NATIONAL ADVANCED MOBILITY CONSORTIUM

The Defense Mobility Enterprise: An Update

Mr. Tony Melita, Executive Director
National Advanced Mobility Consortium (NAMC)

April 7, 2015

Ground Robotics Capabilities Conference & Exhibition

Arlington, VA

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Background

ROBOTICS TECHNOLOGY CONSORTIUM

- Organized in May, 2008 as a non-profit, 501(c)3 entity
- Formed at the Government's request for the advancement of unmanned ground systems technology
- Used a Section 845 Prototype Other Transaction Agreement (OTA) with a $175M ceiling as contract vehicle
- RTC established as a wholly-owned subsidiary of the National Center for Manufacturing Sciences (NCMS) who serves under contract as the Consortium Administrative Organization (CAO)

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Why a Consortium?

- To establish a single government-industry-academic business enterprise
- To enable participation by small companies & nontraditional defense contractors
- To facilitate the exchange of information so that:
  - Industry and academia can gain increased visibility and understanding of DoD technology challenges and requirements
  - DoD gains greater understanding of the technological state-of-the-art, possibilities and opportunities
- To facilitate networking, collaboration, and dynamic teaming among members and enhanced collaboration with the government
- Enable members to propose ideas and concepts to DoD and in turn receive feedback on those ideas

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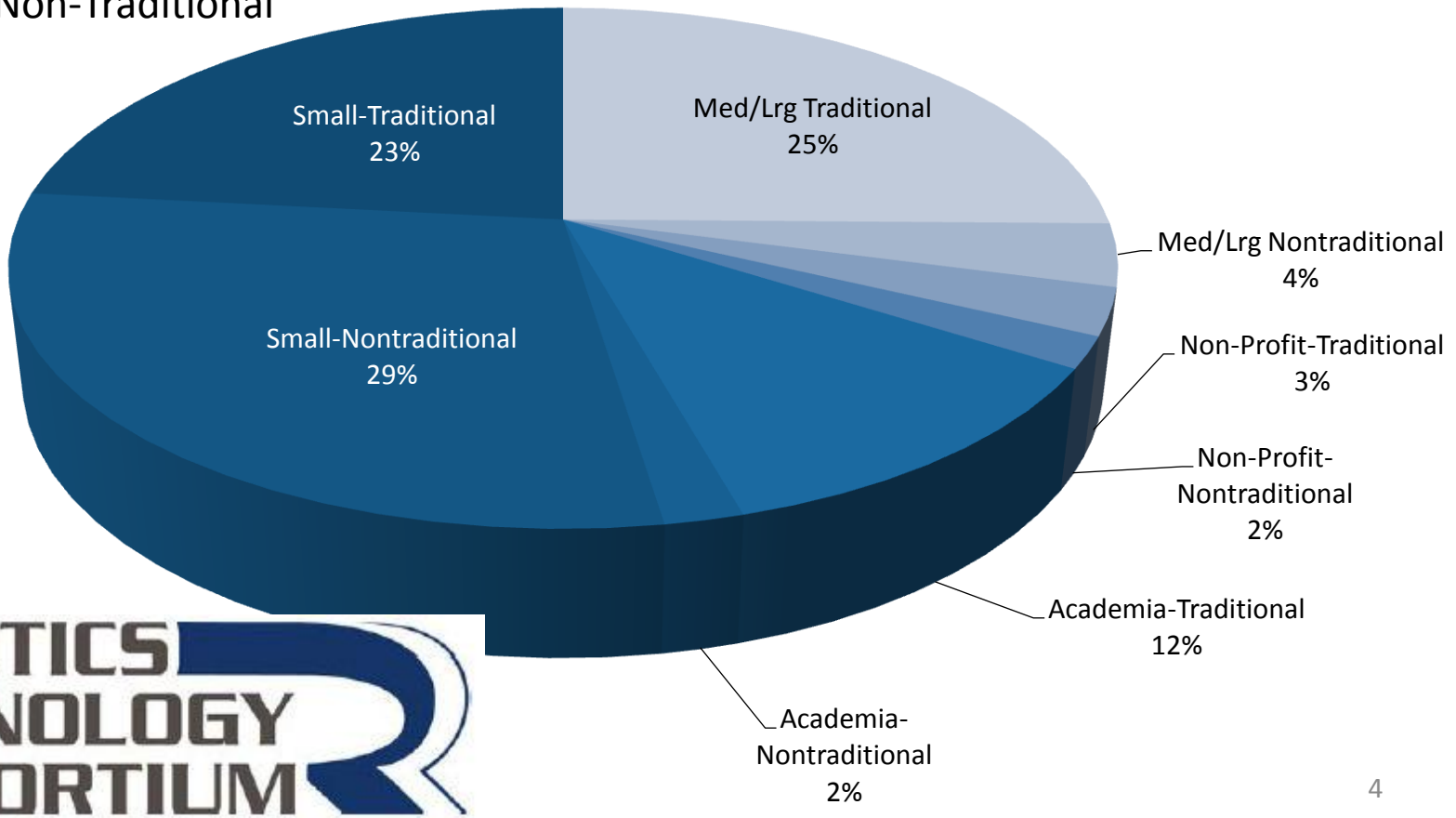
Membership

June 2014

103 members
37% Non-Traditional



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2008 - 2014

- 64 Projects Under Contract
- Over $80 Million Awarded to 65 Member Companies
- Average of 109 days from Request for Project Proposals (RPP) release to contract

