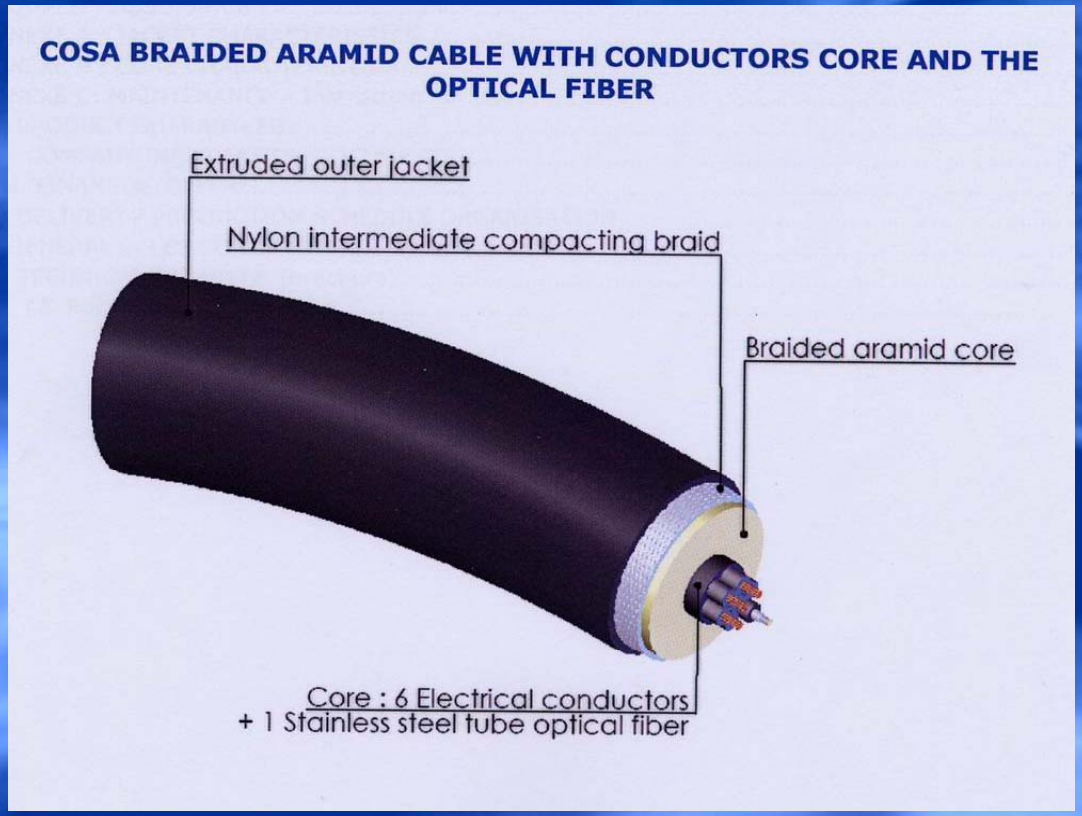
Royal Netherlands Institute for Sea Research

OFEG-TECH Barcelona 24 nov 2009

Procurement of OEM Kevlar cable



Marck G Smit

Jack Schilling

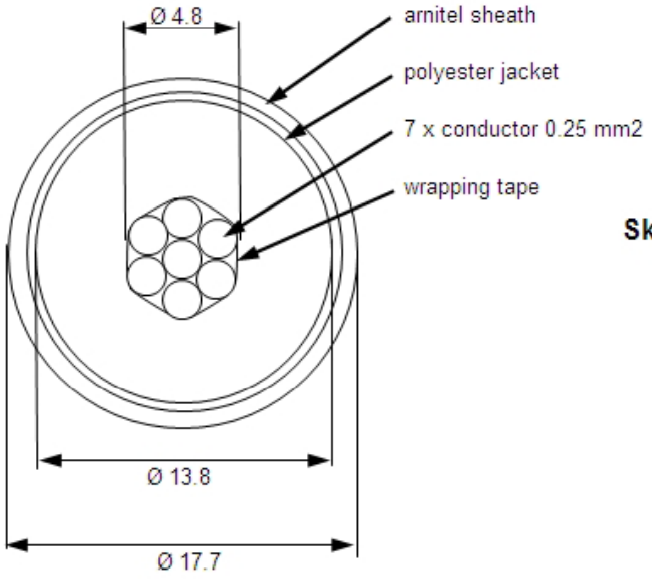
Start point / wishes

- Start point:
  - Existing cable: 16 ton, 7 conductors: good track record
  - Trials Nexans test cable:
    - Ss tubing, gel filled, 4 fibers: performed good
    - Straight yarns: not suitable for traction winch
- Wishes:
  - Fiber optics added
  - Higher Breaking Load: ø18 mm ➔ ø 20 mm

