Learning lessons from the 2007 floods An independent review by Sir Michael Pitt

Response of the Europa Council of the International Association of Emergency Managers

(www.iaem.com www.iaem-europa.eu)

The International Association of Emergency Managers (IAEM) is a non-profit educational organisation dedicated to promoting the goals of saving lives and protecting property during emergencies and disasters.

Our Vision: IAEM shall be recognised as a premier international organization of emergency management professionals.

Our Mission: The mission of IAEM is to serve its members by providing information, networking and professional opportunities, and to advance the emergency management profession.

We are grateful for the opportunity given to our members to comment on this important report

Arthur Rabjohn CEM President IAEM Europa www.iaem.com

IC 1 The interim conclusion of the Review is that Government takes the lead in making the case for the need for adaptation to climate change and particularly in mitigating the potential impacts on communities.

IC 2 The interim conclusion of the Review is that the Government develops a clear strategy and action plan to deliver the provisions of the Climate Change Bill to support adaptation to increasing impacts from flooding.

IC1 & IC2 IAEM Europa fully agrees with the reports interim conclusions that government should show leadership and address 'Climate Change' now. To do this we believe that a Central Government Agency must be established to address Emergency Management across the full phases of Prevention, Preparedness, Response and Recovery. The Civil Contingencies Act 2004 has addressed the later phases but has not integrated prevention and mitigation into a co-ordinated approach to protect communities.

IC 3 The interim conclusion of the Review is that the Environment Agency further develops its tools and techniques for predicting and modelling river flooding, especially to take account of extreme and multiple events; and takes forward urgently work to develop similar tools and techniques to model surface water flooding.

IC3 IAEM Europa welcomes the suggestion that the Environment Agency should be given resources to further develop its capability to define fluvial and pluvial flood risks. This will greatly assist our members to carry out their professional activities in addressing these risks. Identified risks must be included in the Local Resilience Forum Community Risk Register and addressed as a multi-agency responsibility as per IC5.

IC 4 The interim conclusion of the Review is that the Environment Agency revises its flood maps to identify areas where there is a risk of significant depths and velocity of water, to improve the effectiveness of emergency planning.

IC4 As with IC3 we welcome the assistance this will give to our members in carrying out their professional activities at the local level. However there must be a preventative or mitigation effort within the design, planning permission and building processes of new developments.

IC 5 The interim conclusion of the Review is that the Environment Agency works more closely with Local Resilience Forums to provide information drawn from flood risk modelling and mapping tools to improve the accuracy and consistency of flood risk information in Community Risk Registers.

IC5 As with IC3 we welcome the assistance this will give to our members in carrying out their professional activities.

IC 6 The interim conclusion of the Review is that the Environment Agency progressively develops and brings into use flood visualisation tools, designed to meet the needs of flood risk managers, emergency planners and responders.

IC6 As with IC3 we welcome the assistance this will give to our members in carrying out their professional activities. Any such tools must also be made available at the planning stage to assess risk before building is undertaken.

IC 7 The interim conclusion of the Review is that the Met Office and the Environment Agency produce an early assessment of the costs, benefits and feasibility of techniques which can predict where rain will fall and where surface water flooding will occur.

IC7 As with IC3 we welcome the assistance this will give to our members in carrying out their professional activities.

REC 1 – The Review recommends that more frequent and systematic monitoring of groundwater levels at times of high risk should be undertaken by the Environment Agency, which should begin as soon as possible to predict and mitigate further serious ground water flooding from this winter onwards.

REC 2 – The Review recommends that the Environment Agency, supported by local authorities and water companies, should urgently identify areas at highest risk from surface water flooding where known, inform Local Resilience Forums and take steps to identify remaining high risk areas over the coming months.

IC3-7 REC 1 & 2 The suggested further work required by the Environment Agency (EA) is welcomed, but will only be achieved with greater investment in that agencies technological capabilities and human resources.

The EA should be a principle adviser to both national and regional structures, along with the Health Protection Agency (HPA). We do not feel that the EA has the resources to work closely with the 40+ LRFs and should therefore make its recommendations for prevention and mitigation programmes at regional levels. Planning must not be the only response to identified risks brought to the attention of LRFs, there must be directives to prevent or mitigate the risks. **IC 8** The interim conclusion of the Review is that PPS25 should be rigorously applied by local planning authorities, including giving consideration to all sources of flood risk and ensuring that developers make a full contribution to the costs both of building and maintaining any necessary defences.

