

An aerial photograph showing a coastal area with significant damage. Buildings with corrugated metal roofs are partially destroyed or missing. Debris, including wood and rubble, is scattered across the ground. A road with a 'STOP' sign and a car is visible on the right. The overall scene depicts the aftermath of a disaster.

Disaster Risk Management Professional Practice Group

Review of the first year

**Royal
Geographical
Society**
with IBG

Advancing geography
and geographical learning

Photo: Toby Meredith, copyright University of Portsmouth

Background

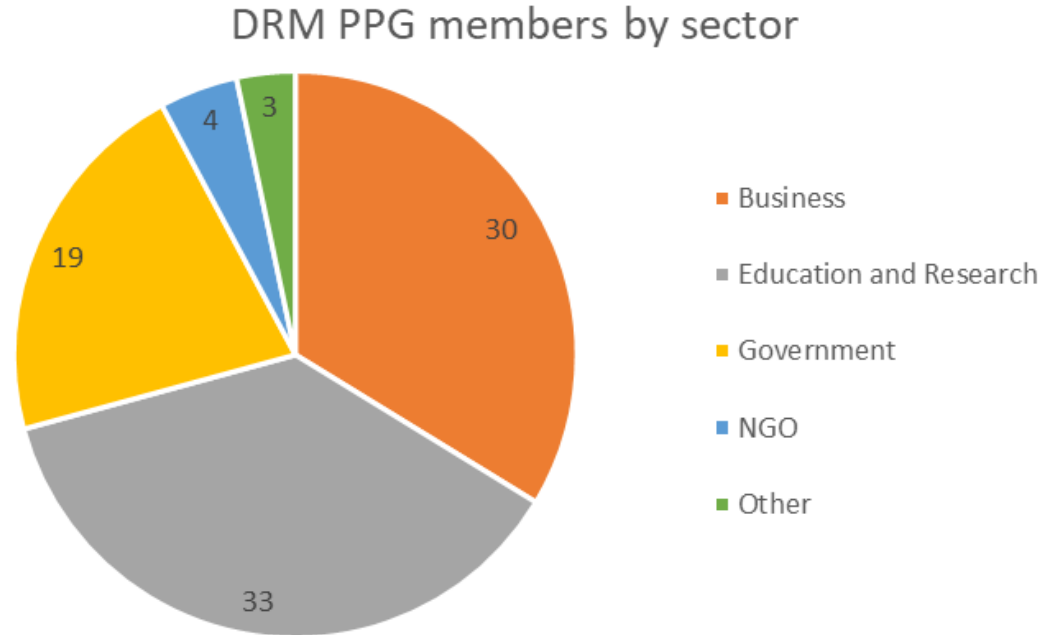
- Geography and geospatial technology in disaster risk management (DRM)
- Community of risk-focused professionals and academia
- Cross-sector membership
- Promote best practice and geography as a professional discipline
- Discover common approaches
- Support early career development

Photo: Toby Meredith, copyright
University of Portsmouth



DRM-PPG members

- 89 members registered with the RGS-IBG and 262 in the LinkedIn Group
- Members include 53 Fellows of the Society, of which 25 are Chartered Geographers
- Broad representation across sectors



