

CSIC / NERC

seismic collaboration update

What's gone well, what's gone not so well!

C. Day
OFEG-TECH 2011
NOC

What is the collaboration planned to achieve?

- In 2010 CSIC commissioned a comprehensive package of seismic equipment comprising a suite of Sercel 'G' guns and handling system, 6000m of solid state streamer and deployment winches, data acquisition system, compressors and a range of ancillary equipment which together comprised a comprehensive system capable of deploying a large source plus a 6000m streamer system
- It was proposed to develop a bi-lateral collaboration to enhance NMF and CSIC seismic capabilities in the areas of training, technician exchange and equipment exchange, with a view to joint support of the NERC and CSIC seismic cruises.
- Since 2010 the NERC and the CSIC have developed this collaboration to operate a trans-national capability supporting marine geophysics through a joint pool of Spanish - United Kingdom geophysics equipment and a trans-national technical team in support of the NERC and CSIC marine science programmes on UK, Spanish and barter vessels.
- A Memorandum of Understanding has been agreed between NERC and CSIC to make equipment owned by both parties available through the collaboration in support of both national marine programmes.

What have we achieved and where are we at present?

The collaboration started delivering cruises in 2010 with the following cruises completed to date:

- | | | | |
|----|---------------------|--------------------------|---------------------------------|
| 1) | CSIC trials cruise | - RV Sarmiento de Gamboa | - 15 day cruise; Vigo to Vigo |
| 2) | CSIC MEDOC cruise | - RV Sarmiento de Gamboa | - 33day cruise; Vigo to Vigo |
| 3) | CSIC EVENT cruise | - RV Sarmiento de Gamboa | - 25day cruise; Vigo to Vigo |
| 4) | NERC trials cruise | - RRS James Cook | - 10 day cruise; Vigo/Reykjavik |
| 5) | NERC White cruise | - RRS James Cook | - 25day cruise; Iceland/Iceland |
| 6) | NERC Pierce cruise | - RV Sonne | - 47 days; Auckland/Townsville |
| 7) | CSIC science cruise | - RV Sarmiento de Gamboa | - 14 days; Vigo to Vigo |
| 8) | CSIC science cruise | - RV Sarmiento de Gamboa | - Vigo to Vigo |
| 9) | CSIC science cruise | - RV Sarmiento de Gamboa | - 30 days; Gran Canaria - ? |

Proposed cruises for 2012

- CSIC have requested a barter cruise on the RRS James Cook in the Caribbean around April/May 2012.
- CSIC have a requirement for a seismic cruise around Svalbard in June 2012 probably on the RV Gamboa.

Proposed cruises for 2013

- CSIC have a requirement for a cruise around the Gulf of California in 2013

What's gone well, what's gone not so well!

■ What's gone well?

- We have demonstrated that large scale equipment and staff can be managed accross national programmes between partnerships/between countries
- We have implemented a model for equipment and staff sharing that can be developed for other types of activity
- We have employed staff to jointly support a transnational capability funded by the collaboration
- We have delivered 9 seismic cruises between CSIC UTM and NOC NMFSS in 2010/2011
- 6 of these cruise had joint Spanish/UK staff supporting equipment, and 4 of the cruise had joint Spanish/UK equipment onboard

What's gone well, what's gone not so well!

- What's not gone so well?

Transnational teams:

The idea of transnational technician(s) and teams works! We have successfully supported complex cruises with UK and Spanish staff....

But....both partners have insufficient staff to support the number of cruises programmed, and communication of cruise requirements has on occasion been problematic!

Joint scheduling and programming:

To effectively programme and schedule cruises across two national marine science programmes the communication and processes between planning teams needs to be consistent and visible. This is a risk area, and an area in need of development for both partners.