IC8 IAEM Europa believes this would be significant step forward to allow for prevention and mitigation to be addressed at the planning stages. Greater emphasis should also be made of the impact of flooding with regards to the presence of vehicles and waste receptacles at ground level. Simply building residential / commercial property above garages and communal areas in flood risk zones is not the answer. Access and egress during floods must also be an issue for both vehicular and pedestrian traffic.

IC 9 The interim conclusion of the Review is that householders and business owners should no longer be able to lay impermeable surfaces as of right.

IC9 We would go further and suggest that such a change to a property should require planning permission. Local Authorities should be able to block such development and actively reverse the trend by grant support to property owners to change their hard standing areas to porous structures.

IC 10 The interim conclusion of the Review is that the automatic right to connect surface water drainage of new developments to the sewerage system should be removed.

IC10 IAEM Europa welcomes this comment that should ensure all future land use developments mitigate the risk of pluvial flooding. An environmental impact assessment by developers detailing all aspects of waste water and surface water should be required as a component of planning applications.

IC 11 The interim conclusion of the Review is that no new building should be allowed in a flood risk area that is not flood resilient, and that the Government should work with organisations such as the Royal Institute of British Architects and the building industry to encourage flood resilient building and development design.

IC 12 The interim conclusion of the Review is that the Government should incorporate flood resistance and resilience requirements for new properties in flood risk areas into Building Regulations as part of the current process of revision.

IC 13 The interim conclusion of the Review is that the Government should incorporate requirements for resistant or resilient refurbishment of flooded properties in high flood risk areas into Building Regulations as part of the current process of revision.

IC12&13 Resilient to flooding infers that we are going to allow them to flood with minimal damage and a speedy recovery. Resistant to flooding implies the buildings will hold back the water. IAEM Europa would prefer the principle to be that any new buildings that are replacing development already undertaken on the flood plains must be beyond the reach of flood waters and contribute to the water storage and drainage capacity of the land they cover.

IC 14 The interim conclusion of the Review is that local authorities and housing associations should take a more active roll in increasing the uptake of flood resistance and resilience measures, leading by example by repairing their properties with appropriate materials where it is cost effective.

IC14 This will not happen unless additional funding is provided and its use reserved purely for this purpose.

IC 15 The interim conclusion of the Review is that local authorities in high flood risk areas should extend eligibility for home improvement grants and loans to encompass flood protection and resilience products.

IC 16 The interim conclusion of the Review is that local authorities, as they discharge their responsibilities under the Civil Contingencies Act 2004 to promote business continuity, should encourage the uptake of property-level flood resistance and resilience measures. This should be reflected in guidance from the Government.

IC16 This is termed an 'all hazards approach' that is advocated throughout emergency management. Emergency Planning (EP) has for too long planned against specific risks rather than all hazards. The delivery of Business Continuity promotion must be aligned to the BS25999 standard and appropriate hazard assessment, risk analysis and impact assessment undertaken by all businesses. Flooding may be one of a number of hazards they are faced with.

IC 17 The interim conclusion of the Review is that local authorities should lead on the management of surface water flooding and drainage at the local level with the support of all responsible organisations including the Environment Agency, water companies and internal drainage boards, the Highways Agency and British Waterways.

IC17 This comment again puts the lead and work on the shoulders of Local Authorities (LA) without defining who within the LA should be responsible. The diversity of LA structures in the UK means that this lead role could fall across a number of different areas of LA work. The only way to give clear leadership on all such risks is to have a dedicated multi-agency unit than leads and directs such activity within its programme of projects addressing all phases of emergency management.

IC 18 The interim conclusion of the Review is that local authorities in flood risk areas should assess their capabilities to deliver the wide range of responsibilities in relation to local flood risk management.

IC18 With regard to climate change and critical infrastructure this comment should point LAs to review their total capability to deliver a comprehensive all hazards emergency management programme.

IC 19 The interim conclusion of the Review is that the Environment Agency should have a national overview of all flood risk and that, Defra's work on the development of a national overview role for the Agency in relation to surface water flooding should be progressed.