Current Committee Members



Tina Thomson

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William Forde

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Matt Foote

mattfoote67@gmail.com



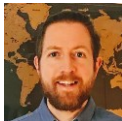
Richard Teeuw

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Chris Ewing

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Review on Progress

Proposed plan of activities

Update on activities

Months 1-3 <i>(Sep – Dec 2020)</i>	Announcement of formation of the PPG and call for interested parties	
Months 1-3 <i>(Sep – Dec 2020)</i>	Formation and first meeting of the PPG; establishing links with other Societies and Bodies	Establishing links with RSPSoc, Risk-KAN Early Warning Systems Group and others, MapAction
Months 4-6 <i>(Dec 2020)</i>	Networking event to promote the PPG to society members	1 hour Launch webinar in December 2020 Establishment of LinkedIn group (>250 members)
Months 6-12 <i>(Jan-Jun 2021)</i>	Webinar covering one of the themes of the PPG e.g. disaster preparedness and risk reduction	3x 'Fireside chat' 1 hour webinars run with (~40-100 attendees per event) 1 x RSPSoc annual conference session 1 x webinar on early careers 1 x roundtable webinar with Cabinet Office
Months 12-18 <i>(Jun – Dec 2021)</i>	Online promotional article/blog/new items on topics from the event/webinar	3 x Fireside chat blogs + recordings (3 more to come) 8 x Profiles of women in disaster risk for International Women's Day 1 x blog for International day of DRR
Months 18-24 <i>(Dec – Jun 2022)</i>	Evening lecture covering one (or more) of the themes	Evening lecture (Covid permitting) Careers profiles and resources on the website

Summary of Activities 2021

5 Fireside Chats

- 1 hour panel events (12.00-13.00)
- 19 speakers so far
- 40 to 100 attendees per event
- Sessions recorded and written up as blog posts



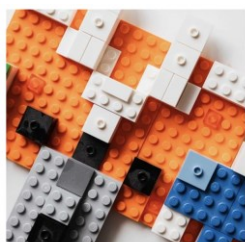
Communicating and understanding risk in dynamic situations

This case study summarises the key themes discussed by our panellists at the first fireside chat, organised by the Disaster Risk Management Professional Practice Group in February 2021.



Disaster Risk Pooling - enabling mutual cross border resilience

This case study summarises the key themes discussed by our panellists at the second fireside chat, organised by the Disaster Risk Management Professional Practice Group in April 2021.



Disaster risk reduction

The third in the Disaster Risk Management Professional Practice Group's fireside chat series.

◆ FREE TO ACCESS.
PROFESSIONAL INTEREST TALKS, 2021



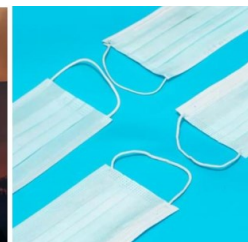
Compound risk: dynamic exposure and vulnerability

In the fourth Disaster Risk Management Professional Practice Group's fireside chat, the panel discusses the topic of compounding risk, with a particular focus on dynamic exposure and vulnerability.



Climate change and implications for disaster risk management

In the Disaster Risk Management Professional Practice Group's fifth Fireside chat event, our expert panel discuss the implications of climate change for evolving disaster risks and disaster risk management.



UPCOMING - COVID-19 pandemic: What have we learnt from a risk management perspective?

Join us on 10 December for the final Fireside Chat of the year.

BOOK HERE
[www.drmppg.org.uk](#)


Summary of Activities 2021

Cabinet Office Roundtable:

Re/insurance approaches to inform the National Security Risk Assessment methodology review

8 speakers

Report



Re/insurance approaches to inform the National Security Risk Assessment methodology review

A Disaster Risk Management Professional Practice Group roundtable discussion with the Royal Academy of Engineering and the Cabinet Office Civil Contingencies Secretariat to inform the National Security Risk Assessment methodology review.

Dr Tina Thomson¹, Alex Jackman²

◇ SECURITY, EMERGENCY PLANNING AND RESPONSE, MANAGING RISK

- **Alan Godfrey**, Head of Group Casualty and Cyber Exposure Management, Axis Capital
- **Emma Watkins**, Head of Exposure Management, Portfolio Risk Management at Lloyd's of London
- **Dr Emma Bergin**, Flood Risk Specialist, Flood Re
- **Dr Raveem Ismail**, Head of Parametric Underwriting at ASR Re
- **Dr Nicola Ranger**, Deputy Director of the Centre for Greening Finance and Investment, Oxford Sustainable Finance Programme
- **Cabinet Office Civil Contingencies Secretariat:** Oli Brown
- **Royal Academy of Engineering:** Dr Marie-Laure Hicks and Dr Alexandra Smyth

<https://www.rgs.org/geography/advocacy-and-impact/impact/nsra-review-drmevent/>

Summary of Activities 2021

- 8 career profiles of women in disaster risk reduction for International women's day 2021.

