.

Feedback received during the Alpha 2 testing phase can be reported under five main headings:

1. Design and Cartography attributes
2. AusStage service integration
3. Mapping Web application
4. Google Earth aspects
5. User documentation

Design and Cartography attributes

As part of the next phase of development key attention will be given to Mapping Service design and cartographical aspects. Whilst minimal Alpha 2 testing feedback was received on these attributes the importance of the creation of an aesthetically agreeable template with standardised layout, tools, fonts, colours and icons in line with cartographical conventions is recognized.¹ External expertise will be sought to ensure this process is professionally and succinctly accomplished in line with user requirements.

AusStage Service integration

The forthcoming AusStage LIEF project will be closely integrated with aspects of the Aus-e-Stage Mapping Service. For example, the API used will allow the dynamic inclusion of maps on AusStage search pages which in turn will enable one click interactivity between the Aus-e-Stage Mapping Service and the AusStage database. Recommendations to take this attribute a step further with maps for AusStage drilldown pages with lists of events for contributors, organisations, venues and other basic and advanced search criteria are also noted from the Alpha 2 feedback. A simple alphabetical browse list of contributors was requested in feedback and this may be a future AusStage LIEF consideration.

Mapping Web application

As mentioned in the introductory comments, significant consideration to the recent Google Maps API upgrade has occurred during this phase. To date, the Aus-e-Stage Mapping service has been built upon the Google Maps Javascript API Version 2. In May, 2010, Google Maps officially moved to Javascript API Version 3. This new version has now been carefully considered by the Aus-e-Stage development team and recommendation to move the Mapping service to this new version has been made with the following core supporting arguments:

- the Google Maps Javascript API Version 2 has been officially deprecated as of May 19, 2010; Google Maps Javascript API Version 3 is now the official Javascript API, and Google is encouraging migration to Version 3,
- the Aus-e-Stage mapping service is still in active development, we should incorporate new technologies while we can,
- the requested revisions to the mapping service are extensive rather than incremental - including changes to interface functionality, redistribution of functionality between web and kml, preparation for integration within the AusStage interface, and visual redesign,
- V3 supports the functionality currently used in the mapping service,
- V3 also supports features requested by users which cannot be delivered in V2, e.g. StyledMapTypes for customisation of map colours, and

¹ A preliminary template concept is outlined in Appendix 1

- V3 is optimised for mobile deployment, more suited for use in the Researching Audience service.

As the Aus-e-Stage Mapping service is presently at the Alpha 2 service revisions stage it seems both timely and relevant to move to Google Maps Javascript API Version 3 at this point. However, it should be noted that this move will demand extended code rewriting and interface redesign and therefore an additional six to eight weeks of time will be required, moving the Mapping Service release date to approximately 25 October, 2010 (still well within the Aus-e-Stage Project period). As we are ahead on the Navigating Networks phase by approximately four weeks it is anticipated that the extension to the Mapping Service development period will not affect the project's ability to be completed on time.

With this API upgrade in mind the web application related Mapping Alpha 2 feedback can be summarised and itemised to fit neatly into this redevelopment and code rewriting. As the decision has been made to move more advanced options (such as trajectories and overlays) to the KML downloads these can also be removed from the equation allowing a relatively straightforward revisions list to be compiled directly from the feedback.

The mapping web application will integrate the functionality developed to date for displaying venues, contributors and organisations, both individually and in multiple. It will also incorporate the following revisions:

- Cluster icons are needed for the browse map to simplify the view and solve loading speed issues.
- Information windows should be standardised with maximum content and effective use of available data.
- Tooltips on markers need to be standardised across all platforms to effectively assist users.
- Markers should be coloured differently for each contributor to allow easy differentiation.
- A decision is needed on most appropriate default map view to be used as basis for the service.
- Zooming improvements are needed to reduce the clumsy scrolling in and out. Suggest to state, capital city and regional centre levels. Double clicking on markers could readily enable such zoom options.
- More detailed error messages are needed to assist users in troubleshooting.
- Timeslider functionality needs to remain on the web page but needs to be easier to use.
- Only one KML download option is needed, the use of this implies "advanced" in any case and thus removes the need to label it as such. This should contain all the available mappable options. The persistent link page should also offer the KML download option.
- A simple "start again" button is needed to clear search data and begin over.