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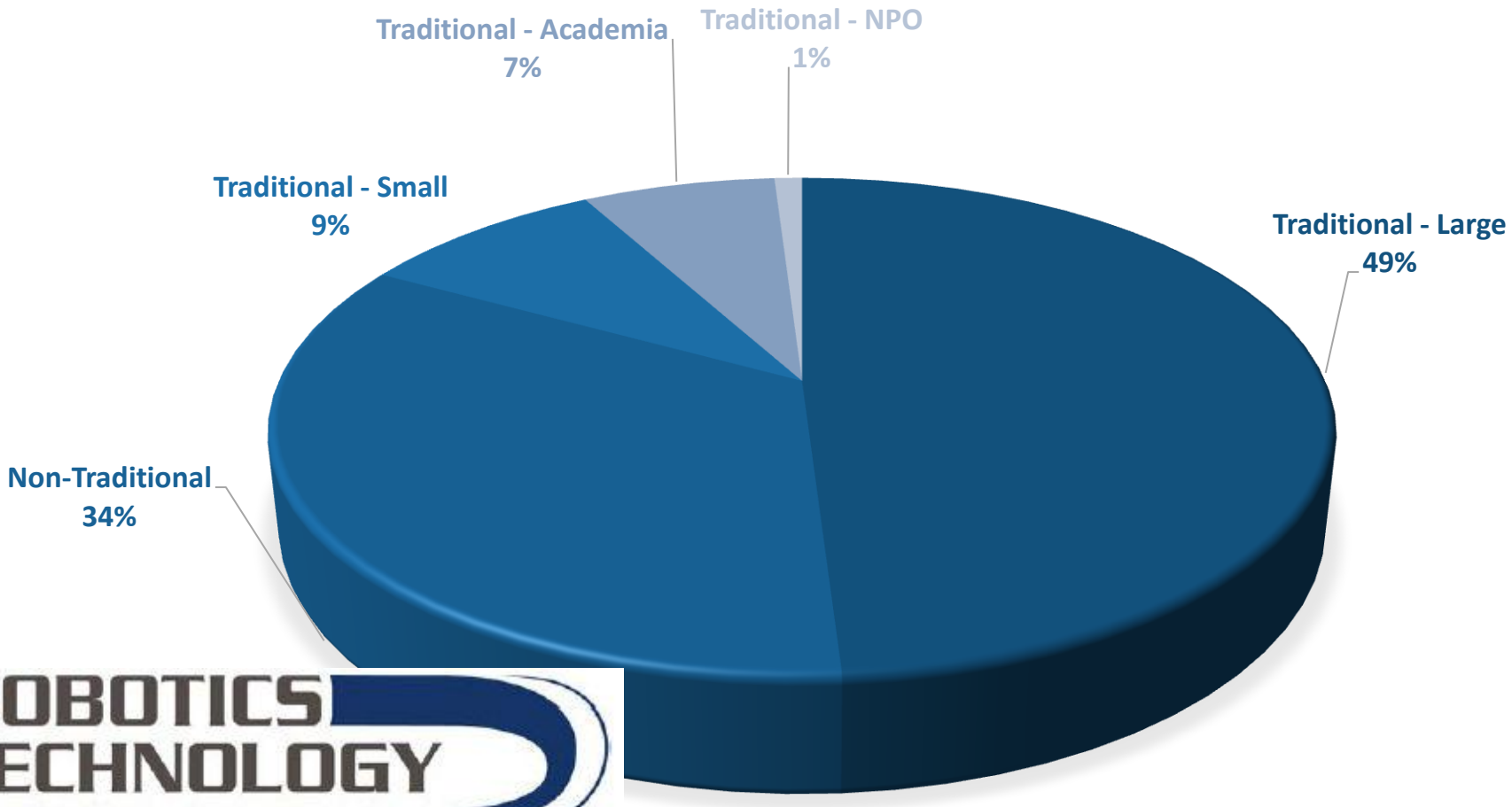
Total $$ Awarded on RTC OTA by Member Type



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Transition to the Defense Mobility Enterprise (DME)

- April 9, 2014 RFI – "…pre-established consortium…"
- July 1, 2014 -- Section 845 Other Transaction Agreement Award to RTC
- –7-year, $700M Ceiling -- Ground Vehicle Systems
- DGRE changed to Vehicle and Robotics Alliance (VRA) – consortium of DoD ground vehicle systems technology and system developers
- RTC changed to National Advanced Mobility Consortium (NAMC) – consortium of US industry and academia now under contract with the DoD for manned and unmanned ground vehicle systems technology development and prototype demonstration

WHY?.....

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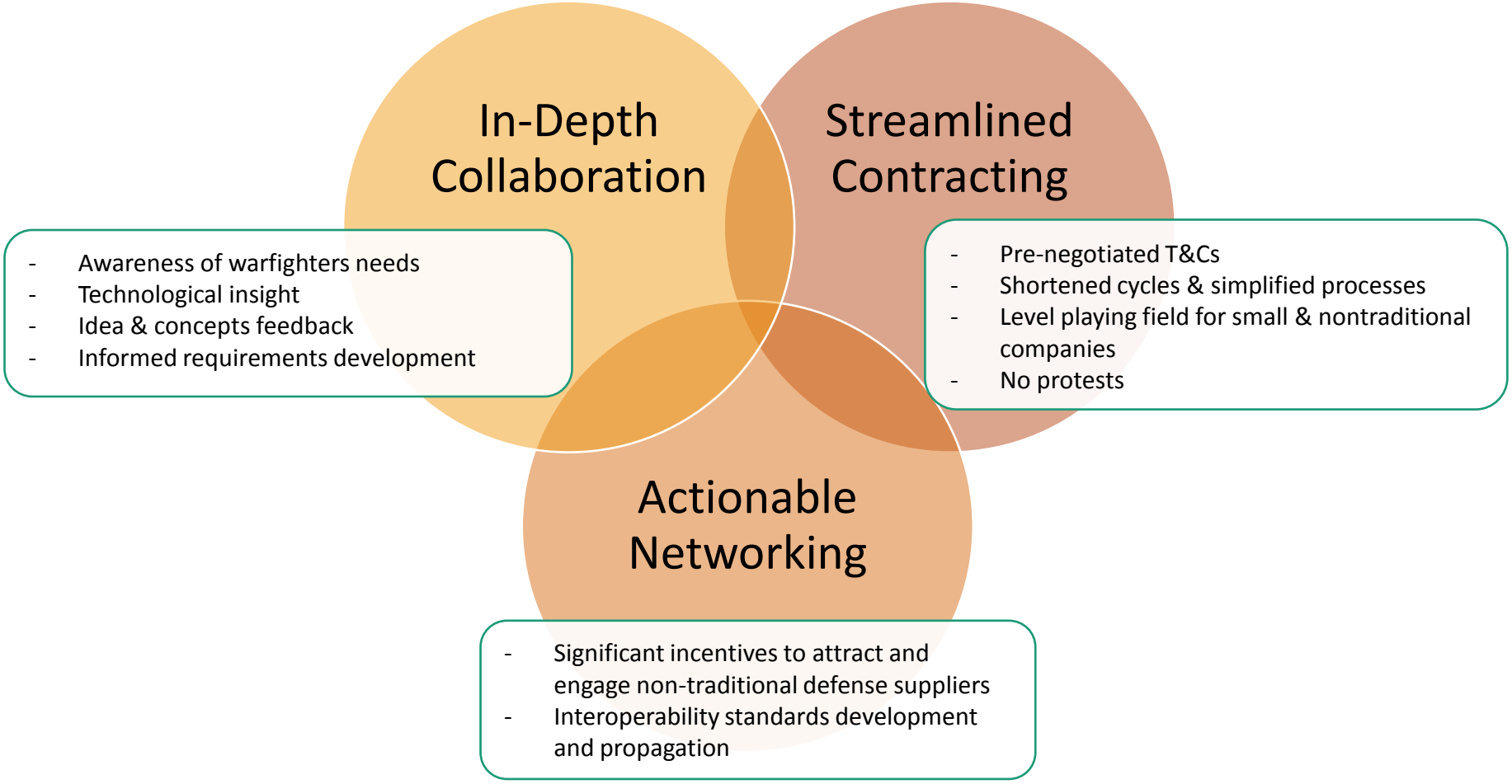
Innovation Acceleration



