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ANDROID

DISASTER  
RESILIENCE  
NETWORK

# Exchange

Volume 2 Issue 3

## ANDROID contributes to the Third United Nations World Conference on Disaster Risk Reduction

Several thousand participants are expected, including at related events linked to the World Conference under the umbrella of building the resilience of nations and communities to disasters.

FROM: **ANDROID Disaster Resilience Network**

# #ROAD2SENDAI



Commissioned and published by the ANDROID Disaster Resilience Network

[www.disaster-resilience.net](http://www.disaster-resilience.net)



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## About ANDROID

ANDROID is an Erasmus academic network. It aims to promote co-operation and innovation among European Higher Education to increase society's resilience to disasters of human and natural origin. The network's teaching and research is concerned with what resilience is, what it means to society, and how societies might achieve greater resilience in the face of increasing threats from natural and human induced hazards. The network will create a European approach that will help us understand the attributes that enable physical, socio-cultural, politico-economic and natural systems to adapt, by resistance or changing, in order to reach and maintain an acceptable level of functioning. The network will also raise awareness and promote a common understanding among stakeholders of the importance of disaster resilience education and the essential role of European HEIs in improving society's ability to increase disaster resilience.

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## Editorial

Welcome to this third issue of ANDROID Exchange's second volume, the regular newsletter of the ANDROID Disaster Resilience Network, a global inter-disciplinary consortium that seeks to promote co-operation and innovation, and increase society's resilience to disasters of human and natural origin. ANDROID is supported by a grant obtained from the EU Lifelong Learning Programme, under the Erasmus networks action.

The ANDROID network began almost three years ago and as we conclude the first workplan, this issue reports on some of our key outputs and outcomes, while also highlighting the network's presence at a major global event that will confirm adoption of the post-2015 framework for disaster risk reduction.

Key outputs of the ANDROID network are being presented at the Third United Nations World Conference on Disaster Risk Reduction, that will be held from 14 to 18 March 2015 in Sendai City, Miyagi Prefecture, Japan. The issue describes some of the key events and activities where the ANDROID network will be represented. ANDROID's presence at an event like this is vital to ensure that our work and findings are appropriately represented in major global policy developments including the post-2015 framework.

The issue also includes an update on the publication of the ANDROID educational roadmap, the launch of the ANDROID open educational platform, and a major ANDROID symposium held in Latvia that provided a public dissemination and scientific forum, with its main aim to increase the awareness for researchers in the Baltic regions of enhancing resilience on a multidisciplinary perspective.

As usual, the issue also includes updates from our key partners, the International Journal of Disaster Resilience in the Built Environment and UNISDR.

ANDROID is currently exploring ways to continue the network and pursue a second workplan. Updates on these plans will be presented in future issues of Exchange. Don't forget, you can also use Exchange to provide updates on your own institution's work in this field. We very much welcome your contributions.

Professor Richard Haigh & Professor Dilanthi Amaratunga  
Global Disaster Resilience Centre, University of Huddersfield, UK



### ANDROID has strong presence at the 3rd World Disaster Conference

Key outputs of the ANDROID network, including the education roadmap, are being presented at a major global event that will confirm adoption of the post-2015 framework for disaster risk reduction

The Third United Nations World Conference on Disaster Risk Reduction will be held from 14 to 18 March 2015 in Sendai City, Miyagi Prefecture, Japan.

Several thousand participants are expected, including at related events linked to the World Conference under the umbrella of building the resilience of nations and communities to disasters.

The United Nations General Assembly Resolution adopted in 2013 identified that the World Conference will result in a concise, focused, forward-looking, and action-oriented outcome document and will have the following objectives:

- To complete assessment and review of the implementation of the Hyogo Framework for Action;
- To consider the experience gained through the regional and national strategies/institutions and plans for disaster risk reduction and their recommendations as well as relevant regional agreements within the implementation of the Hyogo Framework of Action;
- To adopt a post-2015 framework for disaster risk reduction;
- To identify modalities of cooperation based on commitments to implement a post-2015 framework for disaster risk reduction;
- To determine modalities to periodically review the implementation of a post-2015 framework for disaster risk reduction.

The Third UN World Conference on Disaster Risk Reduction and its preparatory process has welcomed the participation and contributions of all relevant stakeholders, including governments, parliaments, civil society, the International Red Cross and Red Crescent Movement, non-governmental organizations, national platforms for disaster risk reduction, focal points for the Hyogo Framework for Action, local government representatives, scientific institutions and the private sector, as well as organizations of the United Nations system and intergovernmental organizations.

As a major partner of the ANDROID project, UNISDR has been instrumental in ensuring a high level presence and engagement of ANDROID at the five day event. Some of the events that the ANDROID network will be represented are detailed below.

