## UNFCCC Workshop, Bonn, 12-13 May, 2003 Professor David Crichton

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## Insurance and "Maladaptation" to climate change

It can be argued that the presence of available and affordable insurance is a disincentive to adaptation to climate change impacts. Three examples can be given relating to flood risk:

- 1. Availability of cheap flood insurance, provided by the State (as in the USA) or the private sector (as in the UK). This can lead to increased building in flood plains or low lying coastal areas. The "flood insurance guarantee", (which applied in Great Britain from 1961 to 2002) was an agreement between private sector insurers and government under which homeowners were guaranteed cheap flood insurance no matter where the property was located. The result was a huge growth in house building in flood hazard areas, with insurance subsidised by homeowners living in low hazard areas. This has now become unsustainable, and the guarantee was cancelled at the end of 2002. As a result 400,000 households in flood hazard areas are suddenly facing huge increases in insurance premium if they can get cover at all.
- 2. Reinstatement after a flood. Insurers want to keep claims costs down so they reinstate damaged parts of buildings using the cheapest modern materials which are often less resilient to future floods than traditional materials. They are increasingly aware that the result is that the next flood causes even more damage. This is also partly the fault of the construction industry, which is not accustomed to resilient reinstatement, and partly the fault of building codes, which have still not changed to take into account climate change. Even if building codes were reviewed in the light of climate change (and there is little sign of this happening) this would make no impact on existing buildings. Insurers could have an enormous effect by adopting a resilient reinstatement policy on buildings damaged by flood or storm, but they need governments to insist on it to provide a level playing field.
- 3. <u>Structural versus non structural flood management</u>. Insurers tend to look at the short term, and favour structural defences. However with climate change, these can offer only a temporary solution, which in the longer term can make the situation worse. The situation in Canada and Japan is contrasted with the situation in Scotland. Structural flood defences can lead to a vicious circle situation; when the defence is built, more people will want to live behind its protection, putting pressure on government to increase the design standard. If they do, even more people will want to live there. Another example of maladaptation.

To make changes happen requires a partnership between the private and public sector to ensure that the risk does not grow out of control and to maintain a level playing field for competing insurers.