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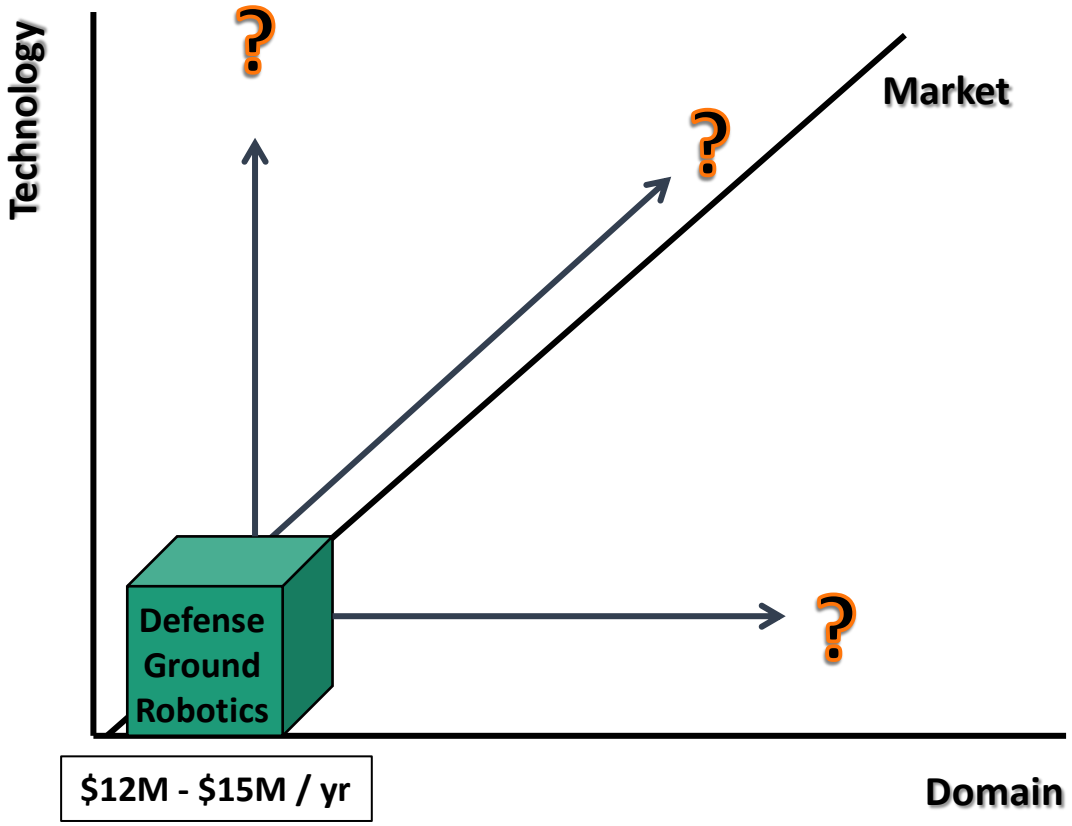
Pre-Established Consortium



(Circa Q1 2014)

Factors

- Leverage Collective Capabilities & Know-How of Current Members as Much as Possible
- Increased Partnering & Marketing Opportunities for Current Members
- Evolving Government Perspective on Ground Robotics: Applique, Commonality, Interoperability, Integrated Vehicle Teams, Optionally Manned / Unmanned, etc.

Less so *unmanned systems*,
more so ***unmanned capabilities***

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A Better Way of Doing Business

Ground Vehicle Consortium Concept being Socialized with the Army & Marines

Growing Awareness of RTC OTA construct at TARDEC

Better Buying Power Traction

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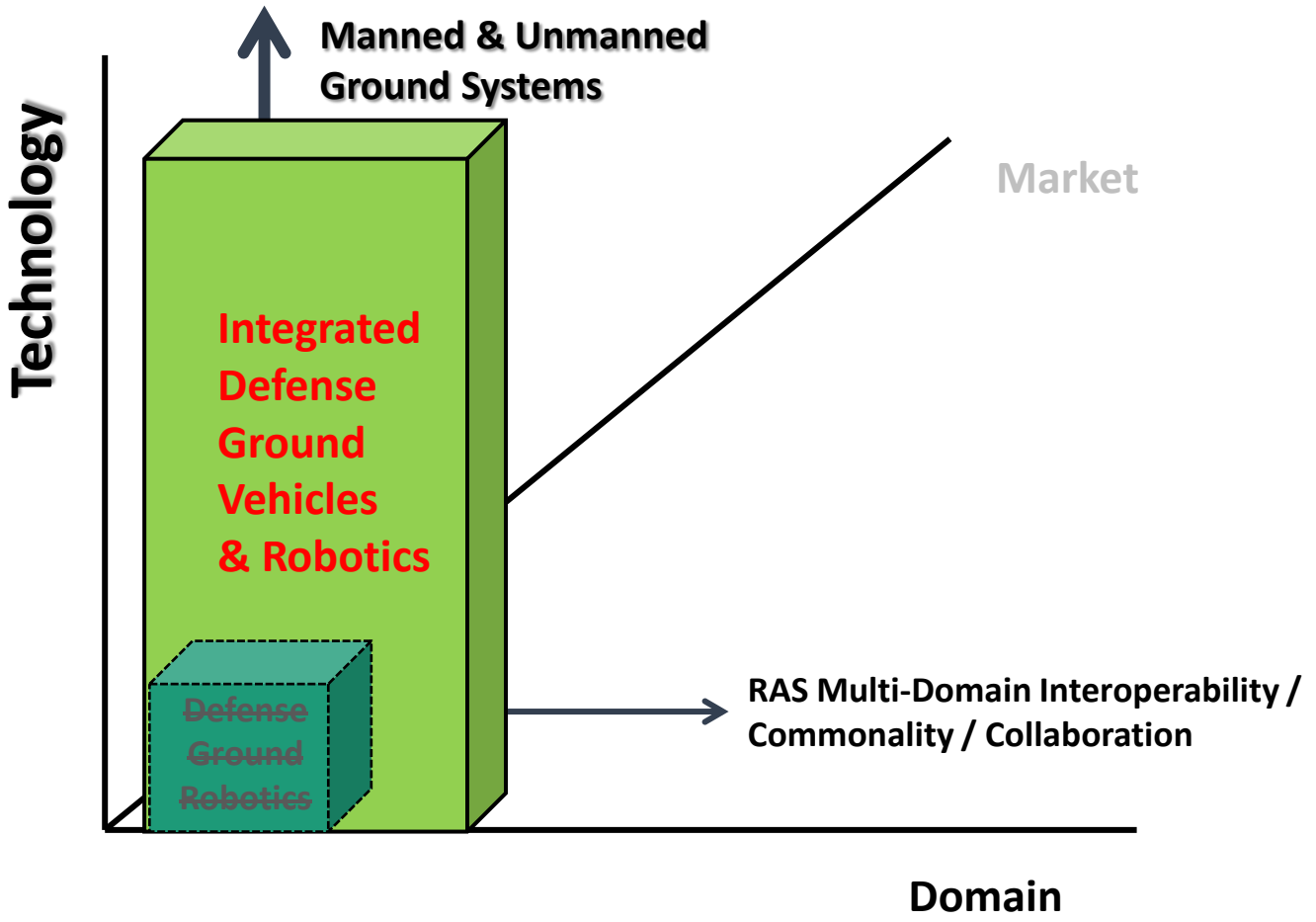
Value Proposition:

