



NACE Corrosion Research Consortia

An Introduction

Edward M. Manns

NACE Staff

Agenda

1. Concept Approval Process for NACE
2. NACE Role
3. Launch Plan
4. Award Process (details)
5. Income Streams
6. Committee Participation/Support/Next Steps
7. Questions, Feedback

Concept Approval Process

1. Discussions at CORROSION 2017 Research Committee led to a high level concept presentation to the NACE Board of Directors (BoD) at June 2017 NACE BoD meeting.
2. NACE BoD directs formation of NACE Corrosion Research Consortia Exploratory Committee.
3. Board asks Committee to further research and validate a market need and recommend focus for a potential NACE-administered Corrosion Research Consortia.
4. Exploratory Committee produced and Chair presented a detailed concept proposal for consideration at September 2017 NACE BoD Meeting.

Concept Approval Process

5. Concept is approved by NACE BoD - September 2017.
6. NACE BoD requests a formal Business Plan Proposal/Budget for CORROSION 2018.
7. Exploratory Committee produces/Chair presents a detailed Business Plan for the approved-Concept at CORROSION 2018 BoD meeting.
8. NACE BoD approves the Business Plan and authorizes budget for FY19 (starting 1 July 2018).

NACE Corrosion Research Consortia Committee

Chair, Dr. Homero Castaneda-Lopez (Texas A&M)

- Dante Battocci (North Dakota State University)
- Edye Fox Abrams (ChemQuest)
- Xihua He (Southwest Research Institute)
- Qindan Huang (University of Akron)
- Mike Hurley (Boise State University)
- Roy Johnson (Norwegian University of S&T - Norway)
- Joey Kish (McMaster University – Canada)
- Nese Orbey (University of Massachusetts-Lowell)
- Francisco Presuel-Moreno (Florida Atlantic University)
- Ben Rowton (National Physical Laboratory – UK)
- Barbara Shaw (Penn State University)
- Preet Singh (Georgia Tech)
- Robert Stote, US Army (US DoD)
- Ravi Vilupanur (Cal Poly Pomona University)
- NACE Board of Directors Champion, Jeff Didas, NACE President
- NACE Technical & Research Activities Chair, Cris Conner
- Thomas Ladwein, NACE Board of Directors
- Edward Manns – NACE Staff
- Shari Goss – temporary NACE Staff support
- NACE Staff Manager, tbd
- NACE Grant Writer, Coordinator, tbd
- Ad Hoc NACE Staff Team: Marketing, PMO, etc.
- NACE Staff Support in creation of concept: Jacob Adams, Melissa Craig, MBA Dept.

Also received detailed feedback: Michael Sellars (Elcometer)

Recommended Option: Managing Agent

Business Model:

- NACE International provides legal structure
- Fee-based members for organizational governance
- Make contracts with consortium partners
- Partners become subcontractors & deliver services (research)
- Managing agent receives percentage for managing contract and profits

Conceptual Model



Research Consortia Committee Roles & Responsibilities

1. Give feedback for the topics selection.
2. Oversee and support the award process.
3. Provide technical opinion of the symposia.
4. Demonstrate corrosion facilities for each institution forming the Committee.
5. Introduce new directions for topics, research process, or anything about this concept.

Launch Plan

1. Confirm initial Organizational Member interest.

2. Recruit key staff.

3. Develop finalized governance model.

4. Identify initial critical research needs.

5. Create grant writing capability and targets.

6. Set parameters for contract fulfillment.

7. Monitor initial performance and ROI against Business Plan goals.

Launch Year 1

1. Analyze market penetration into target markets and potential initial markets.

2. Monitor performance and ROI. Provide forecast & quarterly updates.

3. Tweak business model as necessary.

4. Evaluate opportunities for ancillary products (ex: marketing timed release of research results to non-Consortia Members.)

