



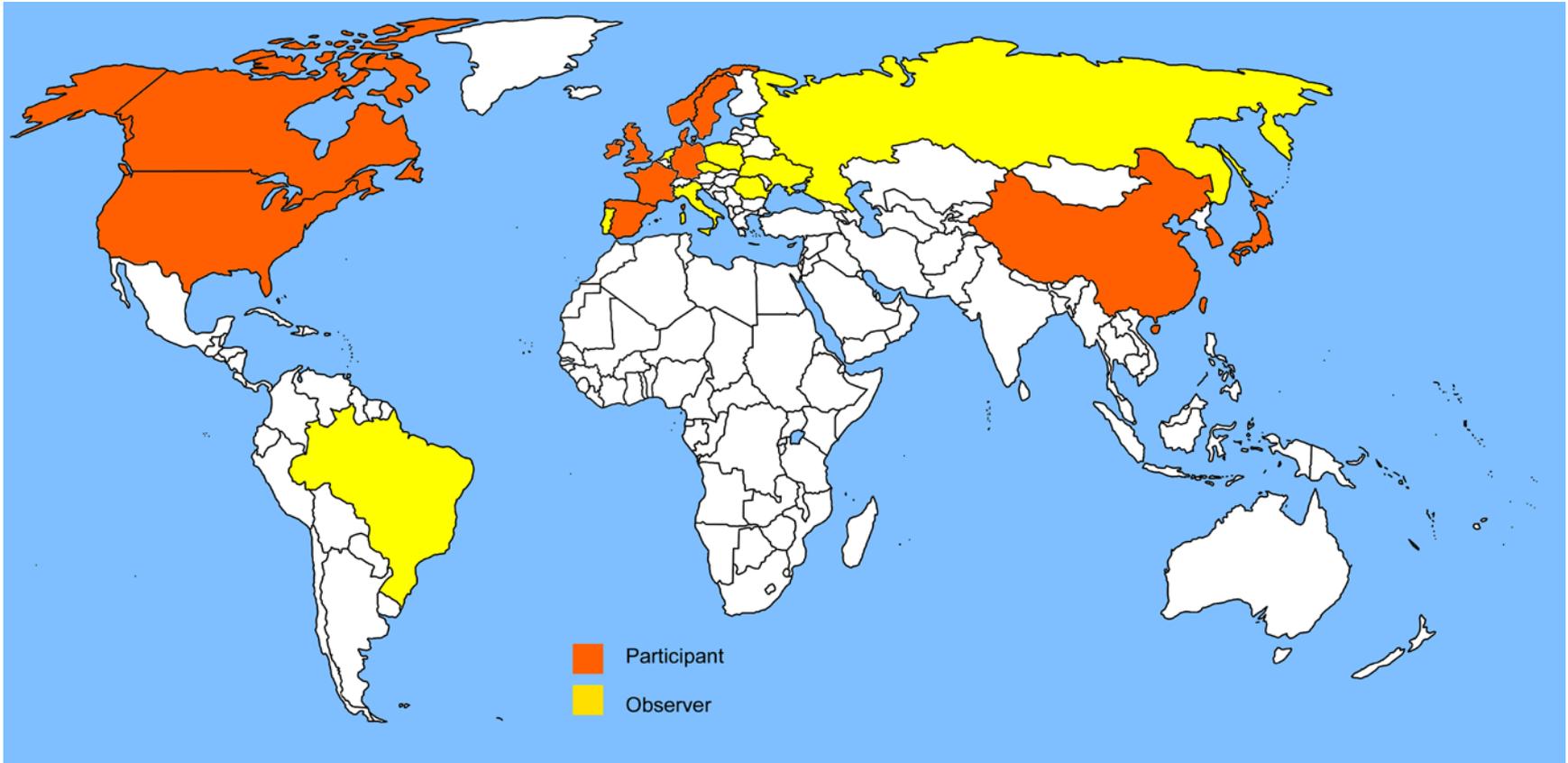
TC – 114 Summary



Neil Rondorf
NREL Sensors and Measurement Workshop – July 2012



IEC/TC – 114 Member Countries



Project Teams

Project Team	Title	Convener
PT62600-1	Terminology	Mr. Ghanashyam Ranjitkar (CA)
PT62600-2	Design requirements for marine energy systems	Dr Robert Paasch (Interim) (US)
PT62600-10	Assessment of mooring system for marine energy converters	Mr. Mann-Eung Kim (KR)
PT62600-20	Guideline for design assessment of Ocean Thermal Energy Conversion (OTEC) system	Mr. Mann-Eung Kim (KR)
PT62600-30	Electrical power quality requirements for wave, tidal and other water current energy converters	Mr. Mohamed E. El-Hawary (CA)
PT62600-100	Power performance assessment of electricity producing wave energy converters	Mr. Emil David Tietje, III, P.E. (US)
PT62600-101	Wave energy resource assessment and characterization	Mr. Matt Folley (GB)
PT62600-102	Wave energy converter power performance assessment at a second location using measured assessment data	Mr. Kim Nielsen (DK)
PT62600-200	Power performance assessment of electricity producing tidal energy converters	Mr. Henry Jeffrey (GB)
PT62600-201	Tidal energy resource assessment and characterization	Mr. Andy Baldock (GB)

Why Is This Important ?



Energy | Environment | National Security | Health | Critical Infrastructure

SAIC

To Prevent This:



To Assist With This:

- Credible process for development
 - Reliability
 - Construction and developments costs
 - O&M Costs
- Reduced Risk leads to increased likelihood of:
 - Project Financing,
 - CVA / Third Party Approval,
 - Buy In From Government Regulators and Other Stakeholders
 - and Project Success!

Insurability and Finance

- Reduced Risk leads to increased likelihood of:
 - Project Financing
 - Reduction of Insurance costs