<https://www.rgs.org/iamageographer/?categories=DisasterRiskManagement&loadall=1&pageindex=1>

Hannah Frost - Senior Catastrophe Risk Analyst

Hannah Frost is a Senior Catastrophe Risk Analyst with Willis Re, based in Sydney, Australia.

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How did you get to where you are now?

I studied for a Geography BSc at Lancaster University, graduating in 2015. I then almost went into geology and especially enjoyed the link between the physical processes and the human behaviour and responses. During a natural hazards lecture at university the risk of insurance was discussed which prompted me to investigate it as a potential career.

I focused my dissertation on the importance of reinsurance in flood modelling for insurance, which gave me insights into the industry and the type of modelling required. As part of this I did some work experience at a local insurance broker to gain insights from a commercial perspective. This led to an interview for the Willis Research Institute, which led me to apply for a position at Willis Re, having grown up just outside London. I always wanted to work in the city but never thought I would find a job there with such strong geographical themes. After an assessment centre and interview I was successful in getting the job as a Catastrophe Risk Analyst.

Over the next few years I worked on various catastrophe modelling projects for clients in Turkey, South Africa, UK, Canada and Australia. In early 2020 I moved to Sydney and took a position in our Sydney team.

What are you responsible for?

The primary aim of my role is to determine how much an insurance company is likely to lose if a large catastrophe was to occur. This information helps my clients to define their size of risk and manage this through their reinsurance and other risk transfer mechanisms.

In order to estimate potential losses, I utilise catastrophe models, which combine programs that simulate various catastrophe events. They require information such as location, building type, construction and usage to inform the hazard and vulnerability. There is a fair amount of data processing, as I have to aggregate information about insured properties into models ready files, which often involves making assumptions based on the knowledge of the portfolio and the local market.

As the output from the models is complex, I prepare the results and communicate to clients about my findings in reports and presentations. By using all the data points I am able to identify trends in areas of where the loss are and what type of loss are they. I can explain why the loss may be increasing or decreasing from year to year to the client.

Climate change is increasingly becoming part of my day to day role, with clients asking more questions about what it means for reinsurance. As the models we use are heavily reliant on past climate trends we have developed adjustments to the models to reflect the likely impact of climate change on a client's portfolio, for example increasing the number of severe storms in Queensland. I can then discuss the changing losses and how this impacts on the future availability of insurance.

What skills and characteristics do you need for this role, apart from geographical knowledge?

A key part of being a successful catastrophe analyst is being able to communicate to audiences with a range of expertise and backgrounds. My work is used internally by actuaries, brokers and client managers, and externally by reinsurance managers, pricing teams, broker members and clients which all have varying levels of knowledge on the specifics of catastrophe and modelling, being able to understand each audience's needs and tailor responses, be it in a presentation, report or email format is essential.

Another key skill that I have picked up from geography is working with a breadth of knowledge and focusing on the relevant aspects. Catastrophe models bring together concepts from statistics, engineering, insurance and social sciences, which means there is always plenty more to learn. It is essential for me to have confidence in my work, but not necessarily being to know every aspect.

How does geography feature in your work?

Risk is inherently a function of location, be it earthquakes, cyclones or pandemics. Being able to understand the different factors which cause catastrophes is essential to understanding what the worst possible scenario could be and hence being able to plan and mitigate. Our clients have been particularly concerned with assets in a range of ports, which makes exposure management a key priority. By analysing their risk we are not just looking South on the sea.

As there were a lot of data in previous hazard and exposure data and it is a key component of our data visualisation, often clients had hard to visualise the results so I support my clients by comparing the footprint of assets with the policy information so they can see where it is likely to be affected and covered recovery efforts. In general clients always love to see interesting maps.

