

# AFWG

ETN Standard Development: Improving Intake Filters in Rotary Machinery in Harsh Environment  
Dominique ORHON, TotalEnergies

# AFWG Air Filter Test Procedure

## Offshore and Coastal Applications

To develop a new **Standard** bringing a quality step change

- Submit air filters to
  - NaCl,
  - Water fog,
  - high and low humidity.
- First of a kind => To close the gap between ISO 29461, part 1 and site environment.
  - To consider the NaCl transformation (solid, melted, dissolved).
  - Accelerated ageing.



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To  
evaluate  
**High  
Grade  
Filter**  
failures

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Water Breach.

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Salt by pass.

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High DP.

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# AFWG Air Filter Test Procedure

## 2 Standard in Development

ISO 29461, Part 4 Test methods for static filter systems in marine and offshore environments.

ETN.

# AFWG members

## ▪ Users

- Equinor<sup>(1)</sup>
- Enel
- Engie
- EOn
- Shell<sup>(1)</sup>
- TotalEnergies<sup>(1)</sup>

## ▪ Filter Manufacturers

- AAF<sup>(1)(2)</sup>
- Camfil<sup>(1)(2)</sup>
- Donaldson<sup>(1)</sup>
- EMW<sup>(1)</sup>
- Faist<sup>(1)</sup>
- Freudenberg
- W.L.Gore<sup>(1)(2)</sup>
- Mann Hummel

## ▪ OEM

- Ansaldo
- Baker Hugues
- Boldrocchi
- Cullum Detuners
- Siemens Energy<sup>(1)</sup>
- Solar Turbines

