

Actions towards seismic risk mitigation in Martinique, French Antilles.

Jean-Christophe Audru, Bruno Capdeville, Jean-Jacques Salindre, N. Nérée, Éliane Mouly

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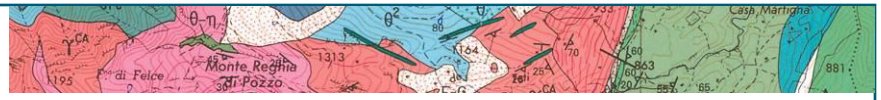
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Actions towards seismik risk mitigation in Martinique, French Antilles

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

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The French Antilles National Earthquake Plan

Le Plan Séisme,
un programme national
de prévention du risque sismique.

- **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.**

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Public information & preparedness

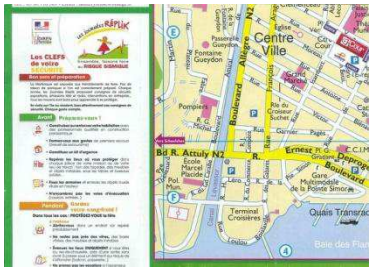
> **Annual information and preparedness campaign (all year + November)**

> **Targets residents (adults, pupils) and tourists**

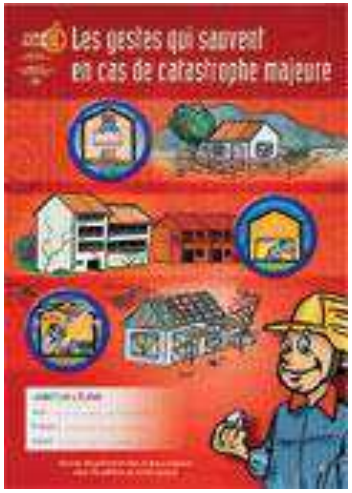
- Brochures, magnets, mouse pads, calendars, whistles, roadmaps, etc.
- Exhibition stand at the annual Housing Fair (October)
- Dedicated web site with a download area













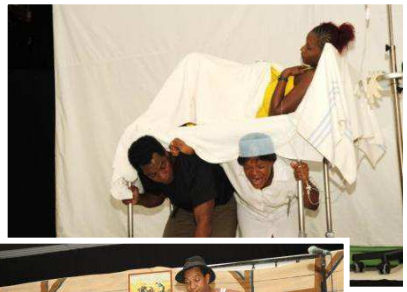
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Public information & preparedness

- 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.



















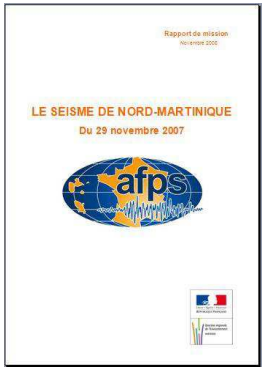
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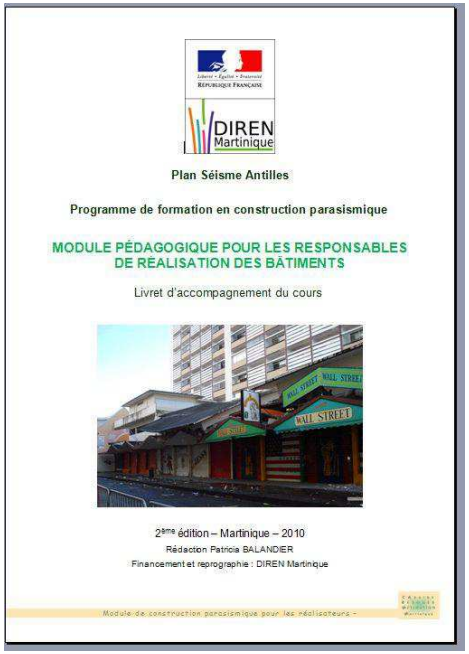
Specific information to employees and to construction professionals