IC19 As above the work of Defra should be a priority to clearly define the EAs role in relation to all hazards not just flooding. It should become a scientific and specialist advisory body to the work of Regional and Local organisation responsible for undertaking the suggested preventative and mitigating activities.

IC 20 The interim conclusion of the Review is that local Surface Water Management Plans, as set out under PPS25, should provide the basis for managing surface water flood risk. These plans should be coordinated by the local authority and be risk-based, considering all sources of flooding.

IC20 IAEM Europa believes this co-ordinated approach should address all hazards with an integrated multi-agency approach.

IC 21 The interim conclusion of the Review is that a local register of all the main flood risk management and drainage assets (overland and underground) should be compiled by the relevant local authority, including an assessment of their condition and details of the responsible owners.

IC21 This comment cannot be based upon current financial, human or expert resources with Local Authorities. For this to happen there will need to be a regulatory requirement that also details cost recovery of such inspections and the legal powers to direct repair works to be undertaken.

IC 22 The interim conclusion of the Review is that Defra should issue guidance on how all organisations can be brought together to work with local authorities on surface water flood risk management, sharing information, modelling and expertise on a consistent basis.

IC22 See earlier remarks with regards to a local comprehensive integrated all hazards approach through a single Emergency Management Unit.

IC 23 The interim conclusion of the Review is that the Government, as part of its Water Strategy, should resolve the issue of which organisations should be responsible for the ownership and maintenance of sustainable drainage systems.

IC 24 The interim conclusion of the Review is that Defra should work with Ofwat and the water industry to explore how appropriate risk-based standards for drainage systems (including pumping stations) can be achieved.

IC 25 The interim conclusion of the Review is that, as part of the forthcoming water industry pricing review, the water companies, in conjunction with local authorities and other partners, should develop proposals for investment in the existing drainage network to deal with increasing flood risk.

IC 26 The interim conclusion of the Review is that local authority scrutiny committees review SWMPs and other linked plans, such as Frameworks and Community Risk Registers, to ensure that flood risk is adequately considered and to ensure greater transparency and progress in the management of that risk.

IC26 We don't think the public want to see another powerless single purposed committee taking up the time of already over stretched organisations to eventually deliver suggestions. We believe the answer is a professional coordinating body mandated to address a comprehensive all hazards programme of activity to address local risks in an expedient and integrated way.

IC 27 The interim conclusion of the Review is that it is appropriate for the Environment Agency and other local organisations to continue to focus investment on areas of highest assessed long-term risk, whether or not they have been recently flooded.

IC 28 The interim conclusion of the Review is that the Government should commit to a strategic long-term approach to its investment in flood risk management, planning up to 25 years ahead.

IC27 & 28 Yes an all hazards approach with long term commitment of resources and capabilities to a priority risk based emergency management programme that protects communities

REC 3 – The Review recommends that the Environment Agency should urgently develop and implement a clear policy on the use of temporary and demountable defences.

REC3 Yes and that policy and those procedures should be applied in risk management locally where most effective to prevent or mitigate flooding. Resources must be stockpiled to meet local identified usage and pre positioned for rapid deployment.

IC 29 The interim conclusion of the Review is that the Environment Agency should open dialogue with all those landowners who will be affected by either a withdrawal from or significant reduction in maintenance of rural watercourses.

IC 30 The interim conclusion of the Review is that the Government should develop a single national set of guidance for local authorities and the public on the use and usefulness of sandbags and other alternatives, rather than leaving the matter wholly to local discretion.

IC30 This is urgently required by our local authority members who voice concerns that the use of sandbags is a political local activity undertaken to be seen to be doing something. In many local authorities the current policy, if one even exists, is wasteful and not risk driven.

IC 31 The interim conclusion of the Review is that Defra, the Environment Agency and Natural England should work with partners to establish a programme and framework to achieve greater working with natural processes, including the identification of appropriate sites and the development of more incentives for creating water storage, restoring the natural course of rivers and establishing green corridors.

IC 32 The interim conclusion of the Review is that the Environment Agency should provide an analysis of the effect that land management practices had or would have had on the impact of flooding during the summer 2007 floods.

IC 33 The interim conclusion of the Review is that flooding legislation should be updated and streamlined under a single unifying Act that amongst other outcomes addresses all sources of flooding, clarifies responsibilities and facilitates flood risk management.