Several additional requests were also received in the Alpha 2 feedback and will require a little more thought and interface redevelopment to incorporate:

- Users requested a linked text based list of venues to also be displayed with the map.
- Text based tables for contributors and organisations were also suggested in line with mapping searches.
- Mapping according to genre was requested.

It can be noted that feedback comments received in relation to the use of the trajectories varied between the knowledge of users and made it apparent that those with less experience did not benefit from these being available via the Google Maps interface.

Google Earth aspects

Feedback gathered from the Mapping Alpha 2 Testing phase suggests that more advanced AusStage users are keen to embrace some of the more sophisticated options (for example trajectories and overlays) that can be readily included into KML format files. These downloadable KML files are readily viewed in Google Earth but are not explicitly limited to only this platform and therefore considered to be a good, flexible choice of file format. By removing some of the more complex options from the Google

Maps interface it serves purpose to both simplify and de clutter this view, making it easier for basic users to successfully navigate and comprehend the key mapping information displayed.

In the KML development process several aspects of feedback need to be considered:

- Standardisation of content for information windows and tool tips is essential so the information displayed between the various interfaces is consistent and uniform in functionality across all platforms.
- Trajectories need to be coloured by organisation and contributors, to have start and stop points and keys and to indicate direction. If possible trajectories should also take event functions into account and be able to show specific productions and tours.
- Different coloured markers are needed for each contributor and organisation.
- Instruction on the production and application of overlays from external sources should be provided in line with the ABS overlay creation being undertaken by the Aus-e-Stage team.

In short, it is envisaged that the KML download selection from the Google Maps interface will contain all possible advanced choices with the opportunity for users to tick box select as many or few as required.

User documentation

A range of user documentation ideas were presented in the Mapping Alpha 2 feedback phase. These have been narrowed down to four main types:

1. Frequently Asked Questions – with range from simple questions like “Why do I not see information on my map?” to “How do I create a suitable overlay using my own data for use on my map?”
2. Tool Tips and Online Help – use of cursor roll-over tool tips to display information combined with more detailed hyperlinked online help as needed.
3. User Manual – to be integrated as possible with existing AusStage manuals and information.
4. Definitions and Terms – creation of a concise help document containing technical definitions and terms.

