

GROOM/JERICO/EGO meeting

Glider Cost analysis



Jerico TNA

Eligible cost: boat hire, consummables, travel & transportation, sensor calibration, workspace rented, personal cost

Non eligible cost: capital investment of the infrastructure or depreciation of material.

Groom Task 5.4

Estimated setup and running costs

Gliders may be an economical means for collecting certain kinds of data, yet for their optimum use, a common infrastructure must be created, as described above. The costs associated with the recommendations of the WP5 tasks will be analysed. Considered factors may include:

- (1) the infrastructure costs (running the building, ballasting and calibrating facilities, research and development laboratories, software maintenance and development, and equipment purchases for outfitting “gliderports”).
- (2) Operating the infrastructure (engineering and IT staff, maintaining stock in operations, building running costs, consumables).
- (3) Preparing and operating gliders (depreciation of equipment – including the glider - , communications, batteries, ballasting, calibrations, mechanical maintenance, servers, pilot staff, transport, customs, as well as deployment and recovery at sea.

Groom Task 5.4

Estimated setup and running costs

- The task 5.4 has to take into account all the other recommendations of groom study, it will be one of the last step in the process.
 - Maintaining a fleet of glider and doing experiment at sea
 - Estimate additional cost according to groom recommendations

Step 1: getting glider data

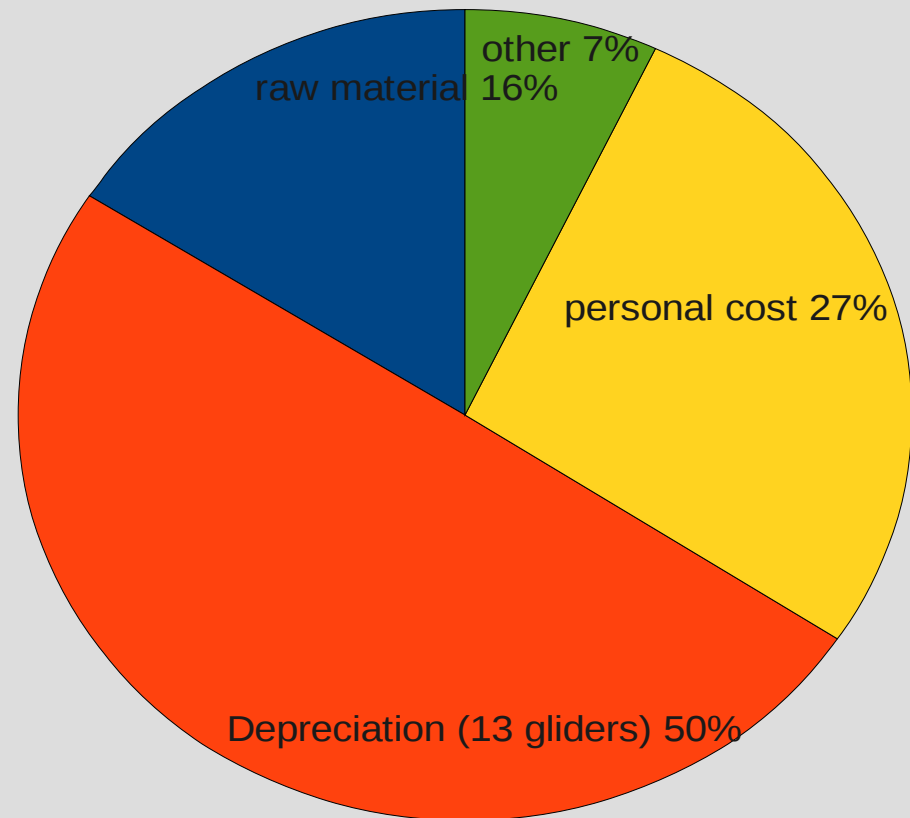
- Having glider cost money: maintenance, depreciation
- Running glider cost money: shipping, preparation, consummables, ...

The final product is data but the unit cost is days (months) of gliders at sea

Cnrs group: 2010

More than 500 KE of budget (including depreciation over 5 years)

13 gliders and « only » 18 months of data.



Different gliders different cost?

- Are some gliders more expensive to run
- Can we lower the cost?
 - Rechargeable batteries
 - Transferring less data
 - Doing more deployments
- Will next the generation of glider cost less?
 - Reliability
 - New company (Acsa - Sea Explorer)

Same service different prices

- Primary Lithium batteries for slocum gliders

(excluding VAT and transportation)

Laden (Germany) : 3200 E (Saft)

Steatite (UK): 3500 E (Vitzrocell)

Williamson: 2200 E (Saft)

- Iridium communication

dialup: 2 cents /sec

rudics: 1 cent /sec (+2500\$)

sbd: ??/Ko

Same work, different approach

- Expertise at the lab vs subcontracting
- Calibration cost
- Development cost
- More data communication

Will the cost be coherent among all partners?

Do we want the cost to be coherent among all partners?

Questionnaires

- What level of detail do we want to include in the questionnaire as the first step.

Gliders / year of purchase / cost

Sensors / year of purchase / cost

Nb of days (months) at sea for the year in 2011 (&2010?)

1/ raw material cost (iridium +batteries)

2/ Maintenance cost (repairs& upgrades)

3/ subcontracting cost (boat rental, glider preparation, or other)

4/ Personnal cost

5/ Other expenses (building costs, special equipment, others)

conclusion

- First questionnaire for the 'product'
- More cost studies to come for specific equipment needed according to groom recommendations