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Actions towards seismic risk mitigation in Martinique, French Antilles



J.C. Audru, B. Capdeville, J.J. Salindre, N. Nérée and É. Mouly



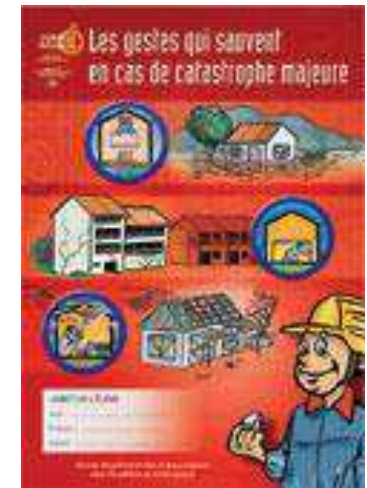
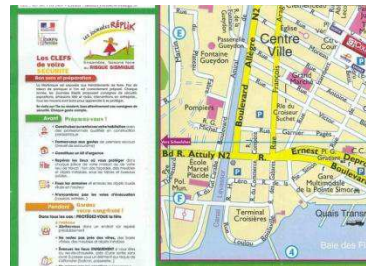
The French Antilles National Earthquake Plan

- > Initiated in the French Antilles in 2007
- > To reduce the vulnerability of people and buildings
- > Budget ~100 M€ for Martinique actions
- > Actions dedicated to
 - public information and preparedness
 - professionals training courses
 - scientific knowledge
 - reinforcement and retrofit
- > The “Réplik” group of partners = public services, academy, regional and general council, foundations, experts, architects, mayors association, firemen, army, communication society, etc.



Public information & preparedness

- > Annual information and preparedness campaign (all year + November)
- > Targets residents (adults, pupils) and tourists
 - Brochures, magnets, mouse pads, calendars, whistles, roadmaps, etc.
 - Exhibition stand at the annual Housing Fair (October)
 - Dedicated web site with a download area



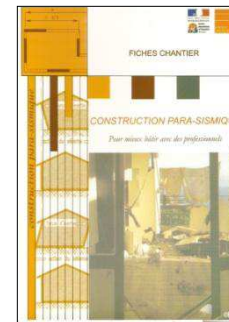
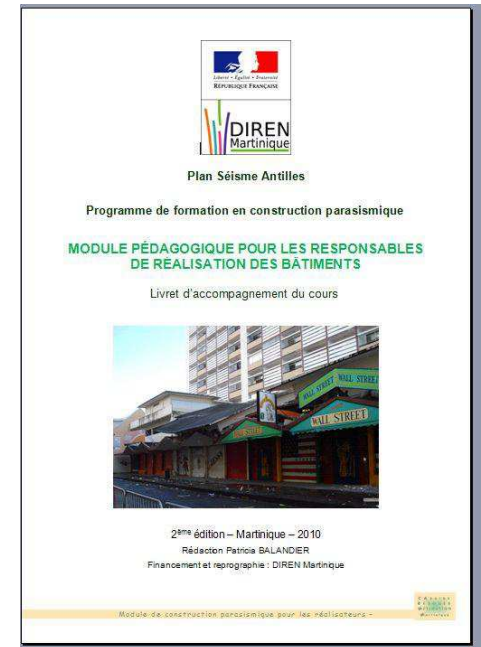
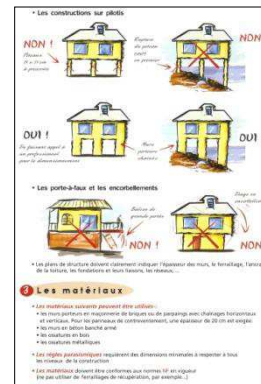
Public information & preparedness

- Painting and sculpture exhibition, theatre skits, newspaper ads
- TV, cinema and radio spots
- Expanded partnership : pharmacies, medical offices, insurance firms, post offices, petrol outlets, commercial centers, TV channels etc.