## ▪ Laboratories

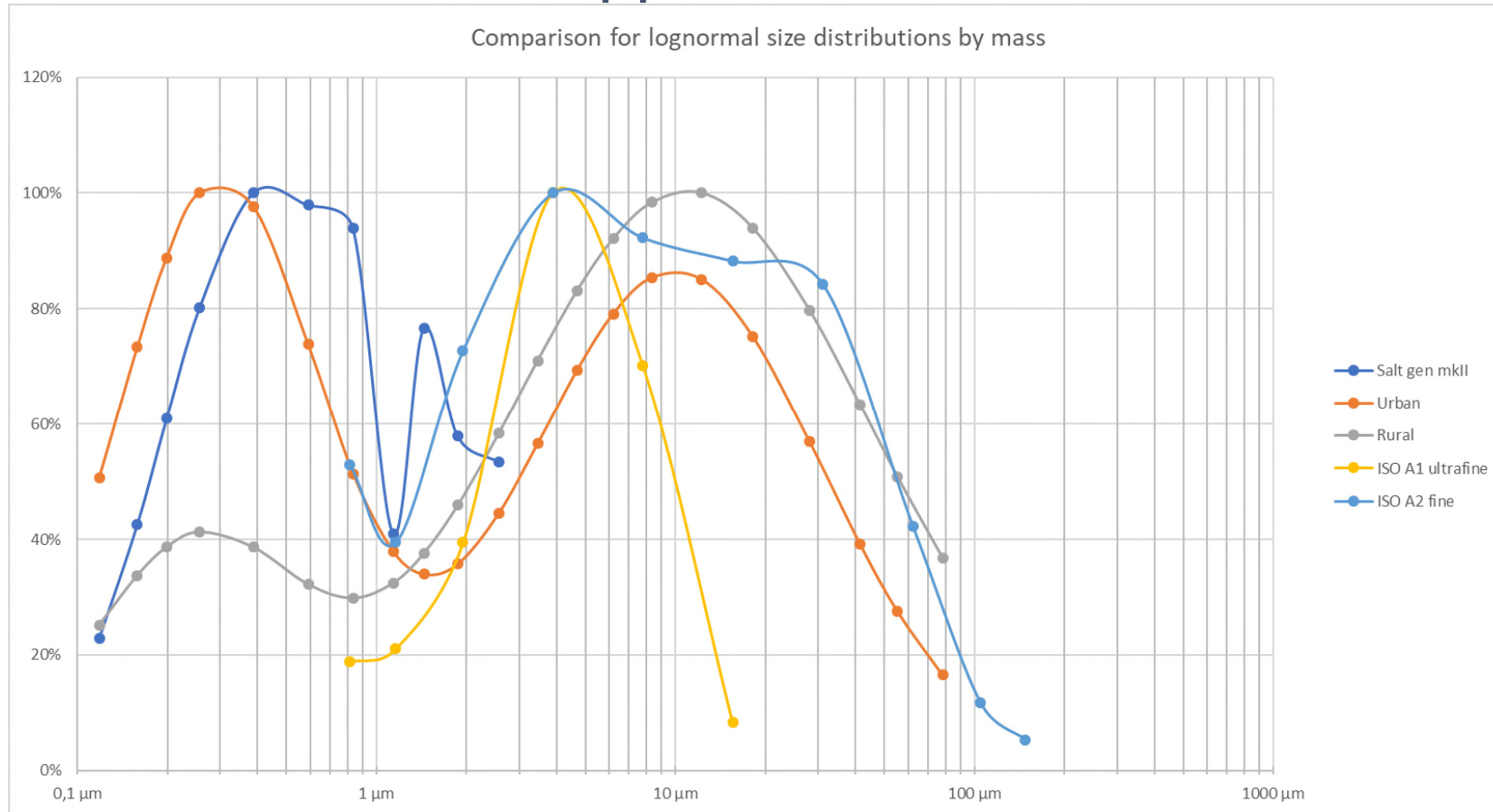
- Fiatec

(1) AFWG Core Group  
(2) Testing Company



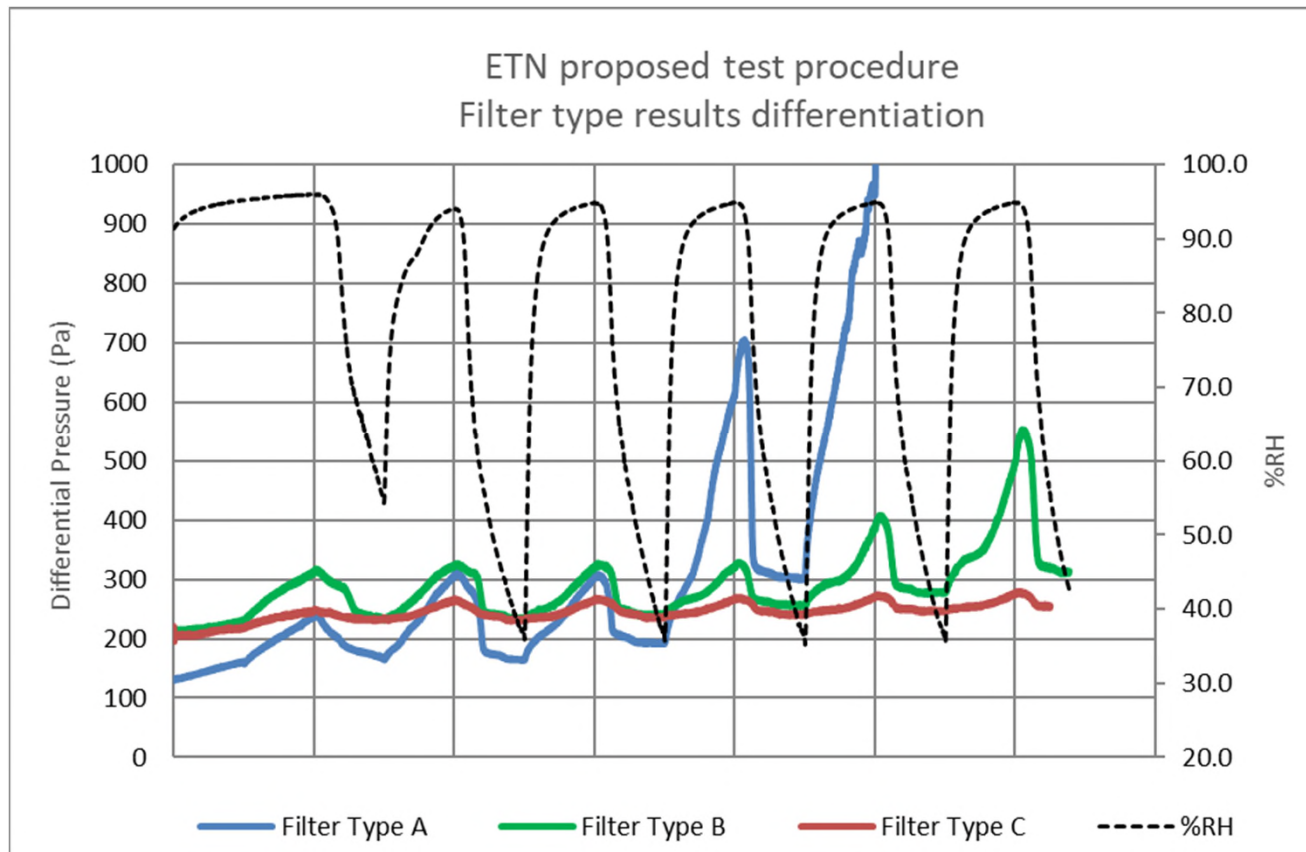
# Air Filter Test Procedure

## Offshore and Coastal Applications



# Air Filter Test Procedure

- 1700 hours of testing