



Collaborating Centres REDESIGNATION FORM

Please include the proposed terms of reference for the future collaboration between the proposed institution and WHO, as discussed prior to completing this form. In most cases, 1-3 TOR will be sufficient to provide a high-level framework of the future collaboration. For redesignations, the current terms of reference is automatically prefilled but can be revised as appropriate.

For detailed instructions on how to fill in this section please click on the link provided at the top of the form.

- TOR 1** Carry out research on mass gatherings, emergencies, high visibility/high consequence events and health protection preparedness to inform WHO (and Member States/Organisers) in regards to planning, response, recovery activities, training programs and evidence based guidelines at national, regional and global levels.
- TOR 2** Develop scientific knowledge and provide operational, clinical, epidemiological and event management support on mass gatherings and global health security to WHO, including the planning and modelling of events, event management and on-site health services, special needs groups and technological innovations.
- TOR 3** To inform the work of WHO, its partners and mass gathering planners and service providers, Torrens Resilience Institute will assist capacity building by identifying best scientific evidence and shared experiences, provide suitable training opportunities and identify key publications, guidelines, tools and experts to support practice in mass gathering and global health security.
- TOR 4** Identify suitable evidence and develop consensus for an international database for mass gatherings to support research and decision making by WHO/CPI and its partners.
- TOR 5** Support Global Health Security activities and capacity building for mass gathering planning to aid countries gain IHR compliance and reduce global threat, especially in relation to the deliberate use of chemical, biological and radiological agents.