#### Reducing Disaster Risk in Urban Settings - Ministerial Roundtable

ANDROID are joint organisers of a Ministerial Roundtable, where world leaders will deliberate on the new post 2015 DRR framework and guide the process towards implementation. Some of the key issues that will be considered in the deliberations on urban risk reduction and resilience for implementation of the framework are:

##### *i. Risk Assessments as a prerequisite for urban resilience*

Cities are complex systems; and, like all systems, a city depends on the smooth functioning of its constituent elements and the larger organization in which it is nested. A city's resilience is therefore affected by the resilience of those smaller and larger systems. Disruptions to the basic services they provide can have cascading impacts well beyond the city itself. The complexity of cities also makes resilience building especially challenging. Focusing on one policy goal, such as climate protection, without considering others can lead to undesirable outcomes. These decisions may come as explicit trade-offs, unintended consequences, or some combination of the two. Building a

SAVE THE DATE / 14-18 March 2015

# 3rd World Conference on Disaster Risk Reduction

Sendai City, Miyagi Prefecture, Japan



# UN World Conference on Disaster Risk Reduction



Between 2002 and 2014 natural disasters in the EU caused over

80 000 deaths

and over

€100 billion in economic losses

#Road2Sendai #WCDRR

Source: EU

Andriessen AG  
in collaboration with

25/02/2015

resilient city therefore requires a holistic, multi-sectoral, and flexible approach to urban development. Better knowledge of how such risks interconnect in their materialization at the city level is the first step towards helping cities build resilience.

### ii. Urban Planning at the core of city resilience

Urban planning can help bring the vision of future growth in line with the idea of long-term sustainable development such that new risks are avoided altogether. Urban planning is future looking, and at its best, urban planning can address the core of what resilience is all about. We want to stress that urban planning is a political process that involves (or should involve) different stakeholders in bringing about equity in access to land and urban services, including the empowerment of poorer and vulnerable citizens, for example through inclusive and participatory forms of planning.

### iii. Public Private Partnership as integral part of the process

As a major investor in cities, the private sector needs to protect valuable urban-based assets. Clearly, while business has yet to play a prominent role in building urban resilience, companies are starting to think more strategically about how they can participate. As awareness grows that risks related to natural hazards could directly impact business operations, the private sector appears poised to become a more prominent player in broader urban resilience-building efforts. More action is needed, however, to ensure cities and businesses recognize all the key local risks. Once cities assess climate change risks, they are extremely likely to take action. While cities and business

must work more closely to align their understanding and response to climate change risks, it is significant that cities are recognizing – and acting upon – the most severe risks identified by businesses. This mutual recognition of climate change risks is an important step to taking action that creates safe, resilient cities that are also attractive places to do business, invest and innovate.

### Science and Technology Major Group delegation

ANDROID is part of the Science and Technology Major Group delegation for the 3rd WCDRR, coordinated by the International Council for Science (ICSU)

The Scientific and Technological Community Major Group (STMG) has been steadily engaged in this process highlighting the possible contributions that science could make to the post 2015 framework for DRR, especially by promoting the availability, accessibility and use of scientific information and strengthening the interface between science, policymakers and practitioners through a partnership approach that would mobilise and better coordinate existing initiatives and networks.

The aim of this partnership is to implement evidence-based decision-making on disaster risk reduction through actionable research co-designed and co-produced with stakeholders, assessment and synthesis of scientific evidence that can support the work of policy-makers and practitioners, development of methodologies, standards, metrics to monitor progress on DRR and resilience building, and improving our understanding of underlying risk factors.

The Science and Technology Major Group made a series of inputs via statements in the technical workshops and co-chairs dialogue on issues ranging from the contribution that science can make in the implementation of the Framework, the links between the post-2015 agenda and DRR and the integration of DRR with financing.

While member states recognized the importance of science for disaster risk reduction, there was agreement that many countries struggle to connect science with decision-makers at the national and local levels.

The Science and Technology Major Group urged delegates to address this challenge by supporting a broad partnership between science and policymakers to implement evidence-based decision-making on disaster risk reduction.

Such a partnership would help to strengthen the provision of actionable research co-designed and co-produced with stakeholders, assess and synthesize scientific evidence that can support the work of policy-makers and practitioners, help develop methodologies, standards, metrics to monitor progress on DRR and resilience building.

Science also has a key role to play in improving our understanding of underlying risk factors. In a statement, the Science and Technology Major Group urged delegates to recognize that disasters are not caused by natural hazards but triggered by them.