There is also the more obvious geography aspect - the location information is provided at a range of geographical scales and we have to work to aggregate and disaggregate data across different resolutions.

What do you enjoy most about your job?

One of the most enjoyable aspects of my work is how versatile it can be. I recently finished to do a presentation on modelling concepts to the board which involved discussing their reinsurance programme, recent hat events and climate change impacts. Interestingly after I went to work on some modelling with a lot of data points, which involved a completely different skill set.

I also really enjoy working on areas where models are not available. It is fun to build up an understanding and evaluate available models, and add and build them where we think they are not suitable or are not available. In my previous role I managed projects for the Sub-Saharan Africa team which does not have much commercial model coverage. The project that we worked on further to understand the risks, working with our partners on the Willis Research Institute to build models that fit our clients' worked on developing a South Africa hat model which is used in collaboration with MIGA and the Karlsruhe Institute of Technology. Knowing that we are helping to make catastrophe insurance available and affordable for developing countries is very satisfying.

Do you get to travel for your role?

As we are an office globally there is a split for travel to client meetings. There have been lots of travel related clients in Africa, India and recently in Brisbane. I also attended a conference in Berlin where I got to meet with others from the industry and attend educational products.

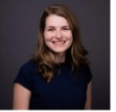
What advice would you give to someone wanting to go into this career?

I would suggest that people interested in catastrophe modelling to insurance and reinsurance look to do with the developments in the industry by reading blogs and news articles from large insurance companies, reinsurance and brokers, such as Willis Re's 'Journal of Global Catastrophe Events'. Look for a catastrophe analyst or exposure management opportunities at geographers, insurance companies and reinsurers.

Being able to provide examples of working with large datasets and experience with programming languages such as Python or R are also very useful.

Why did you choose geography?

Geography links up how principles from many other disciplines can be applied to make sense of how the world works - whether it's climate change, engineering, law and technology. I was particularly interested in how it was used in modelling Singapore and was equipped myself with the knowledge and technical skills to be able to apply my real world problem and opening up to a range of career opportunities. And there's always the heritage!



Hannah Frost
Job Title: Senior Catastrophe Risk Analyst
Organization: Willis Re
Location: Sydney, Australia

Downloads
Hannah Frost - Senior Catastrophe Risk Analyst (pdf)
Featured banner image courtesy of Willis Re.



Caroline Yormesor on working in Disaster Risk Management

Caroline Yormesor is a Senior Resilience Advisor at Applied Resilience. Here she discusses her experiences of working in Disaster Risk Management.

SENIOR POSITIONS, CHARITY AND NOT-FOR-PROFIT, ENVIRONMENT AND SUSTAINABILITY, ENTREPRENEURSHIP AND OWN BUSINESS, GEOGRAPHICAL AND TECHNOLOGICAL INNOVATIONS, DISASTER RISK MANAGEMENT



Liz Hughes OBE on working in Disaster Risk Management

Liz Hughes is a Chief Executive at Map Action. Here she discusses her experiences of working in Disaster Risk Management.

SENIOR POSITIONS, CHARITY AND NOT-FOR-PROFIT, GEOGRAPHICAL AND TECHNOLOGICAL INNOVATIONS, DISASTER RISK MANAGEMENT



Dr Vanessa Lawrence CGeog on working in Disaster Risk Management

Dr Vanessa Lawrence is a Director of Location International Ltd. Here she discusses her experiences of working in Disaster Risk Management.

SENIOR POSITIONS, BUSINESS AND INNOVATION, GEOGRAPHICAL AND TECHNOLOGICAL INNOVATIONS, DISASTER RISK MANAGEMENT



Dr Helen Adams on working in Disaster Risk Management

Dr Helen Adams is a Senior Lecturer in Disaster Risk Reduction and Climate Change Adaptation at King's College London. Here she discusses her experiences of working in Disaster Risk Management.