Part III – Workplan

<p>Activity ID 24963</p>	<p>Activity title</p> <p>Link to TOR</p> <p>Name(s) of responsible staff at the institution</p> <p>Type of activity</p> <p>Description of the activity and how it is implemented</p> <p>Expected deliverables</p> <p>WHO Deliverable (Top Task)</p> <p>Name(s) of funding sources</p> <p>Activity timeframe</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>	<p>Developing models and tools for predicting mass gathering patient presentations</p> <p>TOR1</p> <p>Professor Paul Arbon</p> <p>Research</p> <p>This activity forms a component of the research program designed to develop ontologies and predictive models for mass gathering event health services. The work builds on a program of research commenced in 2001 which has to date resulted in the development of accurate predictive models for patient presentation rates and for transport to hospital rates which are used for event planning internationally. These projects have identified a number of questions requiring further investigation and the program will adapt new technologies to collect data and refine models.</p> <p>Scientific research reports including journal papers and conference presentations. The application of new models to predict health impact(s). Publication 3.1.1</p> <p>Dissemination of results and outcomes through the already existing networks coordinated by the Centre, and through workshops, scientific meetings, publications and peer-reviewed scientific journals.</p> <p>WHO/HSE and its partners will benefit from the availability of better predictive models to support planning for on-site health services at mass gatherings internationally.</p> <p>External research grant funding.</p> <p>This will be a continual activity of the proposed Collaborating Centre.</p>
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<p>Activity ID 24964</p>	<p>Activity title</p> <p>Link to TOR</p> <p>Name(s) of responsible staff at the institution</p> <p>Type of activity</p> <p>Description of the activity and how it is implemented</p> <p>Expected deliverables</p> <p>WHO Deliverable (Top Task)</p> <p>Name(s) of funding sources</p> <p>Activity timeframe</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>	<p>Fostering international consensus on a Minimum Dataset for Mass Gatherings and developing an international repository for Mass Gathering research data</p> <p>TOR4</p> <p>Dr Malinda Steenkamp</p> <p>Product development (guidelines; manual; methodologies; etc.)</p> <p>This project builds on ongoing work to foster consensus, standardize concepts and data points of interest to aid in creating a robust mass gathering evidence base. The next steps are to finalise a minimum data set for mass gatherings and to establish a web-based portal for research data on events. The interactive website will be open to registered researchers and collect standardized data from events internationally. This data includes key features of the venue, event activity and environment, as well as patient presentations and dispositions.</p> <ul style="list-style-type: none"> • A minimum data set with relevant technical specifications Product: 3.1.1 (if WHO branded 3.1.2) • A web-based portal and database for mass gathering health research Product: 3.1.1 (if WHO branded 3.1.2) • Academic Papers and conference presentations Publications: 3.1.1 <p>Dissemination of results and outcomes through the already existing networks coordinated by the Centre, and through workshops, scientific meetings, publications and peer-reviewed scientific journals.</p> <p>WHO/HSE is interested in the epidemiology of mass gatherings including key factors and risk. A robust mass gathering evidence-base will permit meaningful comparisons and meta-analysis between events to inform different levels of governments, event planners, responders, clinicians and researchers.</p> <p>Torrens Resilience Institute</p> <p>Completed December 2019</p>
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<p>Activity ID 24965</p>	<p>Activity title Investigating the health aspects and safety for young people attending mass gatherings</p> <p>Link to TOR TOR2</p> <p>Name(s) of responsible staff at the institution Dr Alison Hutton</p> <p>Type of activity Research</p> <p>Description of the activity and how it is implemented This activity forms a component of the research program on the psycho-social aspects of mass gatherings. Dr Hutton and her team have previously completed research investigating the health and safety issues for young people. These projects have identified a number of questions requiring further investigation. Over previous years' research investigating health and safety issues for young people in connection to psycho-social aspects of mass gatherings have been conducted. Future focus includes aspects such as impacts of mass gatherings on local health services and the development of a model in relation to injury prevention and event safety.</p> <p>Expected deliverables Scientific research reports including journal papers and improved practice guides for event managers and health services Publication: 3.1.1 Dissemination of results and outcomes through the already existing networks coordinated by the Centre, and through workshops, scientific meetings, publications and peer-reviewed scientific journals.</p> <p>WHO Deliverable (Top Task) The psycho-social aspects of mass gatherings are a key consideration in the WHO Mass Gathering Guidelines</p> <p>Name(s) of funding sources External research grant funding.</p> <p>Activity timeframe This will be a continual activity of the proposed Collaborating Centre.</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>
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<p>Activity ID 24966</p>	<p>Activity title Developing education programmes on Mass Gathering & Extreme Event Health</p> <p>Link to TOR TOR3</p> <p>Name(s) of responsible staff at the institution Dr Mayumi Kako and Ms Karen Hammad</p> <p>Type of activity Training and education</p> <p>Description of the activity and how it is implemented The aim is to develop training courses concerning all aspects of mass gathering and extreme event health including event management. These courses, based on experiences of a pilot master class and online disaster management courses are devoted to training front-line health care workers. Focus includes: 1. Factors influencing mass gathering presentations, planning and prevention aspects (including border controls and surveillance) and response (including managing emergencies and disaster events). 2. Online education in health aspects including Chemical, Biological, Radiological and Nuclear issues. 3. Online education in relation to novel and re-emerging infectious diseases.</p> <p>Expected deliverables Establishment of a group of interrelated short courses delivered online and face to face to be used at regional/national level and/or during operational activities. Increased level of knowledge and awareness of mass gathering planning and service delivery, clinical care, and current evidence to support practice Product 3.1.1 (if WHO branded 3.1.2)</p> <p>Courses will be marketed through existing networks of the Centre, and through scientific meetings and newsletters/ publications.</p> <p>WHO Deliverable (Top Task) WHO/HSE has identified a need for appropriate training courses</p> <p>Name(s) of funding sources Courses are full fee paying</p> <p>Activity timeframe This will be a continual activity of the proposed Collaborating Centre</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>
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Activity ID 24967	<p>Activity title Exploring International Law (including the International Health Regulations) and the regulation of the mass gathering and health security environment</p> <p>Link to TOR TOR3</p> <p>Name(s) of responsible staff at the institution Dr Hossein Esmaeili Khabr</p> <p>Type of activity Product development (guidelines; manual; methodologies; etc.)</p> <p>Description of the activity and how it is implemented This research program addresses issues associated with the Law of Armed Conflict, International Protection of Human Rights and the Law of International Organisations amongst others and considers how international law interacts with the requirements of mass gatherings and extreme events such as human rights, border control and point of entry issues, cross border emergencies and external international emergency aid.</p> <p>Expected deliverables Scientific research reports including journal papers, conference presentations and best practice guides Publications: 3.1.1 Dissemination of results and outcomes through the already existing networks coordinated by the Centre, and through workshops, scientific meetings, publications and peer-reviewed scientific journals.</p> <p>WHO Deliverable (Top Task) Key considerations for mass gatherings include management of issues associated with mass movement of populations across international borders and in the event of extreme emergencies coordination of the international response. These events require careful consideration of aspects of law and the research will inform WHO/HSE.</p> <p>Name(s) of funding sources External research grant funding.</p> <p>Activity timeframe This will be a continual activity of the proposed Collaborating Centre.</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>
Activity ID 24968	<p>Activity title Investigating the use of technology for mass gathering and extreme event communications, command and control</p> <p>Link to TOR TOR3</p> <p>Name(s) of responsible staff at the institution Dr Paul Gardner-Stephen</p> <p>Type of activity Development and application of appropriate technology</p>



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Description of the activity and how it is implemented

The ad hoc Telecommunications Networks program is based in the Resilient Networks Laboratory. The focus of activity is around the research and development activities relating to the Serval Project, which has created software that runs on off-the-shelf cell-phones and complementary low-cost hardware enabling them to operate during disaster and in areas where cellular infrastructure may be overwhelmed – such as mass gatherings and extreme events.

In addition to infrastructure-independent telephony, the Serval Project is also developing distributed and infrastructure-free social networking, situation awareness, IoT-like and mapping tools to enable infrastructure-deprived events to maintain or recover communications ICT as fully as possible. This technology has the potential to make a significant impact on the lives of those affected by extreme events and to support response capacity for health and other emergency services. The Serval Project software has been released as free and open-source software under the GNU General Public License so that it can benefit as many people as possible, without barriers of cost. Additional information is available at <http://www.servalproject.org/> This work is supported by the staff and students of the Serval Project Team.