Schuaib Lwasa, member of the IRDR Scientific Committee from Makerere University in Uganda, said that the Science and Technology Major Group was ready to implement the following voluntary commitments:

- Build closer partnerships and better communication to enhance the use of scientific knowledge for evidence-based decision-making at all levels of government;
- Engage to help strengthen capacity—building and to advance risk literacy through curricular reform, in professional training and by life-long learning across all sectors of society;
- Offer analytical tools to assess and advance our knowledge of underlying risk drivers for more effective monitoring and review, across sectors of society);
- Offer advisory capabilities across all fields of science, technology and innovation to address, jointly with communities, stakeholders and governments issues that are relevant to them;
- Propose models for co-design of research that will involve all relevant actors (but which will also require new forms of funding and academic reward systems).

Members of ANDROID will continue to engage with the Science and Technology Major Group, thereby ensuring that its membership can continue to influence global agendas.

### **Role of Higher-Education Institutions (HEIs) in Advancing Disaster Risk Knowledge & Capacity Building**

Professors Richard Haigh and Dilanthi Amaratunga from the ANDROID network have been invited to contribute to a major

global initiative on the role of HEIs in developing disaster risk knowledge. The ANDROID network will be formally represented at this event that is organised by the Asian University Network of Environment and Disaster Management [AUEDM], Periperi U Consortium Africa (Partners enhancing resilience for people exposed to risks), Association of Pacific Rim of Universities [APRU], and Pan Asia Risk Reduction Initiative [PARR]. ANDROID is the only European network to be invited to participate.

Disaster Risk Reduction is an evolving field which in recent decades has received increasing attention of Higher Education Institutions (HEIs). While their outreach is still somewhat limited, universities in Asia and Africa have purposefully established new disaster risk-related departments/centres of studies and started offering undergraduate and postgraduate courses focused on issues related to DRR. These courses range from offering an introductory DRR module to full degree or postgraduate qualification that is contextually relevant.

This has not only helped create a new cadre of disaster risk management professionals. It has also progressively increased research and publications to advance disaster risk knowledge and scholarship. The continuing expansion of higher education efforts in the disaster risk domain has both broadened and deepened understanding of the disaster risks, as these are experienced in diverse social and environmental contexts.

Since HFA-2005, a major achievement in academic domain includes (i) increasing number of academic publications in DRR (ii) formation and expansion of academic networks and consortia in Asia and Africa offering innovative, disaster risk-related courses. In this public forum, prominent partnerships including ANDROID, as well as the AUEDM (Asian University Network of Environment and Disaster Risk Management, comprising 30 universities from Asia) and Periperi-U (an African consortium involving 11 universities) will bring together selected speakers to share their experience of furthering disaster risk-related education in their respective regions. This forum will highlight role of trans-disciplinary, multi-sectorial alliances for the advancement of disaster risk knowledge and human capacity development in disaster risk reduction.

### **Multi-Stakeholder Segment ignite stage**

ANDROID is being presented at the IGNITE Stage, a special venue where WCDRR participants are allowed 15 minutes to present a disaster risk reduction topic, project or initiative. Its aim is to widen the array of topics that are discussed at the World Conference beyond those that are presented in the main sessions and events.

All presentations will be recorded on video and published on the WCDRR website, the UNISDR YouTube channel and on PreventionWeb.

### **Further information**

For further information about the World Conference on Disaster Risk Reduction, visit the conference website at <http://www.wcdrr.org/home>. A report on the conference will also be available on the ANDROID website after the event.

## ANDROID Open Educational Resource platform goes live

Professor Arturas Kaklauskas and working group 8 are pleased to announce that the ANDROID Open Educational Resource platform is now available.

The platform can be used to share learning materials developed by network partners and has already been populated with major outputs from the ANDROID network.

The platform hosts digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research.

Working group 8 was responsible for drafting standards on platforms, accessibility and inclusion, rights management, and approaches to describing, managing, and sharing learning resources, online. They also developed a platform to host these materials.

The platform has been built using a free and open-source e-learning software platform and supports the searching and organisation of content, and on-line learning communities. Initially, the platform has been populated with OERs developed through the activities and outputs of the network's WPs, such as the events and materials from the Doctoral School (WP3), and reports and seminars organised as part of the Inter-Disciplinary Methodologies (WP4), and the three survey and analysis projects (WP5, WP6 and WP7). However, partners are being invited to upload other educational resources that they wish to disseminate and make available to educators, students and self-learners.

The OER platform can be accessed through the ANDROID network website: [www.disaster-resilience.net](http://www.disaster-resilience.net).

## Roadmap for European disaster resilience education published

The ANDROID roadmap for European education in disaster resilience has been published. The roadmap collates the major findings that have arisen from the network's survey and analysis projects and sets an agenda for educational policy in the field.

