

**Sharing Good Practice** 

**EU Disaster Prevention Workshop in Stockholm, Sweden July 2009** 

**Sophie Purdey** 

**Head, Hazard Management Services** 



# Hazard Ready What is it about? Big Picture

Integrating weather / climate & environmental expertise

Enable organisations to

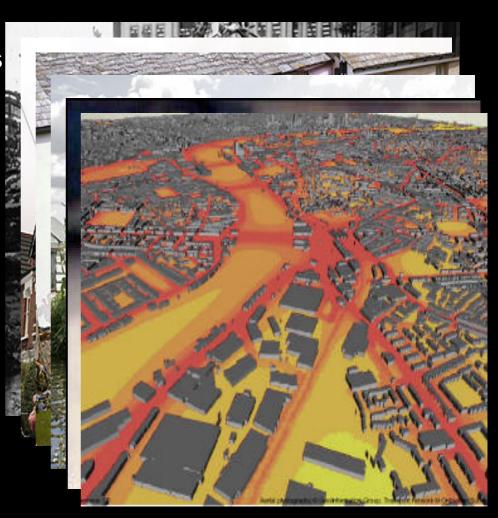
Understand risk Prepare & Respond

Better protect life & property and grow revenues



#### Hazard Ready™ What are the drivers?

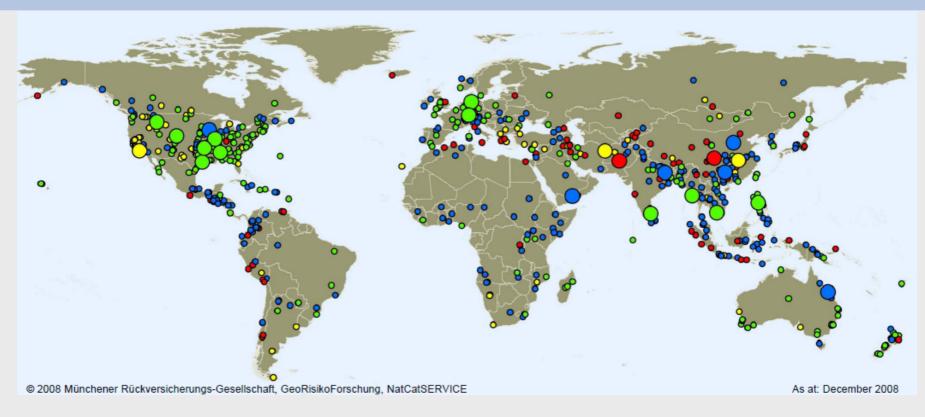
- In 2008 overall global losses attributed to natural disasters were \$200bn (Munich Re)
- Past 20yrs in the EU, 953 disasters caused \$269bn (floods 40% & storms 33%) losses & 88,671 deaths
- Compared to rest of the world, economic losses per capita due to population density
- 1-Stop Shop providing multihazard – E2E services
- Opportunity for a strategic partnerships to add value – integrating data / mapping & expertise for the customer



#### Natural disasters 2008

#### World map





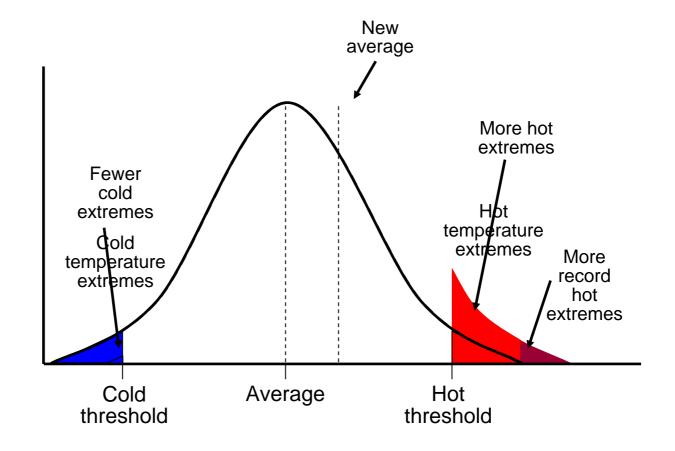
- 750 natural hazard losses
- Costliest/Deadliest events