RESEARCH AND ACADEMIA, MID CAREER, EDUCATION, DISASTER RISK MANAGEMENT



Lucy Stanborough on working in Disaster Risk Management

Lucy Stanborough is Head of Emerging Risks and Geospatial Risks Research. Here she discusses her experiences of working in Disaster Risk Management.

RESEARCH AND ACADEMIA, SENIOR POSITIONS, BUSINESS AND INNOVATION, DISASTER RISK MANAGEMENT



Vanessa Pilley CGeog on working in Disaster Risk Management

Vanessa is a Senior Scientific Officer at DEFRA, based in London. Here she discusses her experiences of working in Disaster Risk Management.

MID CAREER, GOVERNMENT AND POLICY, DISASTER RISK MANAGEMENT



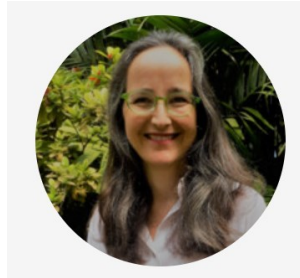
Jane Toothill on working in Disaster Risk Management

Jane Toothill is a Managing Director at JSA Risk Management. Here she discusses her experiences of working in Disaster Risk Management.

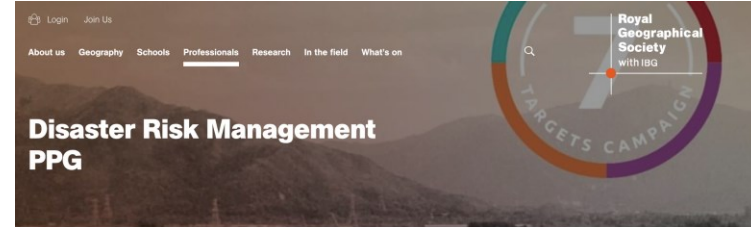
SENIOR POSITIONS, ENVIRONMENT AND SUSTAINABILITY, ENTREPRENEURSHIP AND OWN BUSINESS, GEOGRAPHICAL AND TECHNOLOGICAL INNOVATIONS, DISASTER RISK MANAGEMENT

Summary of Activities 2021

- Blog post interview with **Jenty-Kirsch-Wood** (Head of Global Risk Management and Reporting, UNDRR) for **International Day of Disaster Risk Reduction**, Thursday 13th October 2021



“ **Climate-related disasters have almost doubled compared to the previous twenty years, exacerbating inequalities within and between countries...We need urgent collective action, political leadership, and financing.** ”



International Day for Disaster Risk Reduction 2021: interview with Jenty Kirsch-Wood

For IDDR 2021, the DRM PPG spoke to Jenty Kirsch-Wood, Head of Global Risk Management and Reporting at the UN Office for Disaster Risk Management, on a range of topics around disaster risk reduction, the importance of the IDDRR campaign, and the skills geographers bring to disaster risk management.

Why is it important that we mark the International Day for Disaster Risk Reduction (IDDRR)?

The day is an opportunity to remember those who have lost their lives to preventable disasters, and to remind us of the importance of working together to make true progress towards a safer and more resilient planet.

There has probably never been a more important moment in history to make the point that an investment in disaster risk reduction is an investment in the future safety and resilience of people.

COVID-19 has claimed over 4.5 million lives, wreaked havoc on the global economy and upended people's lives. Wildfires and floods have been devastating communities around the world, and due to global climate change we have just recorded the warmest decade in human history.

The focus of this year's IDDRR is on Target (f) of the *Senda Seven targets*: to 'substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030.'

This seems particularly timely given that IDDRR is just weeks before COP26, a climate change conference that must deliver increased levels of ambition and international cooperation on reducing greenhouse gas emissions and climate change adaptation.

