

IFREMER seismic devices upgrade project

IFREMER seismic devices in 2013 : obsolete (SERCEL fluid filled streamer + SERCEL SEAL408).

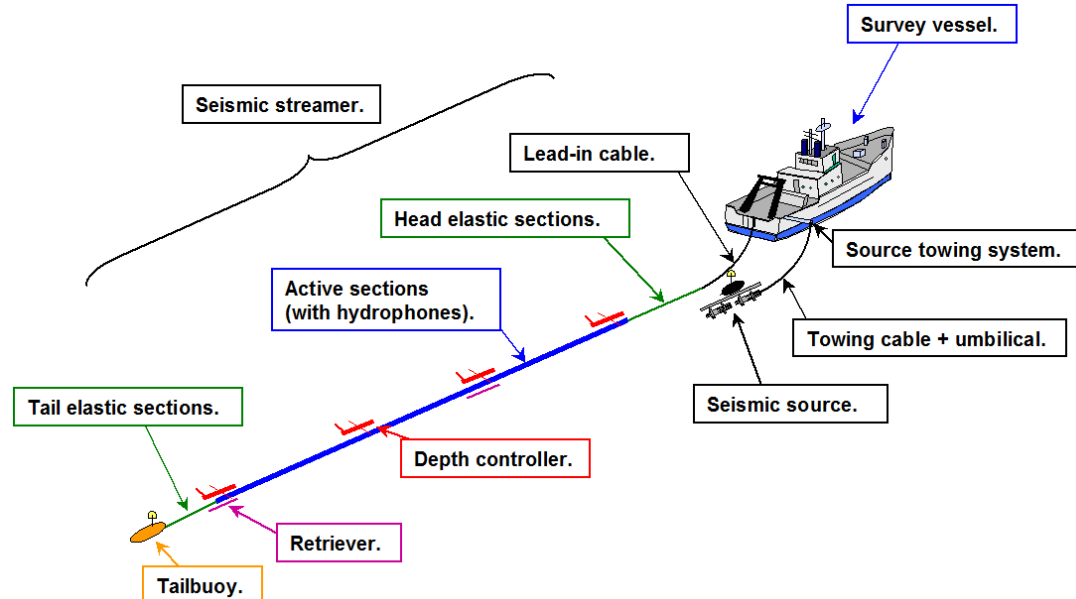
- IFREMER seismic devices upgrade project was launch at the end of 2013.
- Project split in 5 steps spread over the years 2014-2017.

Main objectives : Modernization and increase the capabilities of the old seismic devices.

Two main seismic devices based on solid streamer technology (SERCEL Sentinel RD + SEAL428).

SIS 1: 2D seismic device.
1x6000m long seismic streamer.
Upgrade of the seismic source handling system.

SIS 2: 3D seismic device.
2x600m long seismic streamers (distance between streamers: 25m).
Many available configurations (2D or 3D, with streamer length from 150 to 1200m).



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PROGRESS STATUS :

- Step 1: Seismic device **SIS2 1x600m** validated (February 2015, RV *Thalassa*, Brest).
- Step 2: Seismic device **SIS1 1x4500m** validated (August 2015, RV *L'Atalante*, Nouméa).

Two scientific cruises have been conducted in 2015 with the new seismic devices:

- TECTA (SIS1 4500m, NO *L'Atalante*, September 2015, Pacific SW)
- GHASS (SIS2 600m, NO *Pourquoi pas ?*, September 2015, Black Sea)

PERSPECTIVES 2016-2017 :

- Step 3: Seismic device **SIS2 2x600m** + 3D acquisition system.
Validation planned in March 2016.
- Step 4: Upgrade of the **handling system of the seismic source** associated with SIS1.
Objective : improvement of the transmitted acoustic signal (better control of the airguns' depth).
Validation planned at the end of 2016 or beginning 2017.
- Step 5: Seismic device **SIS1 1x6000m**.
Confirmation in 2016, realization in 2017.



Sea trials for step 2 (ESSISM, RV *L'Atalante*, 2015).

Sea trials for step 1
(ESSISM, RV *Thalassa*, 2015)₂