- 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



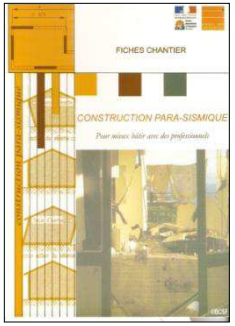








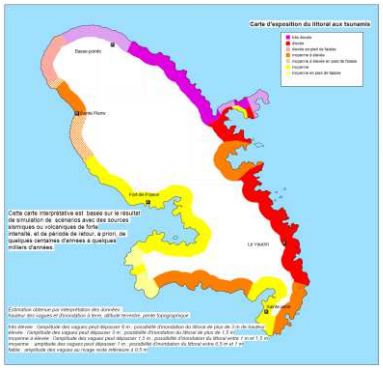




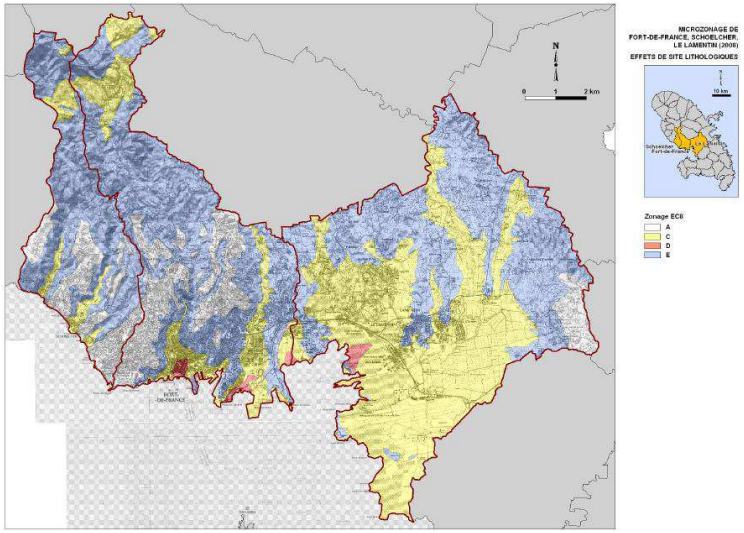
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Scientific information to experts, mayors and local councils

- 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)





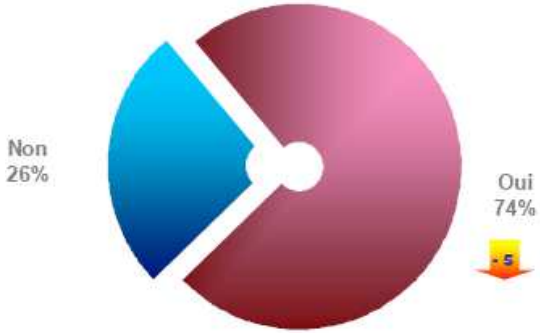




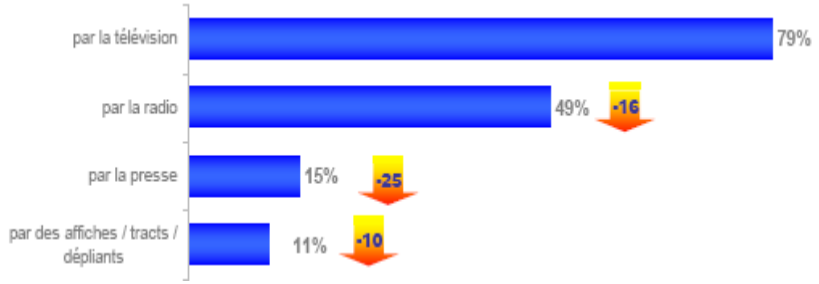
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Evaluation of prep. Actions (survey Dec. 2010)

> 74% have heard of preparedness actions



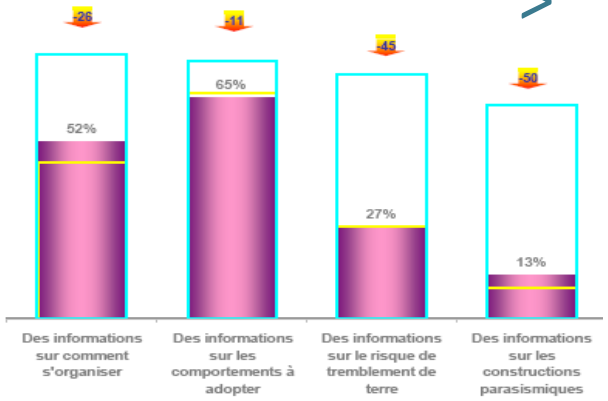
> TV and then radio remain the main dissemination channels