Expected deliverables

Robust communications capability for mass gatherings and extreme events Product: 3.1.1

Dissemination of results and outcomes through the already existing networks coordinated by the Centre, and through workshops, scientific meetings, publications and peer-reviewed scientific journals. This is being increasingly accomplished in partnership with other institutions, such as TU-Darmstadt, Germany. Publications 3.1.1

WHO Deliverable (Top Task)

Coordination of mass gathering and extreme event response and the ability to sustain and utilise social networks and other on line information sources is a current concern of the WHO/HSE. Additionally, coordination and information sharing is an identified weakness among Global Health Cluster organisations responding to extreme events. The Serval Project is also linking increasingly with the WFP's communications related activities, which in turn make direct contributions towards WHO objectives.



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	<p>Name(s) of funding sources Serval Project Inc., Flinders University, NLnet Foundation, Shuttleworth Foundation, Awesome Foundation, New America Foundation, USAID and AusAID.</p> <p>Activity timeframe This will be an on-going activity of the proposed Collaborating Centre.</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>
<p>Activity ID 24969</p>	<p>Activity title Examining disease prevention at Mass Gatherings</p> <p>Link to TOR TOR2</p> <p>Name(s) of responsible staff at the institution Professor Robert Booy</p> <p>Type of activity Research</p> <p>Description of the activity and how it is implemented This work builds on the research being undertaken by the National Centre for Immunisation Research & Surveillance in Sydney on Disease prevention at Mass Gatherings. The research is examining the use of vaccine and non-vaccine approaches such as mask use and hand washing for diseases including influenza, meningococcal disease, pneumococcal disease, pertussis, MERS, diphtheria and tetanus.</p> <p>Expected deliverables Scientific research reports including journal papers and best practice guides Publication: 3.1.1</p> <p>Dissemination of results and outcomes through the already existing networks coordinated by the Centre, and through workshops, scientific meetings, publications and peer-reviewed scientific journals.</p> <p>WHO Deliverable (Top Task) The prevention of disease spread at mass gatherings is a key consideration in the WHO Mass Gathering Guidelines</p> <p>Name(s) of funding sources External Funding.</p> <p>Activity timeframe This will be a continual activity of the proposed Collaborating Centre.</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>



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<p>Activity ID 24970</p>	<p>Activity title Developing a risk assessment tool for mass gatherings</p> <p>Link to TOR TOR3</p> <p>Name(s) of responsible staff at the institution Prof Paul Arbon</p> <p>Type of activity Product development (guidelines; manual; methodologies; etc.)</p> <p>Description of the activity and how it is implemented Undertaking thorough risk assessment for mass gatherings enables public health authorities to identify and assess the generic and specific characteristics of an event. This guides preparedness planning and facilitate a successful mass gathering and long term legacy. Although there are existing guiding principles and best practice information (e.g., the Key Considerations II document published in 2015), there is no specific practical tool, instrument or guide to use in doing the assessment. This project will develop a tool that can be used to assess risks in order to guide preparedness</p> <p>Expected deliverables A risk assessment tool for mass gatherings Product: 3.1.1 (if WHO branded 3.1.2)</p> <p>Dissemination of results and outcomes through the already existing networks coordinated by the Centre, and through workshops, scientific meetings, publications and peer-reviewed scientific journals. Publications: 3.1.1</p> <p>WHO Deliverable (Top Task) Key considerations for mass gatherings include risk assessment.</p> <p>Name(s) of funding sources Torrens Resilience Institute</p> <p>Activity timeframe To be completed by June 2018</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>
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<p>Activity ID 25239</p>	<p>Activity title</p> <p>Link to TOR</p> <p>Name(s) of responsible staff at the institution</p> <p>Type of activity</p> <p>Description of the activity and how it is implemented</p> <p>Expected deliverables</p> <p>WHO Deliverable (Top Task)</p> <p>Name(s) of funding sources</p> <p>Activity timeframe</p> <p>This activity has been specifically developed for the workplan of the WHO collaborating centre and does not constitute a standard activity of the institution without WHO involvement.</p>	<p>Develop interface to assist in the analysis of future risks and vulnerabilities to improve national health security mitigation, preparation and response capacities to CBRN emergencies</p> <p>TOR5</p> <p>Prof Paul Arbon</p> <p>Training and education</p> <p>1. Identify and support international CBRN expert group with capacity to provide input into forecasting, risk and vulnerability, system weaknesses and analysis of scenarios for future potential health security events over the next 25 years, via forums and workshops. 2. Develop tools suitable for the evaluation of mitigation measures, preparedness and response capacities for events involving CBRN materials and participate in the development of reviews and reports concerning national exercises and forums. 3. Develop mechanism for sharing best practice and lessons learnt via forums, virtual workshops, publications etc. which promote and foster collaboration, increase cross-sector responsibility for health security during CBRN emergencies.</p> <p>Functional network and repository informing and forecasting on CBRN health security and providing suitable evaluation tools, scenarios and guidance. Product: 3.1.1 (if WHO branded 3.1.2)</p> <p>Health Security guidance for CBRN events remains a high priority for WHO/HSE</p> <p>To be determined</p> <p>To be completed by June 2020</p>
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