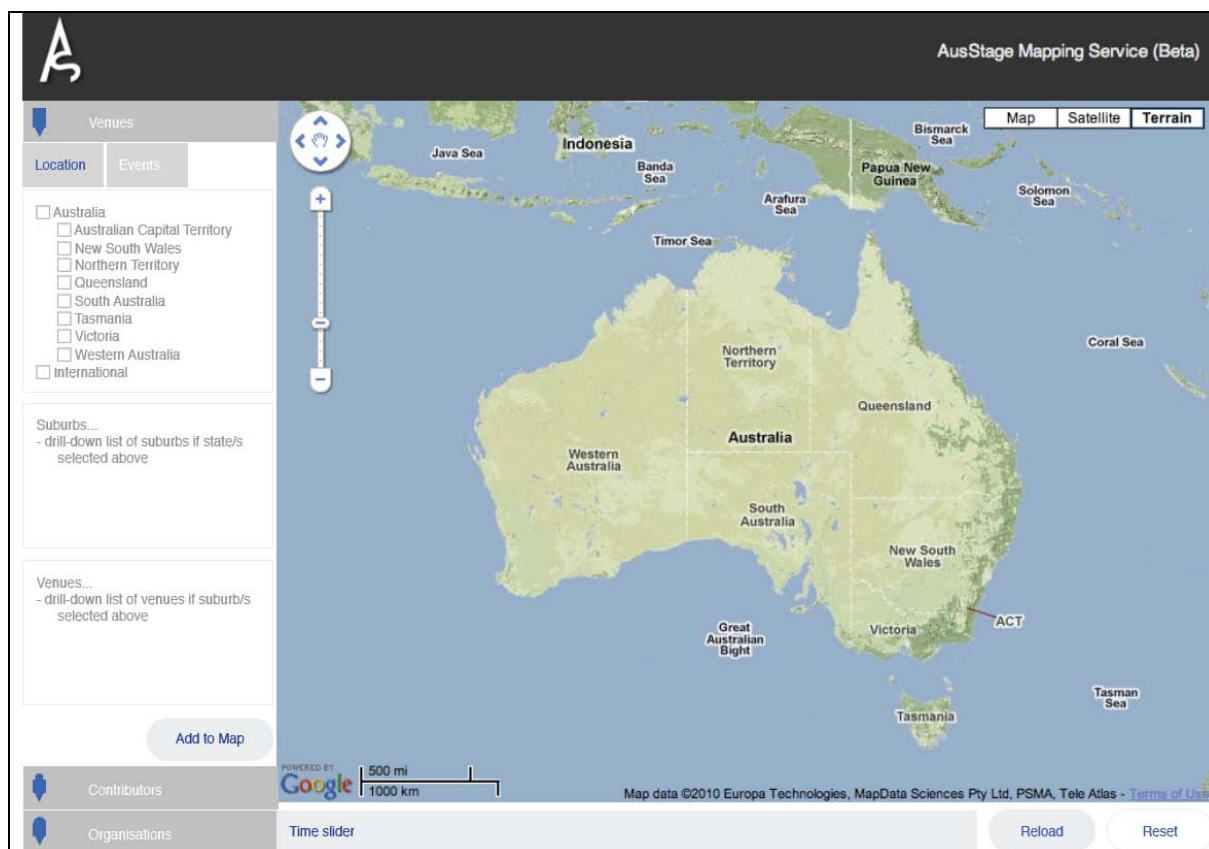
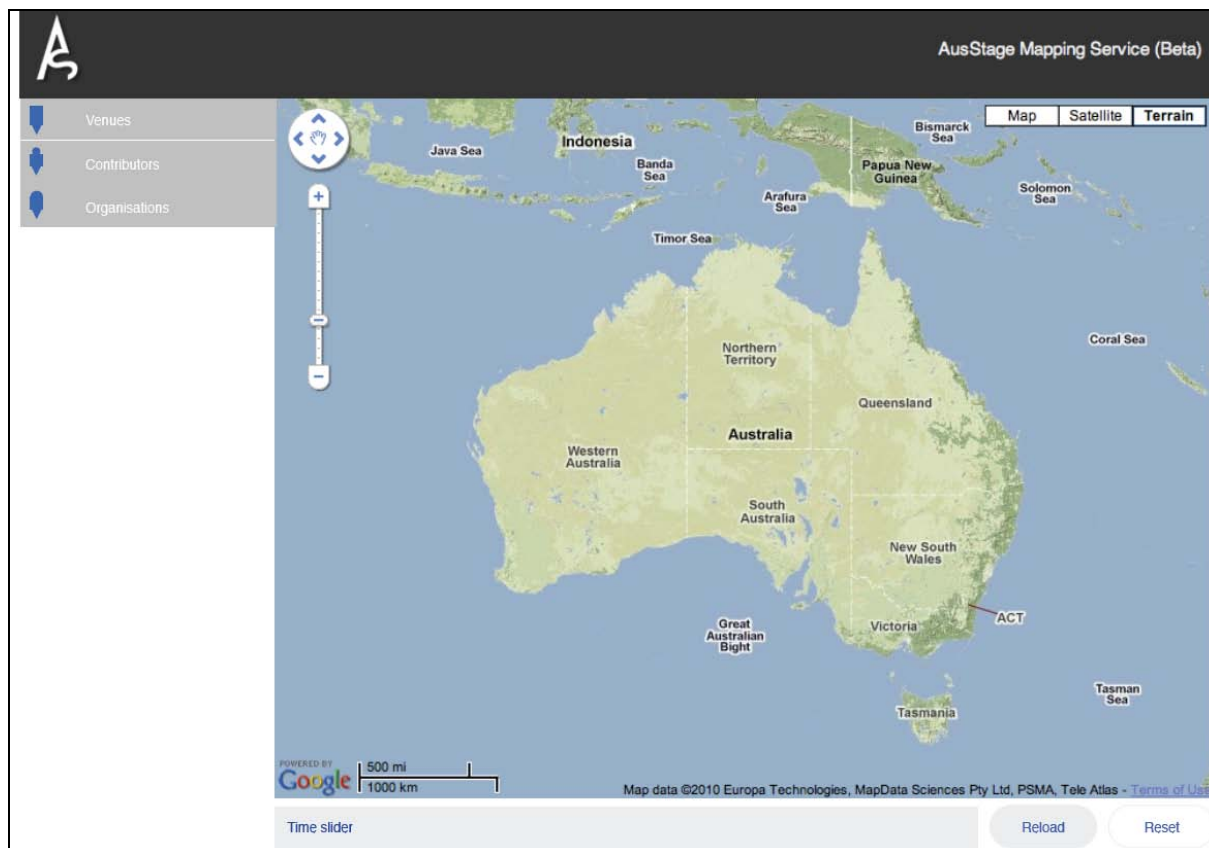
An explanation clarifying the link between existing, chartable AusStage data and mapped representations will need to be iterated in the user documentation.