The report is not about predicting the future. Instead, its starting point is to simply consider some of the greatest challenges and opportunities for education in the 21st century in helping society address the threat posed by hazards of natural and human origin. The report considers society's requirements in terms of skills (based on the results from ANDROID's WP6) and scientific advances (ANDROID WP7). It also considers the existing capacity of European HEIs to meet these requirements (ANDROID WP5). Finally, the report considers what needs to happen in education policy to help address this key European and global challenge.

The report is a major output of the network that can be disseminated to key stakeholders, and also forms the basis of the network's future activities. The report will be published in four languages.

The roadmap is available to download from the ANDROID network website: [www.disaster-resilience.net](http://www.disaster-resilience.net).

## Baltic Symposium on Societal Resilience held in Riga, Latvia

Dr Francesco Romagnoli, Assistant Professor at Riga Technical University, describes the *Baltic Symposium on Societal Resilience - Enhancing Societal Resilience to Disasters: research directions and implications for education*, that was organised within the framework of the ANDROID project and was held on 27th January 2015 at the Riga Technical University, Latvia.

This event was a joint initiative led by the ANDROID network, the Riga Technical University, the Italian National Agency for New Technologies and Energy (ENEA) and colleagues from Tallin University and Vilnius Gediminas Technical University.

The Symposium was envisaged as a public dissemination and scientific forum, with its main aim to increase the awareness for researchers in the Baltic regions of enhancing resilience on a multidisciplinary perspective.

To aid this wider dissemination, speakers and a relevant stakeholder audience alongside ANDROID members were invited to participate in the event.

Stakeholder representatives included local Institutions, research bodies and ANDROID partners. The symposium represented an important opportunity for a multifaceted discussion aimed at strengthening the cooperation among research directors and implementing a methodological approach to boost more resilient and sustainable communities at the stakeholder and policy making levels.

The opening speech from Professor Dagnija Blumberga, Director of the Energy System and Environment pointed out the importance and the actuality of enhancing societal disaster resilience in Latvia. In particular she explained how this issue represented one of top challenges within the current agenda of Latvian Presidency at EU.

During the first session of the symposium Professor Claudio Rochas gave an overview of the ANDROID project framework and the expected/realized impact. This was followed by Dr Francesco Romagnoli who gave a perspective about the meaning of resilience including the description of the parameters and multidisciplinary perspectives that are the basis of the resilience evaluation.

Dr. Pierpaolo Campostrini was focused on the multidisciplinary example from Venice - "Making cities resilient" framework. His presentation, as a speaker external to the ANDROID, project gave an added value to the Baltic Institutions participating to perceive the beneficial effect of the framework the benefits of adopting it. His contribution aimed at clarifying the meaning, effects and the importance of an integrated multi-hazard approach in connection with cultural heritage protection.

The second session was mainly devoted to the presentation of case studies from the Baltic states concerning examples of enhancing resilience measures. The study about protection against flood in Daugava river in Riga was presented by Andris Locmanis. This was to discuss the Integrated Strategy for Riga to adapt to the hydrological processes against Climate Change phenomena.

Within the joint effort to present a Baltic's perspective on resilience development efforts, the PhD student Abdulquadri Ade Bilau from Vilnius Gediminas University, in cooperation with Assistant Professor. Emlyn Witt, presented the detailed case study and analysis of the Cyclone Gudrun disaster in Estonia.

The third session encompassed the research directions from



*Photograph: Dr Emlyn Witt from Tallinn University of Technology presenting the findings of the ANDROID capacity study at the Baltic Symposium on Societal Resilience, organised by ANDROID partner, Dr Francesco Romagnoli and his colleagues from Riga Technical University*

the ANDROID project. Professor Srinath Perera, Northumbria University, made a clear point of the importance of multi- and inter-disciplinary Doctoral schools in order to create a novel type of resilience expertise. The overall impact related to the realisation of the ANDROID Doctoral School within WP3 was highlighted and discussed. The session continued with the contribution of Ass. Professor. Luisa Giuliani, DTU, Denmark with a presentation related to the interdisciplinary aspect on resilience research in connection to the outcomes of WP4.

Dr Ruben Paul Borg, from University of Malta, presented outcomes from the joint cooperation among the ANDROID partners activity within the WP7 SIGs. The work performed by the three SIGs was summarised and the results from the specific case study on the Northern Adriatic Sea and the City of Venice presented.

To conclude the third session, Assistant. Professor. Emlyn David Qivitoq Witt from Tallinn University, Estonia, focused on the results from WP6 of the ANDROID project regarding the potential on building public authority capacity.

The final session represented an opportunity to understand the state-of-art applied research and perspectives in the fields of resilience under different disciplines and level of expertise.