IC 34 The interim conclusion of the Review is that the Government and the insurance industry should work together to deliver a public education programme setting out the benefits of insurance in the context of flooding.

IC 35 The interim conclusion of the Review is that the Government and the insurance industry work together to develop options to improve the availability and uptake of flood risk insurance by low income households and assess the costs, benefits and feasibility of these options, before the Review's final report.

IC 36 The interim conclusion of the Review is that, in flood risk areas, a note on flood risk and the simple steps that could be taken to mitigate it should be included with all insurance renewal notices. Moreover, if Flood Warning Direct is available in a customer's area, one of the conditions of renewal could be sign-up to this service.

IC 37 The interim conclusion of the Review is that the Met Office and the Environment Agency should produce an assessment of the options for issuing warnings against a lower threshold of probability, including costs, benefits and feasibility; this will be considered further in the final report.

IC 31-37 It was felt that this must also be part of the new Homebuyer Pack requirement for house purchases in England and Wales.

IC 38 The interim conclusion of the Review is that unless agreed otherwise locally, 'upper tier' local authorities should be the lead organisation in relation to multiagency planning for severe weather emergencies at the local level, and for triggering multi-agency arrangements in response to severe weather warnings.

IC38 IAEM Europa believes that this can only be achieved if authority for decision making sits with a professional emergency manager leading a multiagency dedicated team that has full knowledge of local risks, plans, resources and capabilities.

IC 39 The interim conclusion of the Review is that where a Gold Command is established, the police, unless agreed otherwise locally, should convene and lead the multi-agency response.

IC 40 The interim conclusion of the Review is that Gold Commands should be established at an early stage on a precautionary basis where there is a risk of serious flooding.

IC 41 The interim conclusion of the Review is that Local Resilience Forums should assess the effectiveness of their Gold facilities, including flexible accommodation, IT and communications systems.

IC 39 - 41 Any new legislation to address UK capabilities to respond to and manage emergencies should make it a requirement for every LRF to have a defined multi-agency Emergency Operations Centre supporting a Strategic Command Group (GOLD). That facility must have a defined minimum set of communications capabilities supported by continuity plans and an alternate site in case of the unavailability of the primary facility.

REC 4 – The Review recommends that all Local Resilience Forums urgently review their current local arrangements for water rescue to consider whether they are adequate in light of the summer's events and their local community risk registers.

REC4 The UK has made considerable advances in the water rescue capabilities of its Fire and Rescue Services as part of its capabilities programme. IAEM Europa feels that this new capability hasn't been mapped regionally or nationally to allow for mutual aid capabilities to be fully understood and utilised.

REC 5 – The Review recommends that all Local Resilience Forums should undertake an urgent review of designated rest centres and other major facilities to ensure either that they have the necessary levels of resilience to enable them to be used in the response to flooding and other major emergencies, or that alternative arrangements are put in place.

REC5 The UK does not currently identify its civil protection resources so that they are identifiable to its population or visitors from the rest of Europe. The civil protection logo of a blue triangle on orange background should be used by all organisations to identify facilities and resources designated by organisations as part of the UK civil protection capability. Furthermore the UK should consider using the EU Civil Protection logo.



IC 42 The interim conclusion of the Review is that the Local Government Association should consider how best mutual support might be enhanced between local authorities in the event of a future wide-area emergency.

IC42 IAEM Europa believes that the first step in this process must be the creation of a national, regional and local joined up structure that addresses a comprehensive emergency management programme.

IC 43 The interim conclusion of the Review is that Cabinet Office guidance to local planners should specifically include incidents which leave large numbers of people stranded on motorways and trunk roads.

IC 44 The interim conclusion of the Review is that, as part of their emergency plans, Local Resilience Forums should consider the vulnerability of motorways and trunk roads to flooding, and consider the potential for earlier, stronger, more specific warnings, and strategic road clearance and closures, to avoid people becoming stranded.

IC44 This will require a clearly defined emergency management procedure that currently doesn't exist in the police, highways agency and local authority roads responsibilities structure. A multi-agency unit would have both the rehearsed knowledge and authority to take such action.