With different filter manufacturers



# Test Procedure Writing

## ▪ ETN Standard Progress

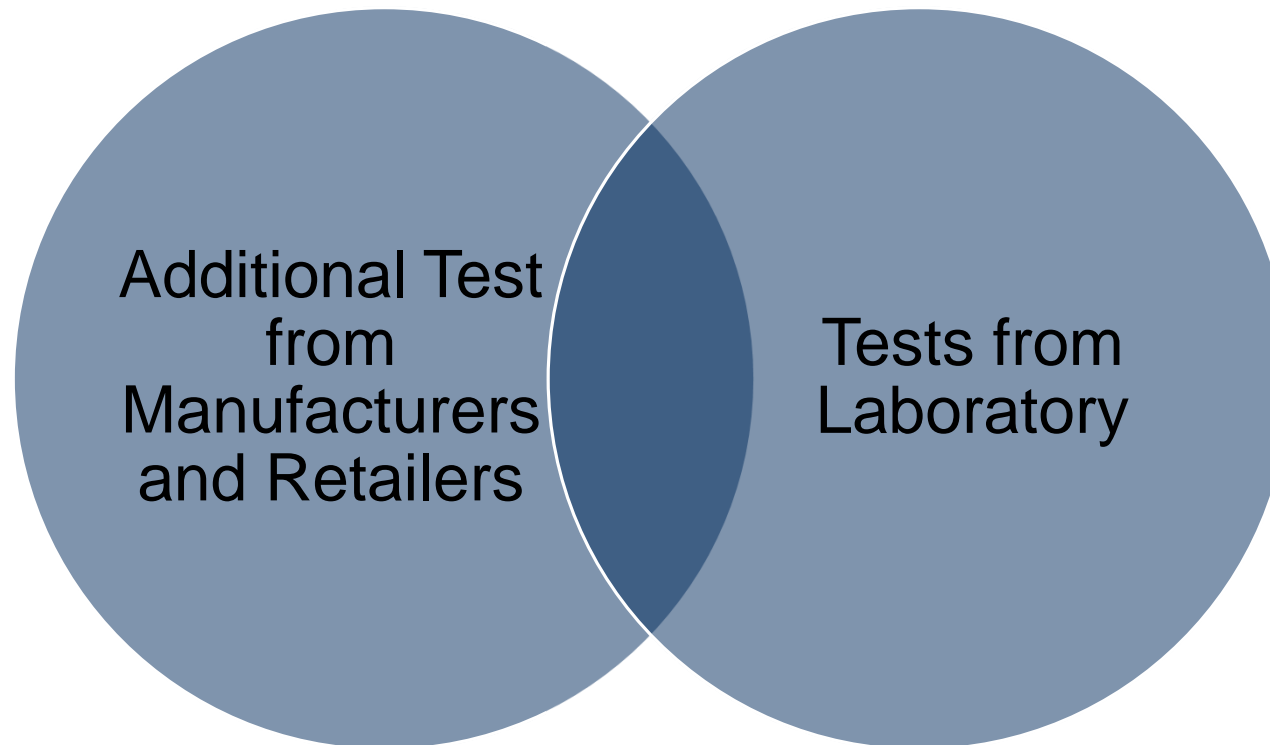
- Final writing
- Incorporation of first ISO comment
- Expected publication for application between ETN members as ETN Standard, end 2022