Expand the Consortium's Scope and Scale to Find Synergies and Efficiencies




DEFENSE MOBILITY
DME
VRA
NAMC
Accelerating the Advancement of Technology
ENTERPRISE

Defense Mobility Enterprise

VRA
Vehicle & Robotics Alliance

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Vehicle & Robotics Alliance ("VRA")

Network of Participating Government Organizations (VRA -- Government Labs / R&D Centers / Program Offices, and its Program Office (VRA PO)

National Advanced Mobility Consortium, Inc. ("NAMC")

Non-Profit 501(c)3 Organization Industry / Academia / NPO; and its Consortium Administrative Organization (CAO)

VRA and NAMC… Partnering to Leverage their Individual Capabilities and Investments

The Defense Mobility Enterprise

- The Defense Mobility Enterprise (DME) is a collaborative partnership between the DoD Vehicle and Robotics Alliance (VRA) and the National Advanced Mobility Consortium (NAMC)
- The mission of the DME is to provide a collaborative environment between industry, academia, and DoD to push the state of the art in vehicle, robotic, and survivability research efforts.
- The DME provides an avenue for creation of IPTs, information sharing, special task requests, and a streamlined contracting process for prototyping of advanced concepts in vehicle, robotics, and ground vehicle survivability technologies.

Vehicle and Robotics Alliance Program Office

- The Vehicle and Robotics Alliance (VRA) is a coalition of DoD agencies, laboratories, Program Management Offices, and Organizations with the combined interest in current and future military technology for vehicles and robotics
- The VRA Program Office mission, with the support of NAMC, is to provide a collaborative plan for research and development of vehicle, robotics, and survivability efforts by:
  - Coordinating GOV organizations research efforts for information and reporting
  - Setting up collaborative opportunities with GOV to GOV and GOV to NAMC Members
  - Participating in GOV Vehicle, Robotics, and Survivability IPTs
  - Educating the GOV workforce through webinars and sponsoring activities
  - Providing a streamline contracting processes for S&T procurement
  - Supporting and developing STEM activities

DME Goals and Objectives

- Enable greater visibility into warfighter needs
- Provide Government greater insight into what's technologically feasible
- Engage non-traditional companies for innovation and technological solutions
- Facilitate teaming among traditional and non-traditional defense companies
- Provide ready access to Government resources, as needed
- Execute business and contractual processes to simplify and accelerate getting technology development projects under contract
- Support the Government's efforts to advance interoperability, open architecture, and other vehicle-related technology standards

Vehicle and Robotics Alliance Program Office

Vehicle and Robotics Alliance (VRA) Program Office

- VRA PO Director

OTA Management

- Annual Cycle Management
- Ad Hoc Cycle Management
- Compile Metrics
- Develop/Update Contracting Process and Templates
- Informing AORs

Information Management

- Gather and Compile Technology Information
- Compile and Report Metrics
- Write Joint Robotics Future Direction Report (JRFDR)
- Database Development
- Setup Collaboration Opportunities
- Identify and Setup DME IPTs
- Identify and Manage Task Requests
- Develop and Manage Websites (Internal and External)
- Lead Robotics S&T IPT for OSD
- Participate in JCGV and Other IPTs
- Educate GOV Personnel
- BIDS Administration

STEM

- Develop and Manage STEM Plan
- Investigate Contract and Develop Process for Funding and Executing
- Compile Metrics and Report
- Identify Funding Sources

Business Development and Management

- Manage the Defense Mobility Enterprise (DME) and the VRA
- Develop and Facilitate Robotic Lender Program
- Develop New Business
- Communication of VRA, DME, and VRA PO Functions and Processes
- Security Adjudication and Management
- G8 Liaison
- Contract Draft and Review

Benefits

DoD:

- *Facilitates collaboration* with Service, Industry and Academic SMEs.
- *Leverages* IRAD funding and innovative technologies with U.S. industry and universities.
- Facilitates planning and execution with incremental funding options
- Enables breakthrough technologies to be more accessible to address DoD warfighter requirements
- Permits DoD technical staff to *focus on technology*, not contracting

Industry/Academia:

- Enables and increases *business relationships and partnerships*
- Provides more visibility and *higher resolution of technology gaps*
- Allows for open communication/collaboration with DoD technical community during requirements development and project definition activities

Defense Technology Base:

- *Enables a more rapid response* to DoD warfighter requirements
- Provides a focus on the demonstration of prototypes, thus reducing risk in development and production
- Increases the number of private-sector companies participating in Defense technology development


NAMC

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Why Join?

Unique Acquisition Process:

- Competitive yet Flexible
  - NAMC membership is open and competitive. DME awards can be made to any member of the NAMC
- Basket Provision
  - If funding is not available, a source-selection-approved proposal is put into an electronic basket where it can be funded any time, by any service for the next three years
- Single Point Contracting
  - CAO facilitates and manages DoD's engagement with all members of the NAMC; e.g., Cost Analyses and Subcontractor agreement verifications will be conducted by the CAO

Shorter Time to Award:

- First time award (funding/SOW received to award)
  - Less than 90 days
- Incremental award
  - Less than 45 days - e.g., if a SOW with a ceiling of $1m was funded up to $500K, and an additional $250K is subsequently made available, it can be awarded within 45 days of sending it to VRA
- Basket provision ("Basket" proposal pulled out for award)
  - 60-80 days

Reasonable Costs:

- NAMC total fees are $500 annual dues and a .5% Project Award Assessment

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OTA Requirements

In accordance with provisions contained in 10 USC 2371 governing the use of OTA's, each NAMC Member Organization must have at least one nontraditional defense contractor participating to a significant extent in the performance of an awarded vehicle or robotics project or provide cost share of no less than one third of the value of the Project awarded to the Member Organization.