“ **Risk reduction efforts have played a role in the reduction of disaster related deaths recorded in recent decades...we see greater interest and action across governments, cities, and towns to take action towards truly sustainable development** ”

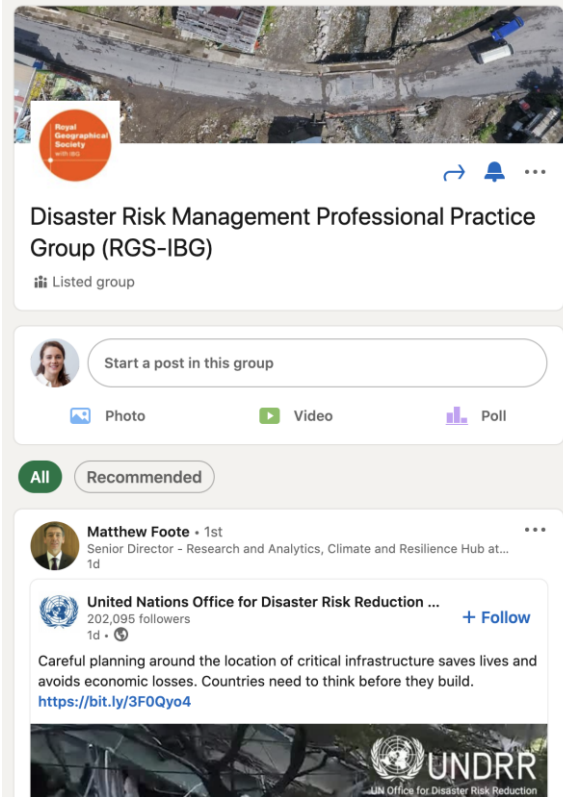
What have we achieved to date in disaster risk reduction?

Four years after the adoption of the 2030 Agenda and the *Senda Framework*, countries have taken concrete steps towards meeting the

Why is IDDRR important?
What have we achieved?
What is the UN's role?
How can vulnerable communities be assisted?
What can geographers do?

Summary of Activities 2021

- **LinkedIn Group**
- >260 members as of November 2021
- Posts on related events
- Group members using disaster risk management practices across academia, government, NGO and private sectors



Disaster Risk Management Professional Practice Group (RGS-IBG)



Listed group

Start a post in this group


Photo Video Poll

All Recommended

Matthew Foote • 1st
Senior Director - Research and Analytics, Climate and Resilience Hub at...
1d

 **United Nations Office for Disaster Risk Reduction ...**
202,095 followers
1d •  [+ Follow](#)

Careful planning around the location of critical infrastructure saves lives and avoids economic losses. Countries need to think before they build.
<https://bit.ly/3F0Qyo4>

 **UNDRR**
UN Office for Disaster Risk Reduction

Summary of Activities 2021

Early Career Development

- Early careers webinar with university students across the U.K. organised by the RGS sharing experiences from our DRM-PPG committee members (link [here](#))
- 8 'I am a geographer' profiles focussed on women in DRM (link [here](#))
- Early careers sub-group of DRM-PPG volunteers starting to collate material for a resource page on the RGS website

Themes you suggested at kick off meeting

- Climate change (and COP26 engagement)
- Resilience and adaptation
- Early warning systems and crisis response
- Emergency management, local & municipal risk planning and response
- Reaching marginalised groups e.g. low-income backgrounds
- International engagement opportunities including NGOs, other international bodies
- Pre-degree student engagement e.g., Geography ambassador scheme (*Careers profiles?*)

<https://www.rgs.org/professionals/professional-practice-groups/disaster-risk-management-ppg/downloads/disaster-risk-management-professional-practice-gro.pdf/>

2022 – Things to come

- Establish and develop further DRM-PPG sub-groups, e.g. communicating risks, career development, cross-sectoral risk management
- Develop an international reach
- Engage more with other organisations e.g. MapAction, RSPSoc, Risk-KAN Early Warning Systems, etc.
- Establishment of an early careers event community
- Continuation of Firesides, roundtables, blogs
- Inclusion of in-person networking type events linked with Monday night lectures
- RGS conference and focus on disaster risk