The attendance of Assistant. Professor. Gian Paolo Cimellaro, Polytechnic of Turin, Italy, represented an important added value to the event. His experience and expertise on seismic engineering, specifically in connection to the effects of the seismic disaster resilience from economic perspective, was shown within a case study presentation.

The presentation looked at a novel approach to evaluate the economic dimension of resilience and the quantification of indirect losses to the economic resilience base of a so called "Structural Growth Model (SGM)". This was a opportunity for delegates to understand a measured approach applicable

for different geographic context, for resilience accounting methods, both for economic planning and research directions. The presentation of Professor. Antonino Scarelli, University La Tuscia, Italy, and Dr. Yamuna Kaluarachchi, Kingston University, UK, were oriented on two research aspects: the first one on quantitative aspects of resilience through mathematic modelling (i.e. use of Multi Criteria Analysis); the second on the emphasising of the importance stakeholder engagement.

The final presentation proposed by the PhD student Fulvio Toseroni, Polytechnic University of Le Marche, Italy, was an important milestone reached thanks to the establishment of the ANDROID Doctoral School. Fulvio had the opportunity to present his latest work on "Emergency threshold index: a way to measure the community disaster resilience" which he had presented during the RDS in Salford. This highlighted and value of work undertaken in the RDS in Salford and to have further discussions on the continuation of his work from the experts attending the Symposium.

The staging of the symposium was an important impact for the ANDROID project. It has assisted in strengthening cooperation, enhancing new trends of research and provided a good base for new collaborative project proposals. Secondly the event generated an interface among different players acting, working and researching on the field of enhancing resilience in the Baltics, which did not exist prior to the symposium

As a result of planning this event, Dr Francesco Romagnoli also had the opportunity to be invited to an informal meeting at the Latvian Ministry of Interior within the context of a seminar related to the enhancing disaster resilience in Latvia. The seminar was part of the celebrative event of the beginning of the Latvian Presidency at EU.

## The State of DRR at the Local Level: Patterns of DRR actions

### Special issue now published in the International Journal of Disaster Resilience in the Built Environment

ANDROID partner, the International Journal of Disaster Resilience in the Built Environment, has just published a special issue entitled 'The State of DRR at the Local Level: Patterns of DRR actions', guest edited by a representative from our ANDROID partner, Jerry Velasquez, Head of Advocacy and Outreach, UNISDR.

#### Guest Editorial

The Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (HFA) was adopted by member states in 2005 as the blueprint for reducing disaster risks globally. Since 2007, countries have been using the HFA Monitor to report on the progress made in disaster risk reduction. There has been gradual process in all regions, across all the Priorities for Action of the HFA. In particular, strengthening countries' institutional, legislative and policy frameworks, early warning, disaster preparedness for response as well as risk assessment, education, research, and fostering public awareness and a common understanding of disaster risk have shown progress.

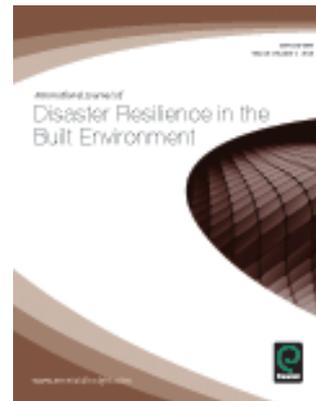
On one hand, HFA can take credit for reducing mortality linked to hydro- meteorological disasters, yet it is clear that we are making little headway in dealing with economic losses caused by the same disasters, which we will see later on, are driven by the backlog of risk built up by the political, economic and environmental forces which have been driving human progress at present - development and climate change.

The trend of reduced mortality is proof that development investments in activities such as early warning, preparedness and contingency planning yield positive gains if invested in reducing vulnerability of people and communities.

However, countries have been more challenged to factor disaster risk reduction into public investment, land-use planning, infrastructure projects, environmental management and social policies, which are the activities under HFA Priority for Action 4 on reducing the underlying risk drivers and tackling the causes of risk creation.

For example, we are now facing an increasing and unmitigated trend of economic losses due to disasters on the public and private sector. For the first time globally, annual economic losses from disasters exceeded \$100 billion for three consecutive years (\$138 billion in 2010, \$371 billion in 2011, \$138 billion in 2012). During these last 13 years of record-breaking temperatures and rainfall, we have seen economic losses reach \$1.7 trillion.

It is also obvious that as human exposure increases, and as nations and communities get better at reducing vulnerability, reaching the last quintile of losses with such programmes as "zero-casualty" will lead to efforts of increasing costs. Increased intensity and unpredictability of hazards also contribute to this



trend of increasing costs of reducing vulnerability due to the need for new technologies and equipment.