- **Nontraditional Defense Contractor Definition:** A business unit that has not, for a period of at least one year prior to the issue date of the Request for Ordnance Technology Initiatives, entered into or performed on (1) any procurement contract that is subject to full coverage under the cost accounting standards prescribed pursuant to section 26 of the Office of Federal Procurement Policy Act (41 U.S.C. 422) and the regulations implementing such section; or (2) any FAR based procurement contract in excess of $500,000 to carry out prototype initiatives or to perform basic, applied, or advanced research initiatives for a Federal agency, that is subject to the Federal Acquisition Regulation.

- **Cost Share Definition:** Cost sharing is defined as the resources expended by the award recipients on the proposed statement of work (SOW) and subject to the direction of the initiative management.

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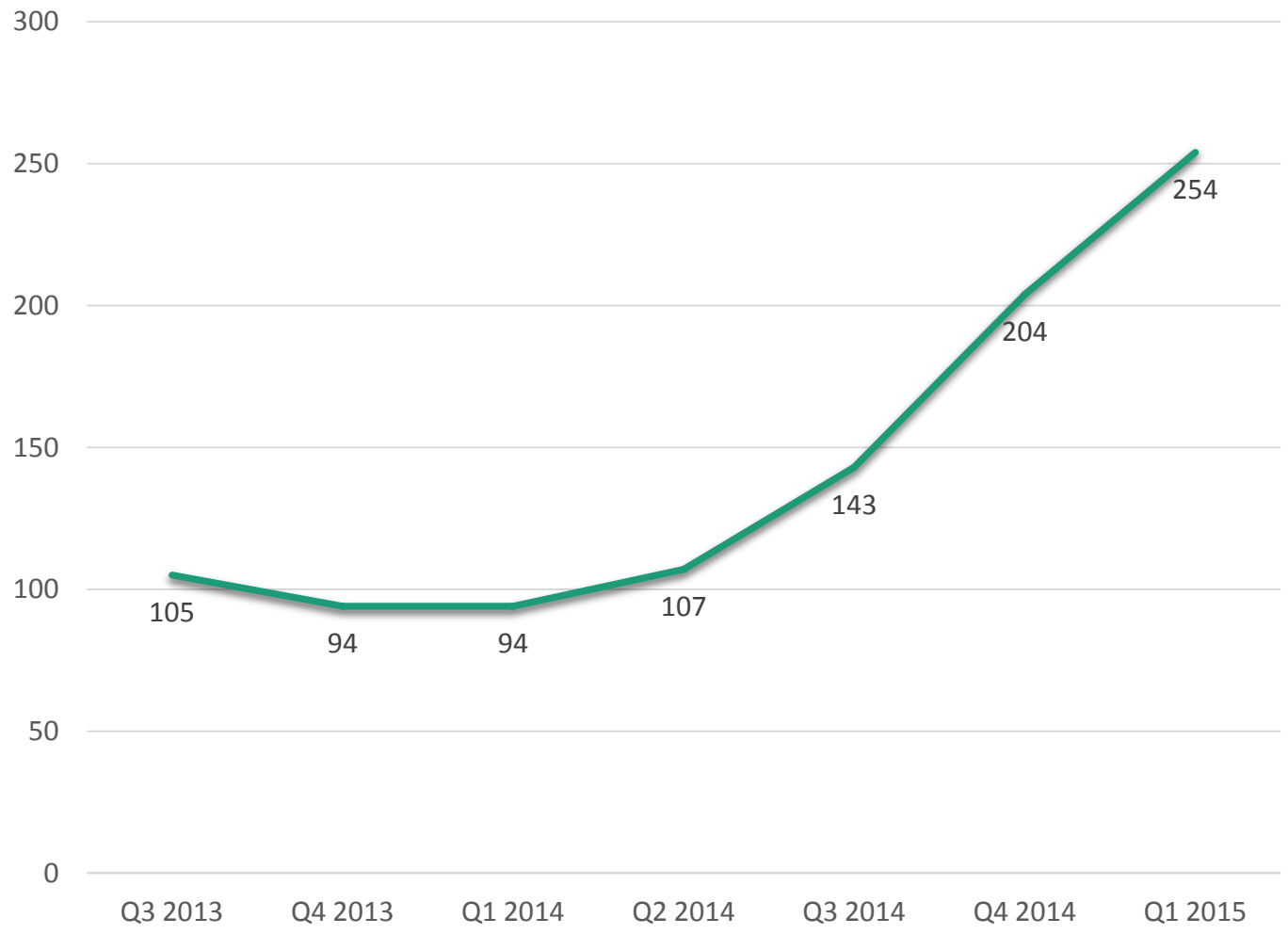
Membership