REC 6 – The Review recommends that the Cabinet Office, with other departments, should urgently consider the costs, benefits and feasibility of establishing arrangements for the urgent acquisition of supplies during a major emergency, including the use of call-off contracts or the creation of national or regional stockpiles of equipment and consumables.

REC6 40+ LRFs each establishing their own procedures or contracts without accounting for neighbouring LRFs arrangements is not good business. The Government Offices of the Regions Regional Resilience Units have been ineffective and undirected with regards to national or regional stockpiles. The only work in this area has been towards Regional Temporary Mortuary capabilities.

IC 45 The interim conclusion of the Review is that Defra should review the current requirement in emergency regulations for the minimum amount of water to be provided in an emergency, to reflect reasonable needs during a longer term loss of mains supply.

IC 46 The interim conclusion of the Review is that central government crisis machinery should always be activated if significant wide-area flooding of whatever nature is expected or occurs.

IC 47 The interim conclusion of the Review is that Defra extends its current departmental programme to share best practice and provide training in emergency response across the organisation.

IC 48 The interim conclusion of the Review is that Defra and the Environment Agency work together to establish a single London situation room to coordinate flooding information, to act as a focal point for cross-Defra efforts, and to support Defra Ministers.

IC 48 Why only Defra and EA? A purpose built multi-agency Emergency Operations Centre for London is required, which an appropriate alternate site, that can be used for all emergencies that may befall the city. Should the Fire Service and Environment Agency establish a single London situation room to coordinate hazardous material information, to act as a focal point for cross-DLG efforts, and to support DLG Ministers?

IC 49 The interim conclusion of the Review is that a national flooding exercise should take place at the earliest opportunity in order to test the new arrangements which central government departments are putting into place to deal with flooding and infrastructure emergencies.

IC 50 The interim conclusion of the Review is that financial assistance for local responders in relation to emergency response and recovery should be revised to improve speed, simplicity and certainty.

IC50 Belwyn doesn't work sufficiently in the current governmental structure. Yes a new means of declaring Governmental assistance to local responders must be established. IAEM Europa recommends a review of the Australian, Canadian and US state, provincial and federal assistance programme may provide a solution. **REC 7** – The Review recommends that Department of Health guidance clarifying the role and accountabilities of organisations involved in providing scientific and technical advice during a major incident should be implemented as soon as possible and understood by Gold Commanders.

REC 8 – The Review recommends that the guidance currently under preparation by Cabinet Office to provide local responders with advice on the definition and identification of vulnerable people and on planning to support them in an emergency should be issued urgently.

REC8 Our members noted, and welcomed, that this has already been achieved with unusual speed for central government.

REC 9 – The review recommends that, in order to effectively fulfil its Lead Department role for flood risk management and emergency response, Defra needs to urgently develop and share a national flood emergency framework.

REC9 Defra is not alone in this regard when it comes to Central Government Departments

REC 10 – The Review recommends that Category 1 responders should be urgently provided with a detailed assessment of critical infrastructure in their areas to enable them to assess its vulnerability to flooding.

REC10 This recommendation fails to recognise the difficulty the LRFs have had in compiling their Community Risk Registers and fails to define the leadership for this work. Again a single multi-agencies unit would be ideally placed to receive and assess such information.

IC 51 The interim conclusion of the Review is that Local Resilience Forums should be made aware of recent Cabinet Office guidance setting out the transition to recovery. Recovery subgroups should be established from the onset of major emergencies and in due course there should be formal handover from Gold Command to the local Recovery Coordinating Group(s), normally chaired by the Chief Executive of the affected local authority.

IC 52 The interim conclusion of the Review is that the Government should establish a systematic, coordinated, cross sector campaign to reduce the disruption caused by natural events to critical infrastructure and essential services.

IC 53 The interim conclusion of the Review is that the Government should develop and issue guidance on consistent and proportionate minimum levels of protection from flooding for critical infrastructure.

IC 54 The interim conclusion of the Review is that infrastructure operating companies should present the case for further investment in flood resilience through the appropriate regulatory process.

IC 55 The interim conclusion of the Review is that a duty should be introduced on critical infrastructure operators to have business continuity planning to BS 25999 in place to more closely reflect the duty on Category 1 responders. This should include minimising the loss of supply as far as practicable in the event of a serious emergency resulting from flooding.