From experience over the last decade it is increasingly clear that a strategy mainly focused on reducing vulnerability to natural hazards will not be sufficient to arrest the creation of future risks. The models and approaches promoted through the HFA and the follow-up by the disaster risk reduction community of practice has been rather effective in dealing with vulnerability reduction, and thus with further concerted efforts, resources and time, it might possibly deal with most of the existing stock of risks. The present evidence and models however suggest that reduction vulnerability to natural hazards may not be capable or even suitable to deal with exposure reduction and the subsequent economic losses it creates. We therefore need to review the existing strategy in order to arrest the creation of future risks.

The world is steadily becoming more urban, and although the level of urbanization is far higher in the developed world, the annual 'urbanization rate' is much faster in the developing world. Not surprisingly, the primary urban agglomerations with the highest concentrations of people and economic activity mostly overlap with the areas of extreme or high risk related to disasters such as coastal areas, along rivers and in flood plains.

The 2011 World Urbanization Prospects highlighted that approximately 890 million people were living in areas of high risk of exposure, with most of them from cities in Latin America, in Northern America and especially in Asia. Flooding is the most frequent and greatest hazard that affects cities or urban agglomerations; at least 250 cities are located in or are close to areas with high risk of flooding – potentially affecting 663 million inhabitants.

To respond to some of these challenges, the Making Cities Resilient Campaign was launched in 2010 with the main objective to engage local government and city officials in the tasks of reducing disaster risks and build resilient cities and communities. The principles of the campaign are established on a vision of disaster resilient cities as condition for sustainable urban development, underpinned by effective decentralization, strategic urban planning and participatory approaches involving citizens, communities, private sector and academia.

The main achievements and the activities that supported

these achievements during the five years of the Campaign include raised awareness among local chief executives on the importance of disaster risk reduction action at the local level through high-profile local and national sign-up events. More than 2,200 cities and local governments have “signed up” to the Campaign by November 2014. The Campaign also identified a dedicated group of local champions willing to share their experiences and sound practices on local DRR implementation. At present there are twenty-three Role Model cities have been designated, as well as 12 individual Champions, who have pledged to lend their support to promote the campaign objectives among their peers. There are also 17 advocates. There have been numerous experience sharing among city representatives and partners through focused discussion on local DRR issues at international and city-specific events and meetings, including the (UN General Assembly thematic events and to the World Conference on Sustainable Development (Rio+20). There has been increased self-reflection among city officials on their work on DRR through the development of the Campaign Guide - the “Ten Essentials for Making Cities Resilient checklist, the Handbook for Local Government Leaders, the Local HFA Government Self-Assessment Tool.” This formed the basis for a baseline tool online (the Local Government Self Assessment or LG-SAT) and offline for local officials to assist them in reviewing, planning work on DRR in their localities, and the Urban resilience Scorecard, which is a more in depth analytical tool that can help cities develop resilience action plans.

In addition, there is systematic collation of examples of progress in implementation and sound practices, through the publication of the “Making Cities Resilient Report 2012: A global snapshot of how local governments reduce disaster risk.” The Report also identified key “enabling factors” for building urban resilience and areas of priorities for the future. A platform for dialogue among local officials and partners, through the development and use of an Internet list serve, which functions as the main communication tool among Campaign cities and partners. A multi-stakeholder supporting body in the form of the Campaign Steering Committee that provided guidance and technical expertise to UNISDR in developing the Campaign content, activities and tools.

Support mechanism to participating local governments through formalized cooperation with more than 45 global partner organizations and numerous regional and national organizations. These organizations apply and promote Campaign tools and principles in their core work. Strengthen local capacities and partnerships through capacity development for participating local government representatives. These learning programmes include the development of capacity development modules, and training programmes and the documentation of DRR sound practice activities at the local level. There have been pilot initiatives to promote local DRR action through the encouragement of peer-to-peer support among local officials. This was done through a number of ‘city to city’ cooperation initiatives and workshops leading to strengthened local government collaboration, promotion of innovative implementation approaches and knowledge sharing.

The Campaign work was guided by the recommendations of the Advisory Group, Partnership meetings and the findings of the Making Cities Resilient Report 2012.

This Journal special issue is based on the “State of DRR at the Local Level” - A 2015 Report on the Patterns of Disaster Risk Reduction Actions at Local Level, a first attempt to establish an evidence base from local data to inform decision-making. It aims to consolidate available knowledge on the patterns of disaster risk reduction actions, and analyses of what enables successful practices at the local level. It will also serve as a basis for developing the HFA2 implementation plan at the local level after the WCDR3, which will serve as an evidence base for inclusion of a stronger “local government voice” in HFA2. It will also try to serve as an inspiration on “how to do effective DRR” at the local level, as stakeholders consider means of strengthening implementation of HFA2.