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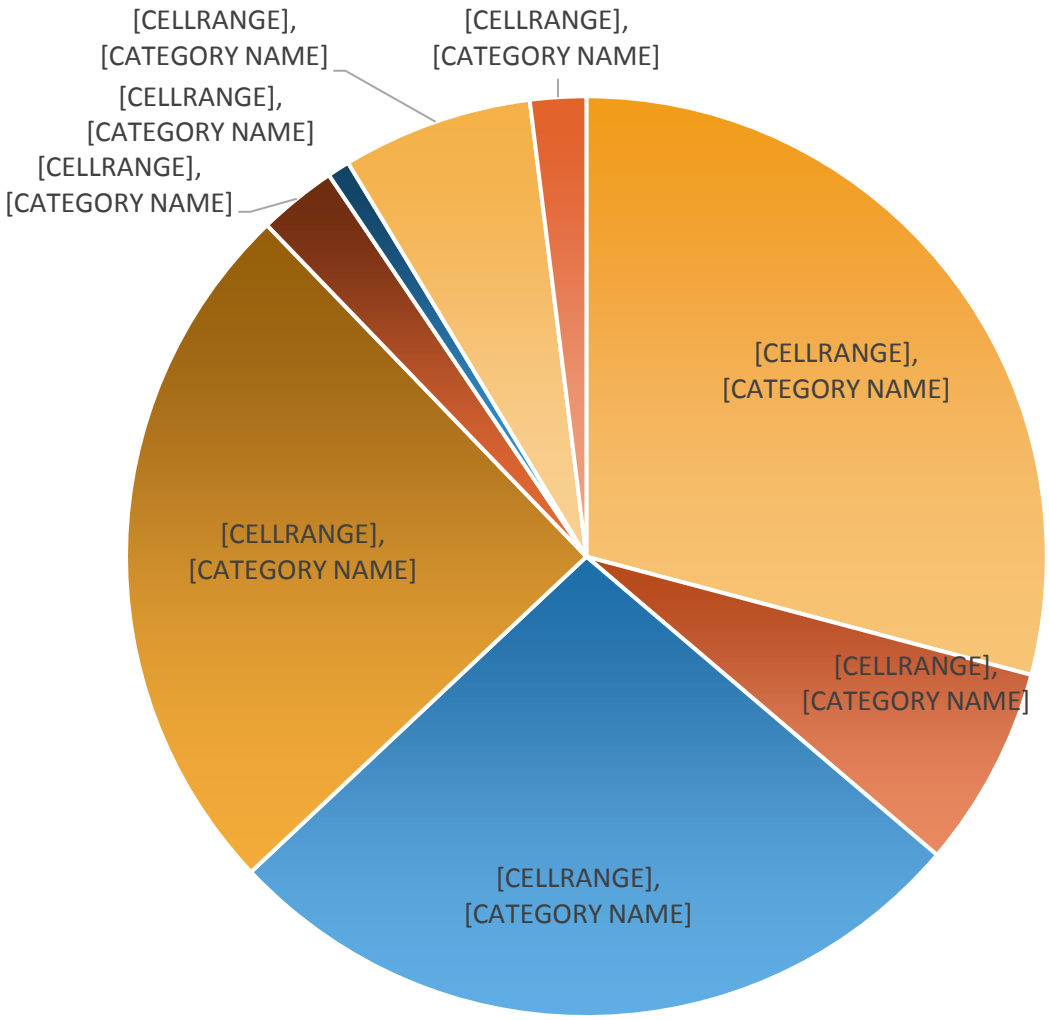
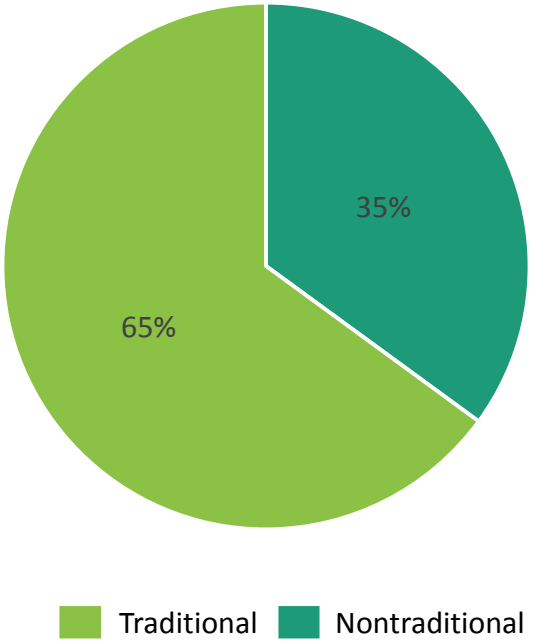
Membership

March 2015 254 Members





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NAMC Board of Directors

Class A (Term Expires Fall 2015)		
Name	**Company**	**Seat**
Parag Batavia	Neya Systems	NT, Defense Supplier
Dawn Tilbury	University of Michigan	Academia/Research
Philip Bryan	REMOTEC	Lrg, For-Profit
Jorgen Pedersen	RE2, Inc.	Appointed, NCMS
Jon Riley	NCMS	Appointed, NCMS
Andy Dallas	Soar Technology	Ex-Officio, Non-Voting, Past President
Derek Daly	QinetiQ	Appointed, AUSVI
Class B (Term Expires Fall 2016)		
Frank Wilson	iRobot	Robotics Sr. Executive
Chris Yunker	Hodges Transportation	Sm. Business
Chris Mentzer	Southwest Research Institute	Non-Profit
Rebecca Taylor	NCMS	Appointed, NCMS
Mike Bolon	General Dynamics Land Systems	Appointed, NCMS
Mark Gordon	Stratom	Appointed, AUVSI
Myron Mills	Lockheed Martin	Appointed, AUVSI
Class C (Term Expires Fall 2017)		
Patrick D. Weldon	Polaris Industries, Inc.	Vehicle Sr. Executive
Jerry Lane	Great Lakes Systems & Technology	Sr. Technology
Rick Jarman	NCMS	Appointed, NCMS
V. Suzy Young	UA, Huntsville	Appointed, AUVSI

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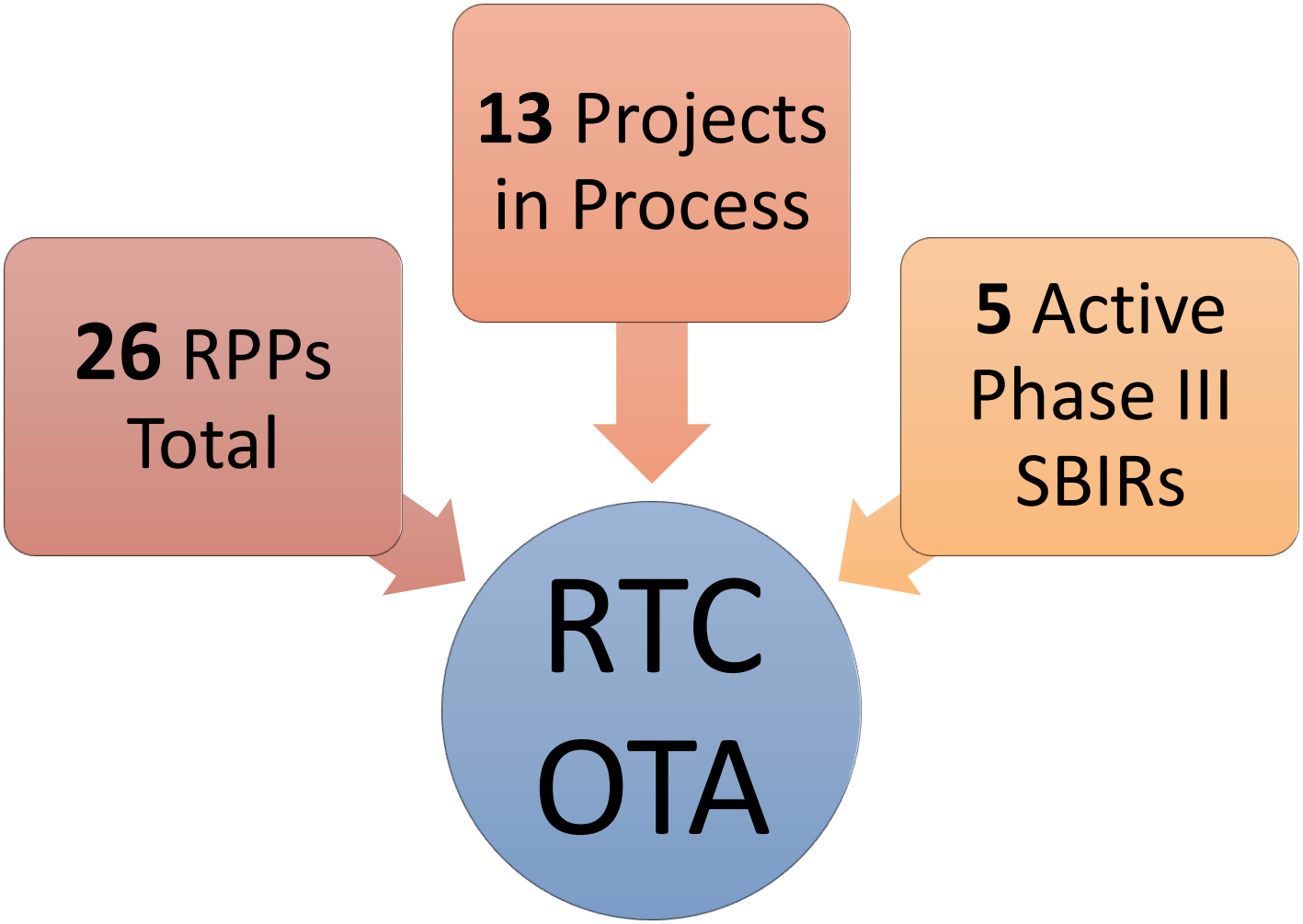
RTC OTA Projects