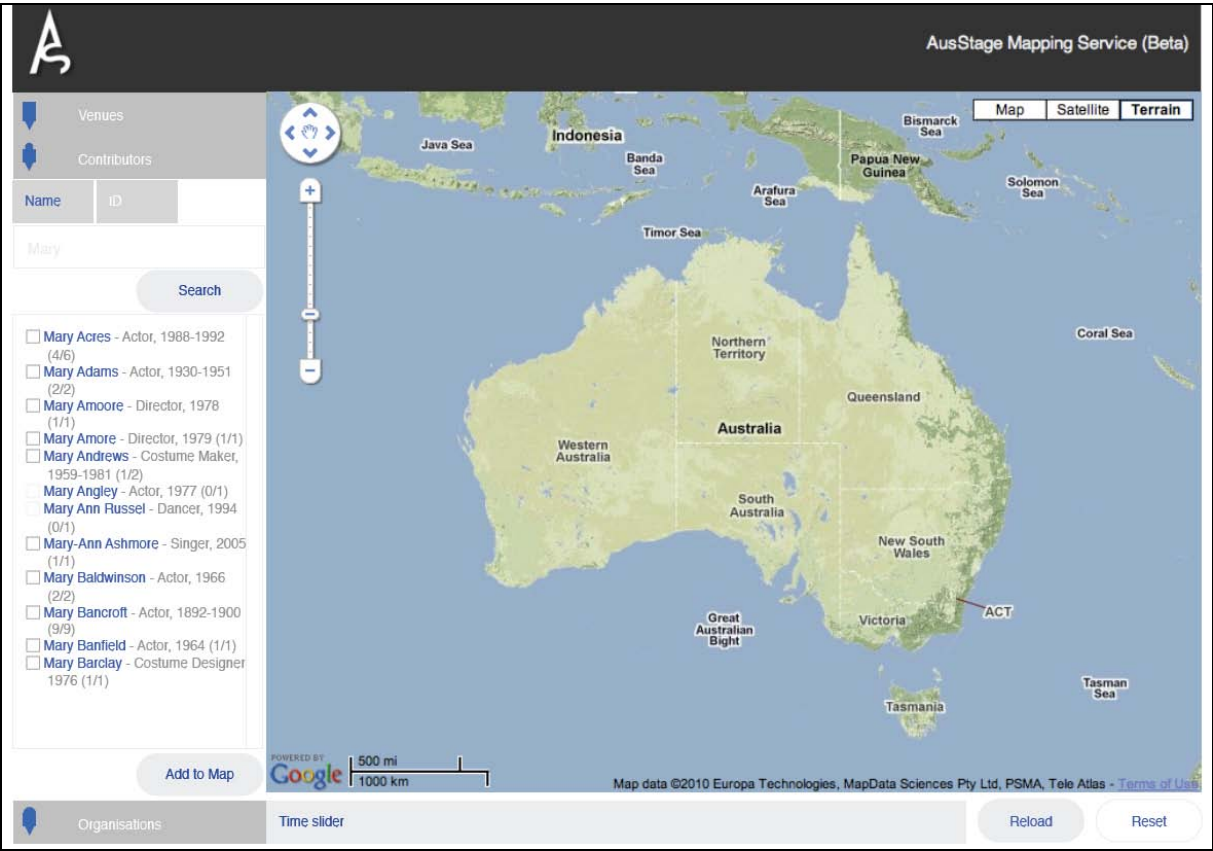
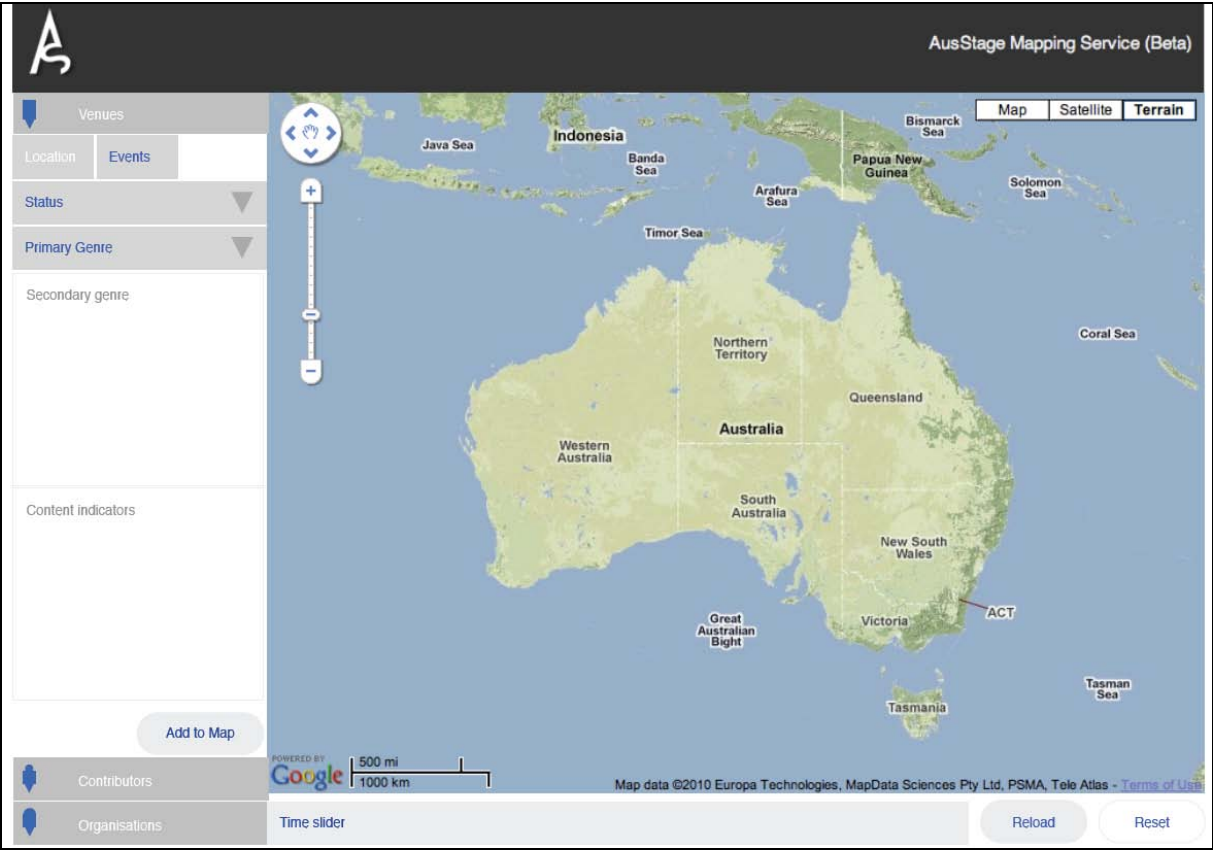
SUMMARY OF SERVICE REVISIONS ARISING FROM THE MAPPING ALPHA 2 TESTING PHASE