This special issue will be launched at the UN World conference on Disaster Risk Reduction to be held in Sendai City, Japan from 14 to 18 March 2015. UNISDR Chief Margareta Wahlström said: “The 3rd World Conference provides us with a rare opportunity to forge universal agreement on how to build disaster resilience across all sectors of society. It is particularly important that we have a strong urban focus as we expect 75% of the world’s population to be living in towns and cities by 2050.” It is the intention that this themed issue will contribute towards achieving this mission.

The themes covered in the special issue include local patterns of risks, local actions on DRR, and central policies for enabling local DRR actions, local disaster resilience, and sound practices of local DRR. This themed issue is a continuation of IJDRBE’s relationship with the Making Cities resilient campaign. IJDRBE aims at developing the skills and knowledge of the built environment professions and will strengthen their capacity in strategic and practical aspects of making cities resilient to disasters.

#### **Content of the Special Issue**

Guest Editorial - Making Cities Resilient and the post-2015 framework for disaster risk reduction (Jerry Velasquez)

Research papers -

The role of individual adaptive practices for sustainable adaptation (Christine Wamsler, Ebba Brink)

Urban transformations and changing patterns of local risk: lessons from the Mekong Region (Richard M. Friend, Pakamas Thinphanga, Kenneth MacClune, Justin Henceroth, Phong Van Gai Tran, Tuyen Phuong Nghiem)

Grass-root preparedness against potential flood risk among residential and commercial property holders (Namrata Bhattacharya Mis, Rotimi Joseph, David Proverbs, Jessica Lamond)

Improving the social performance of flash flood early warnings using mobile services (Lydia Cumiskey, Micha Werner, Karen Meijer, S.H.M. Fakhruddin, Ahmadul Hassan)

CBDRM in Nepal: A Matter of Risk Perceptions (Maria Risom Laursen)

Lessons from Self-Assessments within Urban Climate Resilience Programs (Justin Henceroth, Richard M. Friend, Pakamas Thinphanga, Phong Van Gai Tran, Tuyen Phuong Nghiem)

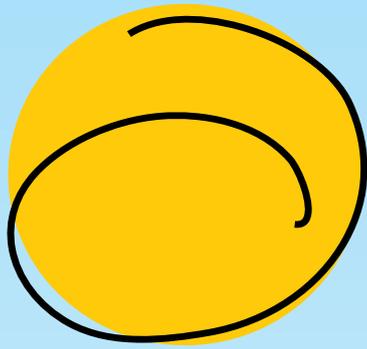
A disaster resilient built environment in urban cities: the need to empower local governments (Chamindi Malalgoda, Dilanthi Amaratunga)



International Strategy for Disaster Reduction



United Nations



Making Cities Resilient

My City is Getting Ready

[www.unisdr.org/campaign/resilientcities/](http://www.unisdr.org/campaign/resilientcities/)

## Zero draft of post-2015 framework released

The co-Chairs of the Preparatory Committee for the Third UN World Conference on Disaster Risk Reduction released the zero draft of the post-2015 framework for disaster risk reduction. This document will serve as the basis for the negotiations at the second session of the Preparatory Committee, to be held in Geneva, from 17 to 18 November 2014.

The zero draft builds on the pre-zero draft, which in turn drew on the views of Member States and major groups expressed during the first meeting of the Preparatory Committee, held in Geneva from 14 to 15 July 2014, as well as the outcome of the six regional platforms for disaster risk reduction and the reports of the multi-stakeholders consultations on the post-2015 framework for disaster risk reduction held since March 2012.

Importantly, the zero draft takes into consideration the views and comments (available at <http://www.wcdrr.org/preparatory/viewsandcomments>) expressed during the ten open-ended informal consultative meetings with Member States and five consultations with major groups, held in Geneva from 5 September to 13 October 2014, as mandated by the first meeting of the Preparatory Committee. In addition, a joint meeting with Member States and major groups was held on 19 September 2014.