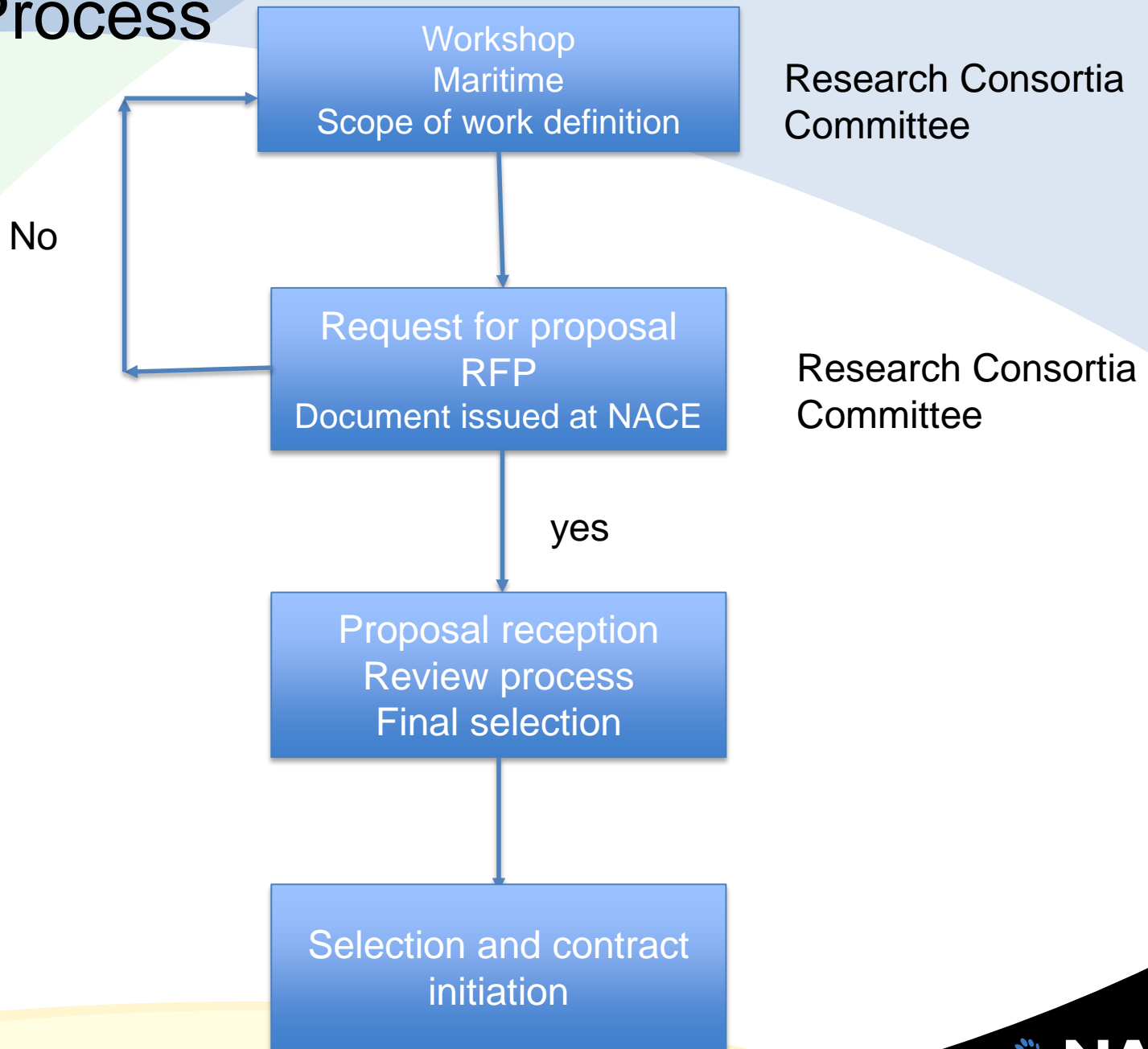
Year 2

1. Continue to monitor performance and ROI and provide forecast & quarterly updates.

2. Target additional market(s).

Year 3

Award Process



Workshop Maritime Scope of Work Definition

Topics:

- VOC Reduction for Maritime Coatings
- Biofouling Technology in the Maritime Industry
- Anti-icing Coating for Maritime Exposures
- Effect of Ballast Water Treatment on PSPC-compliant Coating in Ballast Water Tanks
- Future Research topics for NACE Corrosion Consortia

Purpose:

- Meet and conduct dialog with industry to generate a range of perspectives on required and prioritized research related to corrosion in the maritime industry.
- Introduce the NACE Corrosion Consortia as a venue to generating potential solutions via research.
- Discussion of potential next steps.

Workshop

Additive Manufacturing

Scope of Work Definition

Topics

- Corrosion behavior of alloys produced by additive manufacturing
- Effect of heat treatment on corrosion properties of materials used in additive manufacturing
- Corrosion resistance variability between additive manufactured parts
- Challenges in understanding the impact of corrosion resistant properties of stainless steels in additive manufacturing
- Future Research topics for NACE Corrosion Consortia

Purpose:

- Meet and conduct dialog with industry to generate a range of perspectives on required and prioritized research related to corrosion in additive manufacturing (3-D printing).
- Introduce the NACE Corrosion Consortia as a venue to generating potential solutions via research.
- Discussion of potential next steps

Some Key Assumptions

- Meet an identified NACE constituent need.
- Create affordable access to the latest corrosion-related research for NACE Corrosion Consortia Members and Customers.
- Expand NACE's footprint in both traditional and non-traditional NACE markets/industries.
- Grow NACE's involvement with both the research and academic communities.
- Grow NACE's role as a player in new/cutting edge technologies.
- 25 Institutions per topic (1M dollar value)

Income Streams: Project Funding, Grants, Membership Dues

- NACE secures 8% of each contract.
- Government grants procured by Grant Manager. Current numbers show grants ranging from \$500,000 - \$110 million
- Membership Dues

Strategic Member	Technical Committee Member	Advisory Member	Informational Member
\$35,000	\$30,000	\$10,000	\$3500

Next Steps

- Forming Subcommittee to review draft governance documentation.
 - Based upon existing models/best practices
- Subcommittee recommends Governance final draft for approval by entire NACE Corrosion Research Consortia Committee.
- Final Approval by NACE BoD.

Questions?

Feedback?