| ITEM | ALLOCATION |
|--|------------------------------------|
| 1. Google Maps V2 vs V3 | All |
| <u>SECTION 1 DESIGN AND CARTOGRAPHY ATTRIBUTES</u> | |
| 2. External experts | Liz |
| • Graphic design | • Cartography |
| 3. Decide on standardised content for tool tips/info window in web maps and KML | All |
| 4. Implement standard template including core attributes | Wei/Corey |
| <u>SECTION 2 AUSSTAGE INTEGRATION</u> | |
| 5. Map data API | Corey/Wei |
| • Organisations | • Timelines |
| • Contributors | • Works |
| • Map markers | • Events |
| 6. Javascript API for dynamically adding maps to pages | Wei |
| <u>SECTION 3 MAPPING WEB APPLICATION</u> | |
| 7. Browse map cluster icons to resolve loading times of browse map | Brad/Wei |
| 8. Timeline advanced functionality | Wei |
| • Zoom | |
| 9. Marker coloured by contributor/organisation etc | Corey/Wei |
| • One colour for each group | |
| • One colour for multiples at same venue | |
| 10. Map zoom via drop down | Wei |
| • State | • Capital city |
| 11. Major regional centre | |
| 12. Explore options for double click to zoom on web maps | Wei |
| 13. Text based list of venues on map | Wei |
| 14. Start again button on multi maps | Wei |
| 15. Decide on provision of maps by genre | All |
| 16. Default tiles on maps - Terrain/satellite etc | Wei |
| 17. More detailed error messages | Corey |
| 18. Search by ID returns table not directly linked to map | Wei |
| <u>SECTION 4 GOOGLE EARTH ASPECTS</u> | |
| 19. Trajectories | Corey |
| • Remove from webapp | • Include start/stop |
| • Only in KML | • Progress/direction |
| • Production/tour | • Colour key for lines |
| • Coloured by criteria ie organisation | |
| • Take into account contributor function at event ie trajectory of all events where director | |
| 20. ABS overlay | All/Corey/Wei |
| • Use list of agreed data sets | • Collection districts/SLA's/LGA's |
| • Procedure / tools to make own ABS overlays | |
| • Simplify display of data – one overlay per state with info window display of data | |
| 21. Gathering of promised overlays – historical, transport, heatmap/hotspot | All |
| 22. KML download is all options, no more “advanced option” | Corey/Wei |
| • Integrate what is displayed on map in webpage with what is downloaded via KML | |
| 23. Persistent click maps should provide KML download link | Corey/Wei |
| <u>SECTION 5 USER DOCUMENTATION</u> | |
| 24. User documentation | All/Liz |
| • FAQ | • User manual |
| • Online help | • Definitions and terms |

APPENDIX 1

Preliminary Mapping Service template concepts Dr Jonathan Bollen







| Export | Legend | | |
|---|---|---|--|
| Export as KML - instructions and links | <div><div>Venues</div><div>List of venues displayed on the map, with delete action. One colour gradient, indicat. Include event counts and year range</div></div> | <div><div>Contributors</div><div>List of contributors displayed on the map, with delete action. Different colour for each contributor. Include event counts and year range.</div></div> | <div><div>Organisations</div><div>List of organisations displayed on the map, with delete action. Different colour for each organisation. Include event counts and year range.</div></div> |
| Help | | | |
| Links to... | | | |
| <ul style="list-style-type: none">HelpTutorialFAQ | | | |
| Notes etc | | | |