> 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**

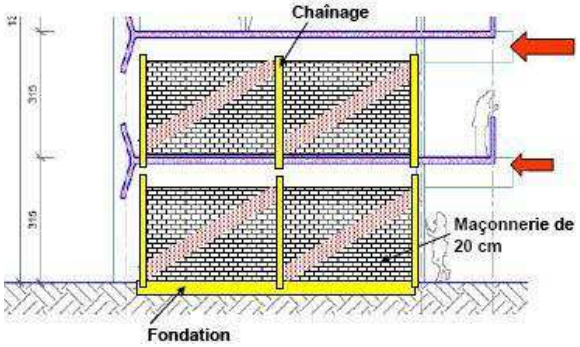


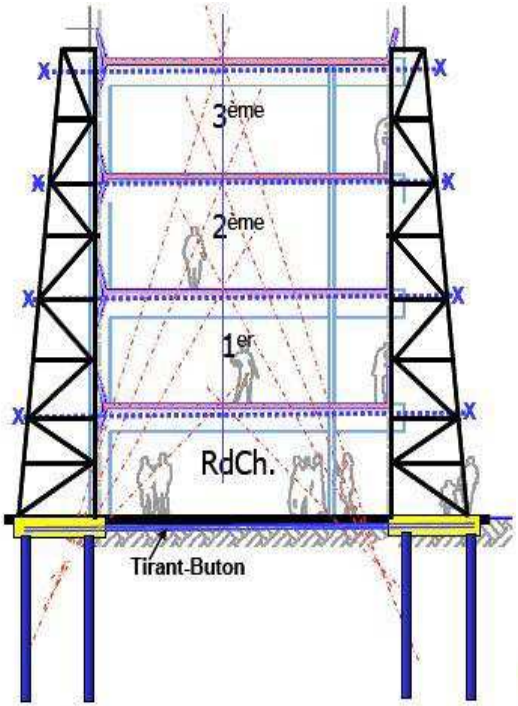


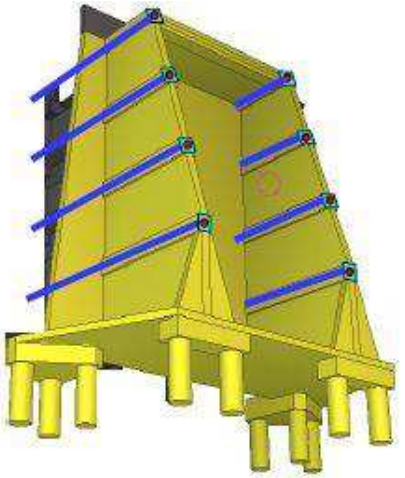


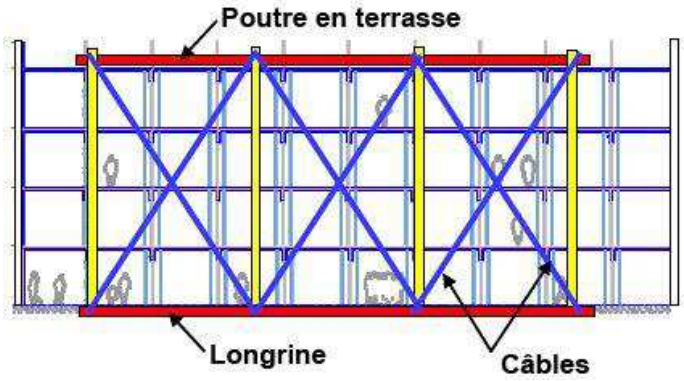
Reinforcement & retrofit solutions

> **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!







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So what's up in 2011 to avoid this …



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Topic for 2011

- "I built my house in the state of the art”

- More training sessions for const. professionals
- More retrofit projects
- Diagnosis of governement buildings
- New seismic codes applicable from next May
- Updating of the Réplik internet site
- New Réplik information





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Thank you for your attention and … pa moli !

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