IC 56 The interim conclusion of the Review is that, in relation to information sharing and cooperation, the Civil Contingencies Act and Regulations should be extended to require Category 2 responders to more formally contribute information on critical sites, their vulnerability and the impact of their loss.

IC 57 The interim conclusion of the Review is that single points of failure and the complete loss of assets need to be explicitly considered in the risk assessment and contingency planning undertaken by operators, emergency planners and responders.

IC 58 The interim conclusion of the Review is that Local Resilience Forums should ensure that Community Risk Registers reflect risks to critical infrastructure from flooding and other hazards.

IC 59 The interim conclusion of the Review is that Category 2 responders should be required to participate fully at Gold and Silver Commands and that the Government should deliver this through the Civil Contingencies Act or other regulatory regimes.

IC 56-59 These comments fail to recognise the commercial confidentiality of such information and the capabilities of large wide area organisations to interact with the numerous LRFs in their area of coverage. These Category 2 organisations need to be tied in to a regional structure that has purpose and position to address the emergency management aspects of this task. The regional office can then provide the information to the LRFs in an appropriate way with directives for actions to be undertaken.

IC 60 The interim conclusion of the Review is that the emergency plans and business continuity plans of essential service providers should be reviewed annually by local authority scrutiny committees.

IC60 Who in Local Authorities is qualified to do this? So if they bring in outside assistance of subject matter experts who is going to pay for it?

Private companies are not going to want their most intimate plans exposed to public scrutiny or to any other organisation that may create commercial advantage to a competitor. This is probably the comment least likely to be developed in this report unless Regulations and a Regulatory body are defined.

IC 61 The interim conclusion of the Review is that critical infrastructure planning should become a separate discipline within civil protection at the local level.

IC61 'Civil Protection' finally appears in the report. Why a separate discipline? If a comprehensive integrated all hazards approach is taken to the process by a dedicated multi-agency emergency management team then critical infrastructure is an embedded risk that is addressed in the emergency management programme.

IC 62 The interim conclusion of the Review is that the Government should implement the legislative changes proposed in the recently published Environment Agency biennial report on dam and reservoir safety.

IC 63 The interim conclusion of the Review is that all reservoir undertakers should be required by Defra to prepare inundation maps and share them with Local Resilience Forums to improve Community Risk Registers and emergency planning.

IC 64 The interim conclusion of the Review is that the Environment Agency should produce a sliding scale of options for greater personalisation of public warning information, including costs, benefits and feasibility, before the final report.

IC64 The use of existing FM radio infrastructure in the UK to deliver public safety messaging should be investigated. There are such schemes in use in other countries, especially the US, so why not the UK?

IC 65 The interim conclusion of the Review is that the Environment Agency works with local responders to raise awareness in flood risk areas and identify a range of mechanisms to warn the public, particularly the vulnerable, in response to flooding.

IC 66 The interim conclusion of the Review is that advice by telephone during a flood emergency should come from just two sources – the Environment Agency for flooding information and local authority contact centres for local advice

IC66 It would be even better if this came from one source the Emergency Management Unit and its Emergency Operations Centre.

IC 67 The interim conclusion of the Review is that advice disseminated via the internet should be coherent by ensuring integration and consistency between local websites, including that of the Local Resilience Forum and those of all category 1 responders.

IC 68 The interim conclusion of the Review is that essential service providers should maintain continuous provision of public information during an emergency, through a website linked to other responders and local authority contact centres.

IC 69 The interim conclusion of the Review is that the Government works towards a single definitive set of flood related health advice for householders and businesses, which can be used by media and the authorities locally and nationally.

IC 70 The interim conclusion of the Review is that council leaders and chief executives play a prominent role in public reassurance and advice through the local media during a flooding emergency as part of a coordinated effort overseen by Gold Commanders.

IC 71 The interim conclusion of the Review is that flood risk should be made part of the mandatory search requirements when people buy property and should form part of Home Improvement Packs.

IC 72 The interim conclusion of the Review is that the Government launches an public information campaign which draws on a single definitive set of flood prevention and mitigation advice for householders and businesses, and which can be used by media and the authorities locally and nationally.

IC67-72 Public Safety messaging must be targeted at those at risk and sustained so as not to dilute the message and waste resources. The BBC Connecting in Crisis scheme must be given wider exposure and support as a means of communicating with the public.

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