 - Market Confidence
- Final results: Project Success

Standards are Living Documents

- Origins of Rule Changes
 - Developed by research
 - Developed by technical review and fabrication survey
 - Recommendations from Industry & Clients
 - National and/or International standards or regulations
 - Failures or near failures in service
 - Incidents

Credit: Lars Samuelsson, ABS

U.S. TAG TC 114

- Technical Advisor – Bill Staby, Resolute Marine
- Administrator – Dr Fredrick Driscoll / Arielle Wolfe – NREL

- Total # of U.S. TAG Members – 57
- Who Are They?
 - Industry
 - Academics
 - Gov Agencies / Labs / Regulators
- Be a part of shaping the Industry – Join the US TAG

U.S. Shadow Committees

Project Team	Shadow Committee Chair
PT62600-1 – Terminology	Philip Beauchamp, GE Global Research
PT62600-2 – Design Requirements for Marine Energy	Robert Paasch, Oregon State University
PT62600-10 Assessment of Mooring Systems for Marine Energy Converters	John Shelton, Delmar
PT62600-20 – Guideline for Design of Assessment of Ocean Thermal Energy Conversion (OTEC) System	U.S. Not Participating
PT62600-30 – Electrical Power Quality Requirements for Wave, Tidal and Other Water Current Energy Converters	Ed Lovelace, Free Flow Power
PT62600-100 – The Assessment of Performance of Wave Energy Converters in Open Sea	Michael Raftery, Stevens Institute
PT62600-101 – Wave Energy Resource Assessment and Characterization	Pukha Lenee-Bluhm, Columbia Power
PT62600-102 - Wave Energy Converter power performance assessment at a second location using measured assessment data	Emil David Tietje, SAIC
PT62600-200 – The Assessment of Performance of Tidal Energy Converters	Jonathan Colby, Verdant Power
PT62600-201 – Tidal Energy Resource Assessment and Characterization	Kevin Haas, Georgia Tech University