- Geophysical (earthquake, tsunami, volcanic activity)
- Meteorological (storm)
- Hydrological (flood, mass movement)
- Climatological (extreme temperature, drought, wildfire)



## Increase in probability of extremes in a warmer climate

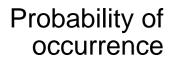
Probability of occurrence

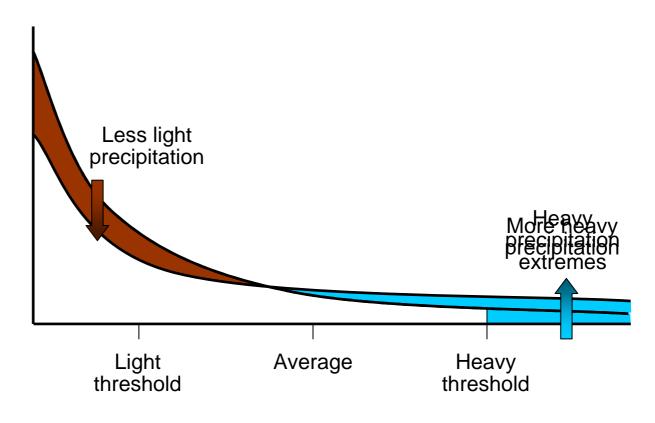


(After IPCC 2007 & Karl et al. 2008)



# Increase in probability of extremes in a warmer climate

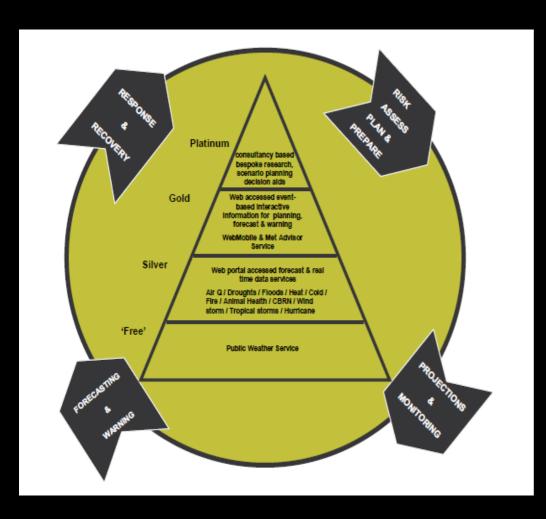




(After Karl et al. 2008)



### Hazard Ready<sup>™</sup> The Idea



#### The Hazard Ready initiative is exploring the potential for:

- Multiple natural & man-made hazard management services
- Life cycle of event management
- Strategic partnerships



## Hazard Ready<sup>™</sup> Potential Offerings

- One Stop-Shop for natural & man-made hazard servicesBasic information layer
- Value Added layers to inform vulnerability mapping
- □ Decision Aid Tools for planning & response
- □ Dependency Analysis to aid response & recovery planning
- ☐ Site or thematic bespoke risk assessment
- ☐ Specialist expert advice & interpretation
- Training
- □ Global capacity building



#### Hazard Ready<sup>™</sup> Scenario - wildfires

"The best prediction to date suggests a 3-4C increase for the UK by 2040, this could equate to 120 000 additional wildfire calls across the country"

Source: CFOA climate change conference

Risk, Assess and plan	Monitoring	Warning	Response
Old an Hamfeld Pail Blundery Province Year P	Control of the contro		
Risk map of wildfire occurrence produced from multi-criteria modelling and past fire records	Satellite imagery coupled with geographical data layers and decision aid monitoring and detection tools ensures fast response times	Integrated into Fire service operational system the user is able to interact and overlay hazard ready services to produce bespoke, tailored warnings and impact assessments	Response is immediate and targeted. Information fed into a mobile data terminal available on the road or in the field will help the fire service get to the location on time.



### Hazard *Ready*™

**Active Alerts** 

Biological



© Crown copyright Met Office

Google

Legend



#### Hazard Ready™

### Thankyou

sophie.purdey@metoffice.gov.uk

T. +44 7887 624990