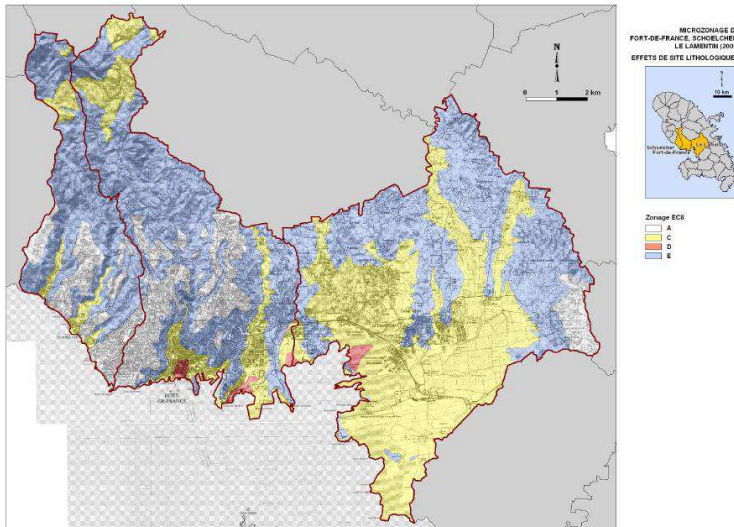
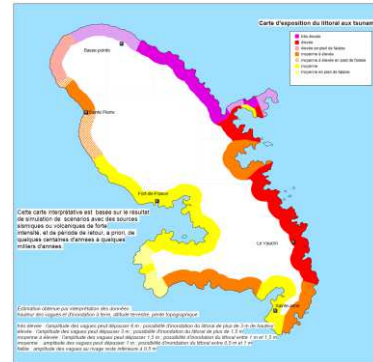
Specific information to employees and to construction professionals

- > Conferences for employees during working hours, “Do and don’t” flyers adapted to the industrial purposes (6000 people since 2008)
- > Training courses for construction professionals, technical brochures, building codes, seismic reports



Scientific information to experts, mayors and local councils

- > Microzonations maps
- > Tsunami hazard maps (at regional scale) for all French islands
- > Caribbean experience sharing with the SeismCaRe symposium (20 countries from C. Am + Caribbean)

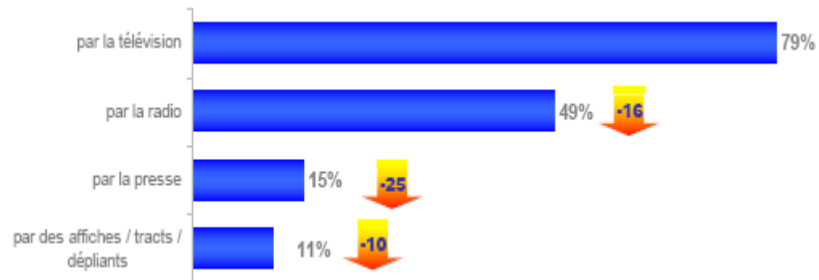


Evaluation of prep. Actions (survey Dec. 2010)

> 74% have heard of preparedness actions



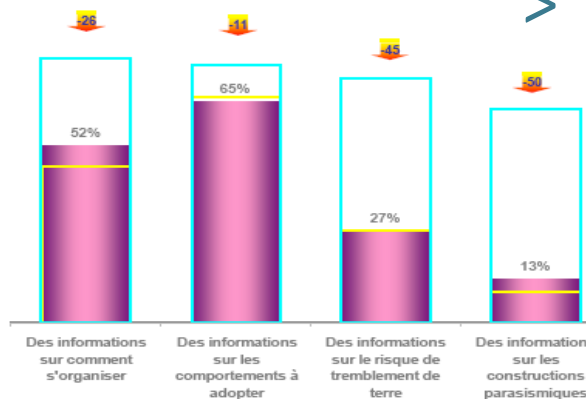
> TV and then radio remain the main dissemination channels



> 72% have not followed the preparedness actions



> Up to 65% know what to do but this is less than in 2009 (back to 2007 level)