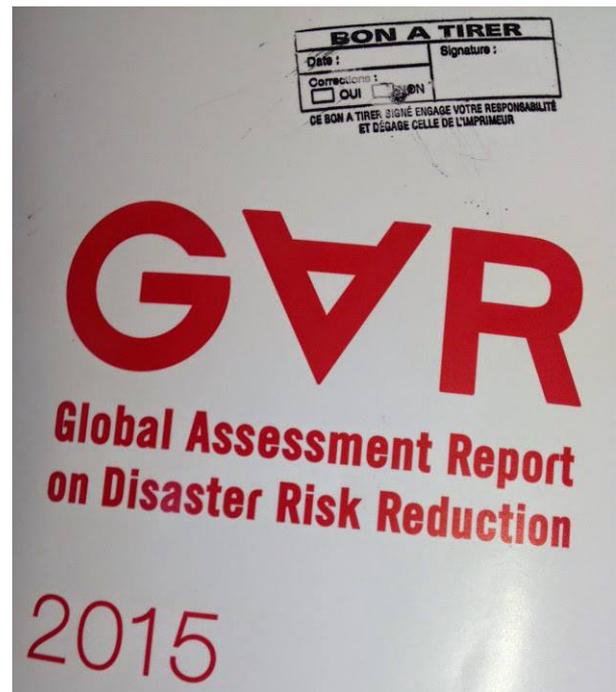
Following the decision of General Assembly resolution 68/211 of 20 December 2013, which called for a concise, focused, forward-looking and action-oriented outcome document, the zero draft proposes a stand-alone document that builds substantively on and supersedes the Hyogo Framework for Action in order to offer a single reference document to policymakers and practitioners. It also attempts to strike a balance between, on the one hand, the need for precise and detailed guidance on a variety of critical issues of a cross-cutting nature that are relevant to all States and other stakeholders and, on the other hand, the need to produce a concise, focused and practical outcome document.

The zero draft can be downloaded from: <http://www.wcdrr.org/preparatory/post2015>

### GAR 2015 will be published in March

The 4th edition of the ground-breaking Global Assessment Report on Disaster Risk Reduction (GAR15) will be published in seven languages in March, just in time for the World Conference on Disaster Risk Reduction in Sendai, Japan.

It is the fruit of a global collaboration with around 100 partners on global risk modelling, progress reporting and DRM policy research. GAR15 will provide the evidence base and rationale for the post-2015 framework for DRR or updated Hyogo Framework for Action (HFA). It will be essential reading for all state and non-state actors on disaster risk management. The 2015 GAR report includes several contributions from ANDROID partners, as well as the ANDROID network itself.



The results are structured around a set of contributed and commissioned background papers, as well as risk and disaster data. More in-depth research and case studies than ever before have been developed for this edition of the GAR. All this material and data will be available on the interactive web version of GAR15.

The print version of GAR15 will be available in all six UN languages (Arabic, Chinese, English, French, Russian and Spanish) as well as Japanese. The main report contains enhanced content that provides access to additional digital information, such as dynamic maps, videos, photos and case studies, for users with smartphones and tablets.

The Pocket GAR provides the main evidence and messages of the report in a short and easy-to-use format. In addition, the risk and loss data produced for GAR15 is made available on a number of interactive data platforms, including on Tangible Earth, the world's first interactive digital globe and on the GAR for Tangible Earth (GfT) fully interactive standalone application for tablet and smartphone users. In 2014, GAR products were downloaded 178,589 times.

### The ANDROID Disaster Resilience Network is linked to a global campaign that aims to make cities more resilient to disasters.

The Making Cities Resilient: 'My City is getting ready!' campaign, launched in May 2010, addresses issues of local governance and urban risk. With the support and recommendation of many partners and participants, and a Mayors Statement made during the 2011 Global Platform for Disaster Risk Reduction, the Making Cities Resilient campaign will carry on beyond 2015.

See [www.unisdr.org/campaign/resilientcities/](http://www.unisdr.org/campaign/resilientcities/) for further information.

# Write for ANDROID Exchange

The ANDROID Disaster Resilience Network provides an opportunity for people to share knowledge and experience. ANDROID Exchange is written by the ANDROID membership for the ANDROID membership, and also for other readers working with national and international NGOs, UN agencies, government and donor institutions, academics, and independent consultants.

We, the Editors of ANDROID Exchange, welcome contributions from ANDROID Members and Associate Members. We are also pleased to consider articles submitted by anyone involved in some way in increasing societal resilience to disasters. If you have knowledge and experience to share, please consider making a contribution.

The scope of contributions should be consistent with the aims of ANDROID. The network's teaching and research is concerned with what resilience is, what it means to society, and how societies might achieve greater resilience in the face of increasing threats from natural and human induced hazards. Typically, we welcome contributions in the following categories (word counts are advisory):

- News and reports from activities and events linked to the Network (100 - 500 words)
- Reports on developments in the field / projects that are being investigated by partners – these do not have to be activities directly linked to the Network, but should be relevant to Network members (100 - 500 words)
- Useful Resources – relevant publications, websites (up to 20 - 40 words)
- Upcoming events (20 words)

We welcome suggestions for alternative types / styles of contribution. If you have an idea for an article that you would like to develop, the Editors would be pleased to discuss it with you - send an email to [android@disaster-resilience.net](mailto:android@disaster-resilience.net).

The Editors reserve the right to edit any contribution.

This edition of ANDROID exchange was edited by Professor Richard Haigh.

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