## ▪ ISO 29461, Part 4 Progress

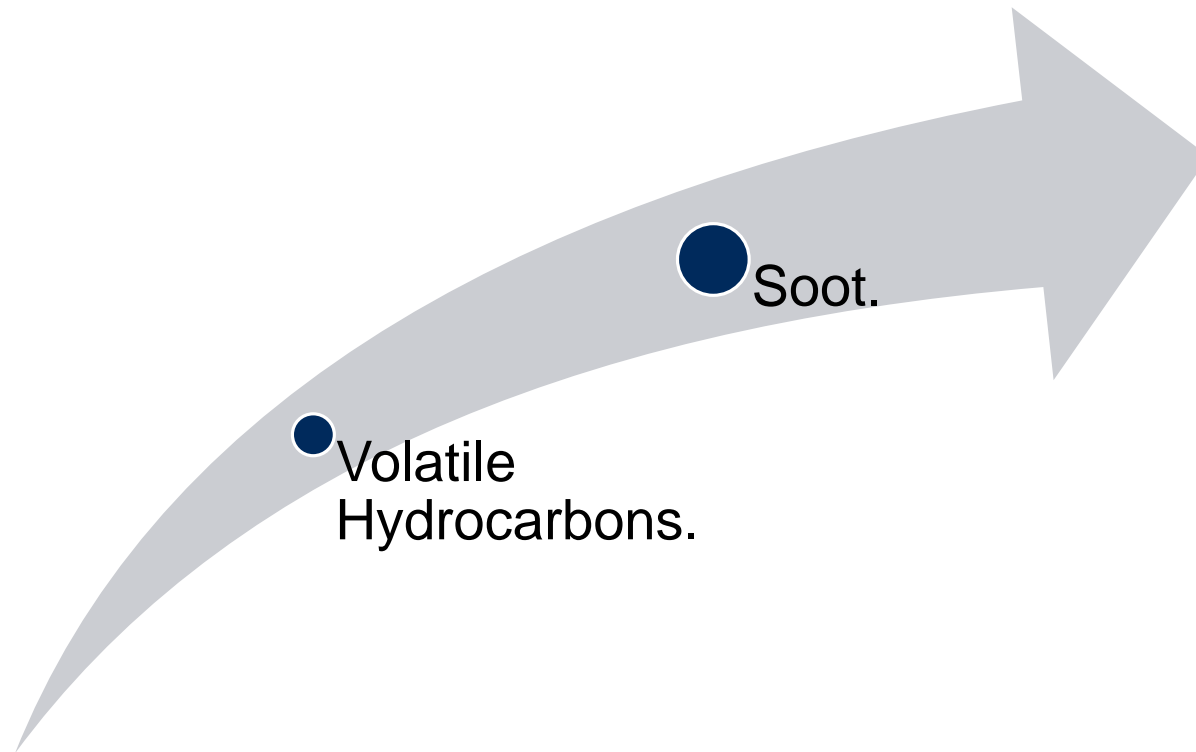
- ETN member of ISO
- ISO/TC 142
  - Step 20 Preparatory
    - Working Draft (WD) in March 2021
  - Step 30 Committee
    - Committee Draft (CD) approved for registration as DIS
  - Step 40 Enquiry
    - Ballot in March 2023 for DIS registered
  - Step 50 Approval
    - Ballot in Sept 2023 for FDIS
  - Step 60 Publication
    - International Standard Publication in March 2024



# AFWG Short Term Expectations



# Further Development, Matter of Improvement





# Thank you for your attention