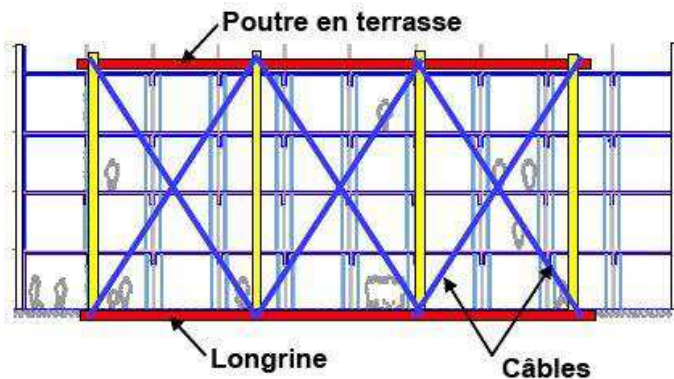
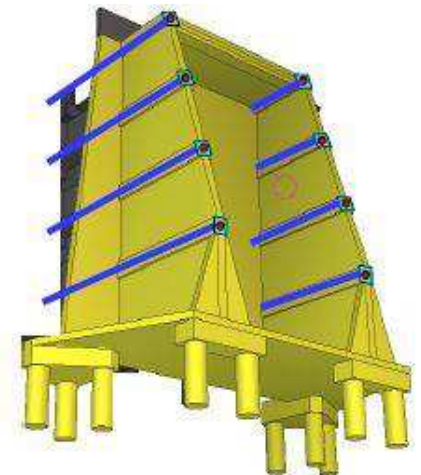
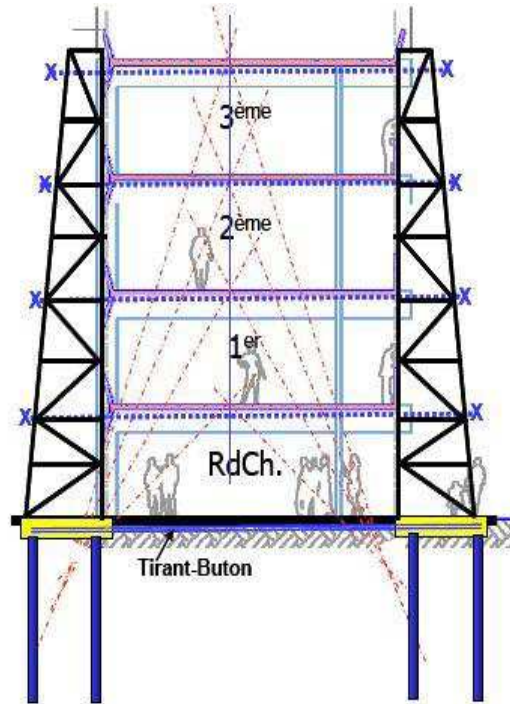
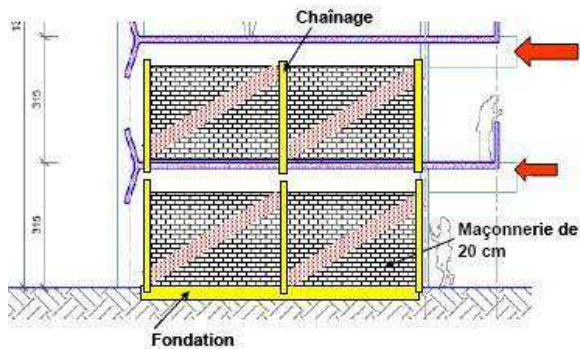
Diagnosis of schools

- > General seismic diagnosis of all primary schools and kindergartens Martinique (schools belong to municipalities in France)
- > A classification into 3 groups:
 - G1: Earthquake resistant, possibly with some minor work to be performed
 - G2 : The retrofit/strengthening is fiscally sustainable
 - G3 : Reconstruction fiscally better than retrofit/strengthening
- > Current diagnosis of private schools



Reinforcement & retrofit solutions

- > Solutions adapted to local schools, to local technical possibilities



Reinforcement & retrofit projects

- > To day, reinforcement and reconstruction of 31 schools for 71 M€
- > These are all subsidized operations (~ 80%): FPRNM (Special Natural Hazard Fund), FEDER (Europe), Government, Regional and General councils, ...
- > To expand asap!



So what's up in 2011 to avoid this ...



Topic for 2011

- "I built my house in the state of the art"
- More training sessions for const. professionals
- More retrofit projects
- Diagnosis of government buildings
- New seismic codes applicable from next May
- Updating of the Réplik internet site
- New Réplik information



Thank you for your attention and ... pa moli !