Sketches

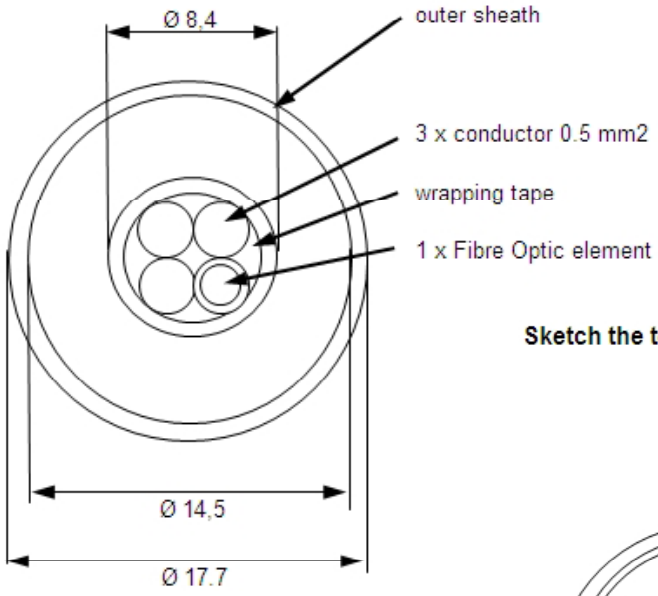
Sketch current NIOZ-cable - COSA, Cousin

27-4-2007



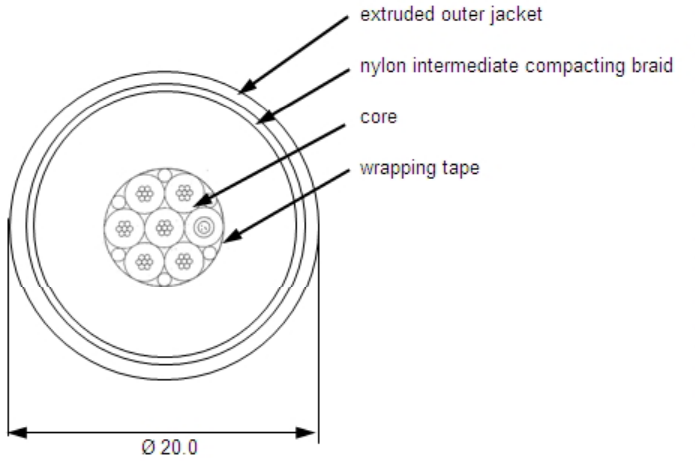
Sketch TRIAL CABLE Nexans test-cable

5-6-2008

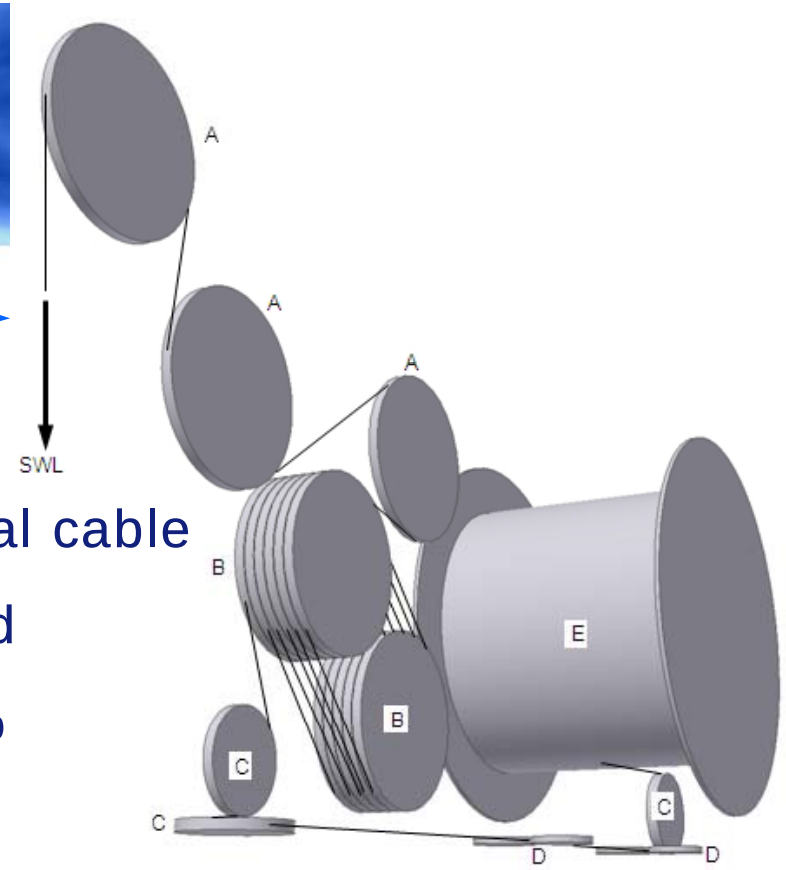


Sketch the tender cable

12-1-2009



EU tender document



- Suitable for NIOZ traction winch
- 2 steps: 1. 300 m trial cable, 2. final cable
- Nominal load: 20% of breaking load
- Accepted overload: 10 x/year: 30%
- Penalties for lost fibers/conductors
- Penalty for breaking load deterioration > 4% after 2 year
- Delivery time test cable: 3 months
- Delivery time 9500 m final cable: 5 months
- Interest IMR, NOC and Portugese Hydr Inst mentioned

Quotations from:

- ATLAS ELEKTRONIK, UK
- Cousin-Trestec , France
- JDR, Netherlands

Royal Netherlands Institute for Sea Research

Thank you

Remarks, questions?

msmit@nioz.nl