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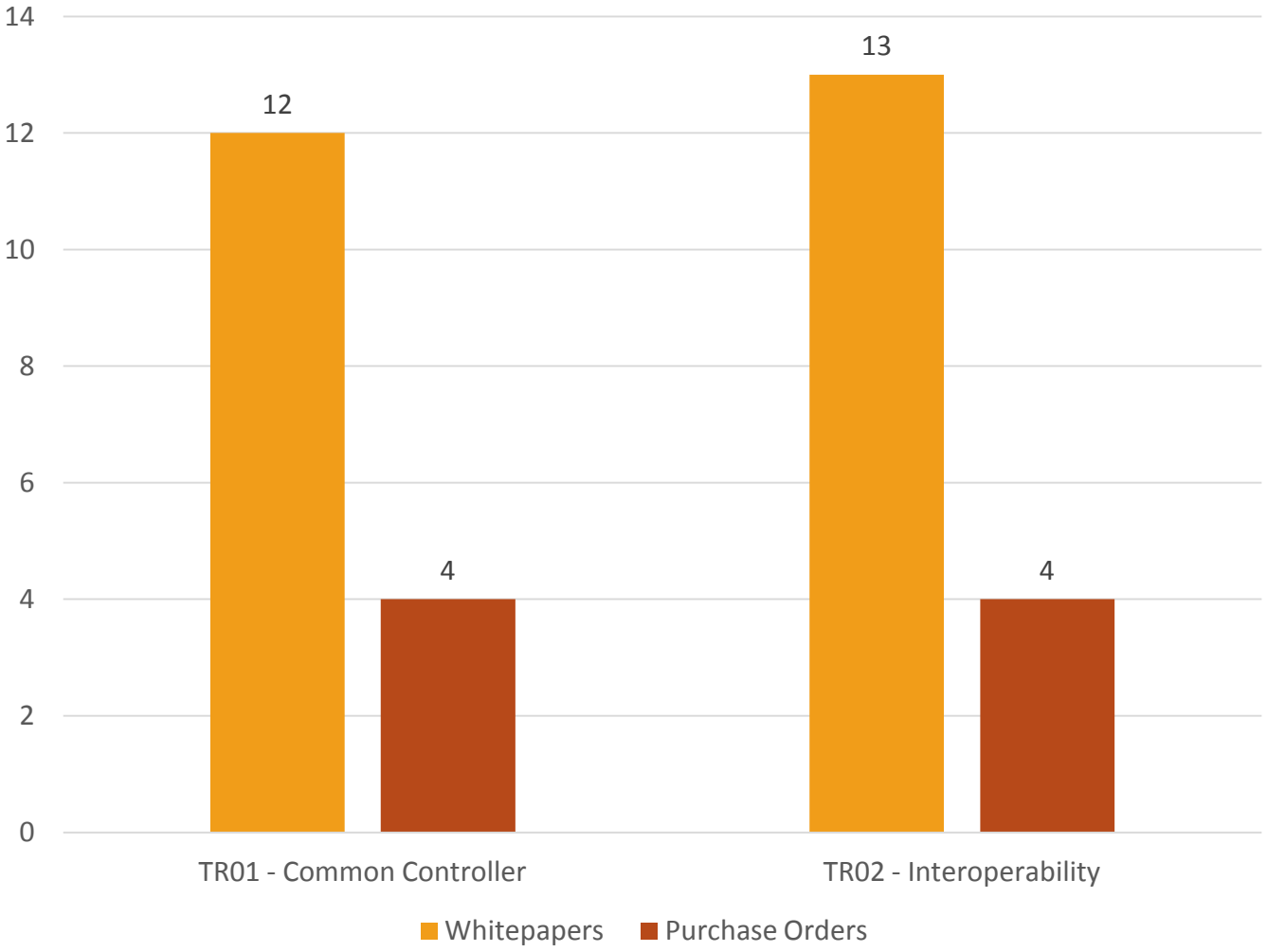
RTC OTA Task Requests



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GVS OTA Task Requests

GVS OTA TR01
Modular Active Protection System Framework (MAF)

Request for whitepapers issued 3-FEB

- **21** WPs received including:
- **4** Nontraditional Defense Contractors (NDCs)
- **5** Trad Small Businesses
- **8** Large Defense Contractors
- **4** Trad Nonprofits

Community of Interest (COI)

- All members who submitted WPs have been invited to join the COI
- COI remains open to more members, must submit a 1-page statement of interest to cindib@ncms.org
- COI kick-off meeting tentatively scheduled for **29-30 APR** at Selfridge Air National Guard Base

Project Lead or Core Team Nominations

- GOV has selected **17** of the 46 individuals nominated to submit a follow-on proposal to serve as project lead or on the core team
- Selection announcements will be made beginning of April
- Core team meeting planned for early/mid April

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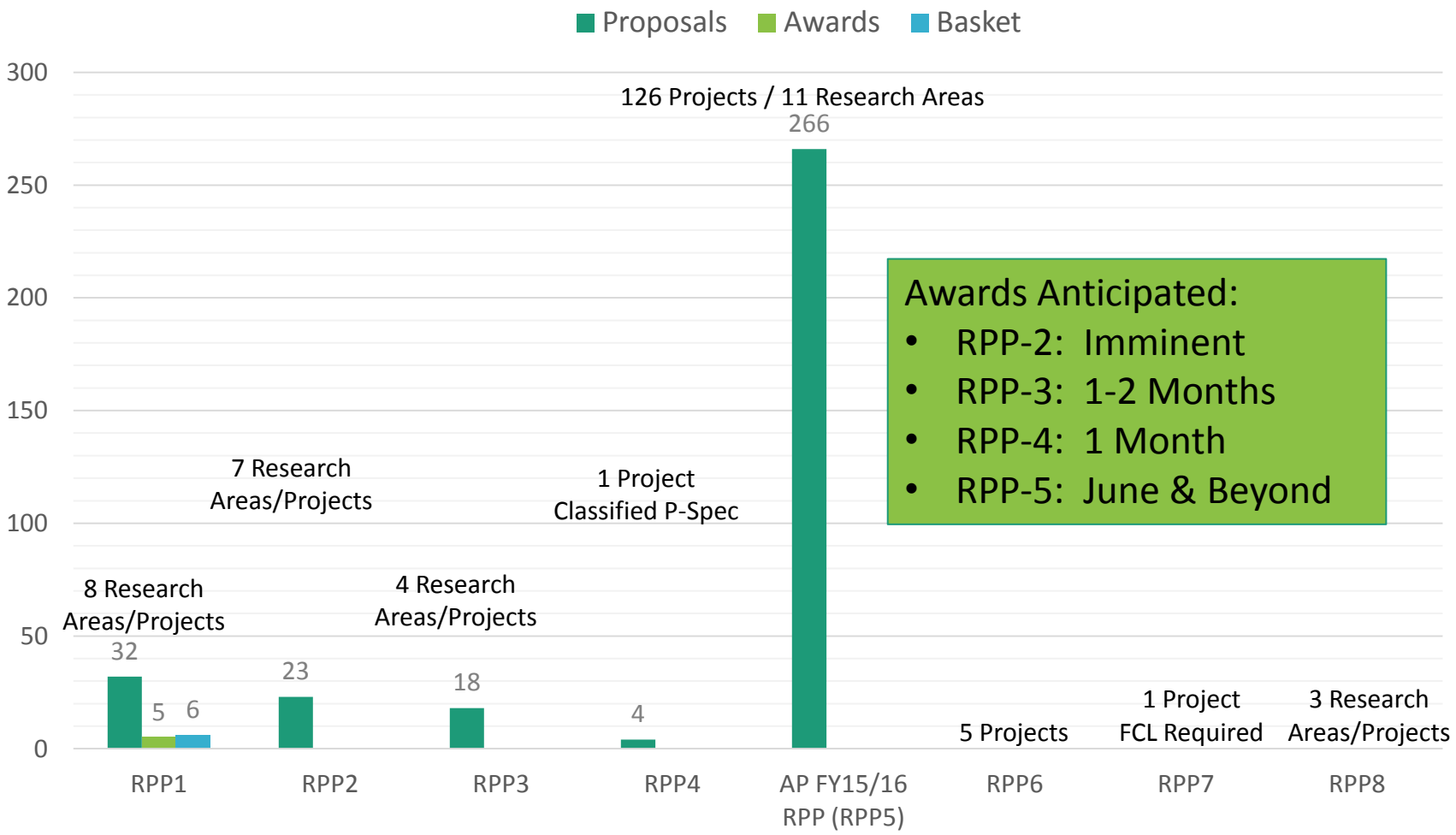
GVS OTA Projects



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Annual Plan Update

148 Requirements in the Published Annual Plan

- 11 Research Areas

552 White Papers Received

- Whitepaper Evaluations
  - 228 Green
  - 226 Yellow
  - 88 Red
  - 10 Withdrawn

342 Invited to Submit a Proposal

Government Restructured for RPP Release

- 22 Requirements Pulled
  - 4 Cancelled Outright
  - 12 Cancelled (No WPs Received)
  - 6 Released as Ad Hoc(s) (RPP-6 & RPP-7)
- 126 Projects Published in RPP-5

RPP-5 Closed 4/3/15

- 266 Proposals from 83 NAMC Members Received against DME AP FY15/16

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FY15/16 Annual Plan Statistics

Research Area	Annual Plan Projects	Whitepapers Received	RPP Projects	Proposals Received
Architecture, Security, and Modularity (ASM)	3	26	1	4
Autonomy	32	158	32	91
Collaboration	2	3	1	0
Mobility	33	101	28	50
Modeling and Simulation (M&S)	11	33	9	23
Petroleum & Water Systems (PAWS)	3	2	2	1
Payload	5	14	5	4
Platform	12	41	11	23
Powertrain	3	14	3	7
Survivability	42	142	33	61
Test and Evaluation (T&E)	2	5	2	2
Total	**148**	**552**	**126**	**266**

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Last Month-at-a-Glance

March

- 254 Members Total (14 NEW in March)
- 12 Provisional Memberships (Total)
- $9M ($20M FY) Obligated to the OTA, $2M ($9M FY) in project funding awarded
- 2 Project awards on the GVS OTA (1 to NDC/1 to Traditional with NDC participation, both awards were to small businesses)
- Average of 20-day turn around from award to task assignment executed 37 (total) Proposals residing in the basket
- 220 Government Evaluators/222 NAMC Submitters Registered in BIDS

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FY15/16 Schedule

Publish Annual Plan to GOV and NAMC	**19 DEC 2014**
White Papers Due from NAMC Members	**23 JAN 2015**
White Paper Evaluations Due from GOV	**20 FEB 2015**
RPP published to NAMC members	**26 FEB 2015**
Proposals due from NAMC members	**03 APR 2015**
GOV Evaluations due	**01 MAY 2015 ***
Estimated Awards & Basket Placement	**JUNE 2015 and beyond**

* All dates are considered “Best Estimates” at this time.
** Actual date becomes project dependent at this stage.

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OTA Basket Provision

A proposal is placed in an electronic basket for a period of three (3) years from the RPP closing date when a proposal (rated better than poor) is not initially selected for award.

To maintain acquisition integrity, the Source Selection official must select the #1 ranked Proposal once funding is available (rankings are determined by the source selection evaluation team)

For other DoD Customers, proposals can be selected from the basket without any regard to ranked order provided that the selecting customer is from a different Service or business unit (Division level) organization than the source selection team organization

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