

ROBOTICS TECHNOLOGY CONSORTIUM

Intelligent Vehicle Technology Development in the Robotics Technology Consortium

April 2, 2009

Outline

- Description of the Joint Ground Robotics Enterprise (JGRE)
 - Description of the Robotics Technology Consortium (RTC)
 - The JGRE Process and where the RTC fits
 - Influencing the direction of Robotics R&D
 - Technology Concepts
 - The Technology Advisory Group (TAB)
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JGRE (JRP) Purpose

- Congressional Direction—Department of Defense Appropriations Bill, 1990
 - Consolidate funds existing in disparate robotics programs under the direction of OSD...
 - Identify robotics requirements...
 - OSD will decide both funding and technology priorities for robotic efforts
 - DUSD LW&M hosts the Joint Ground Robotics Enterprise
 - LW&M funds robotic enablers across the enterprise based on “push and pull” between technology and requirements
 - Oversight, Prioritization, Advancement of Key Technologies
 - Interoperability
 - Collaborative Operations
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RTC Overview

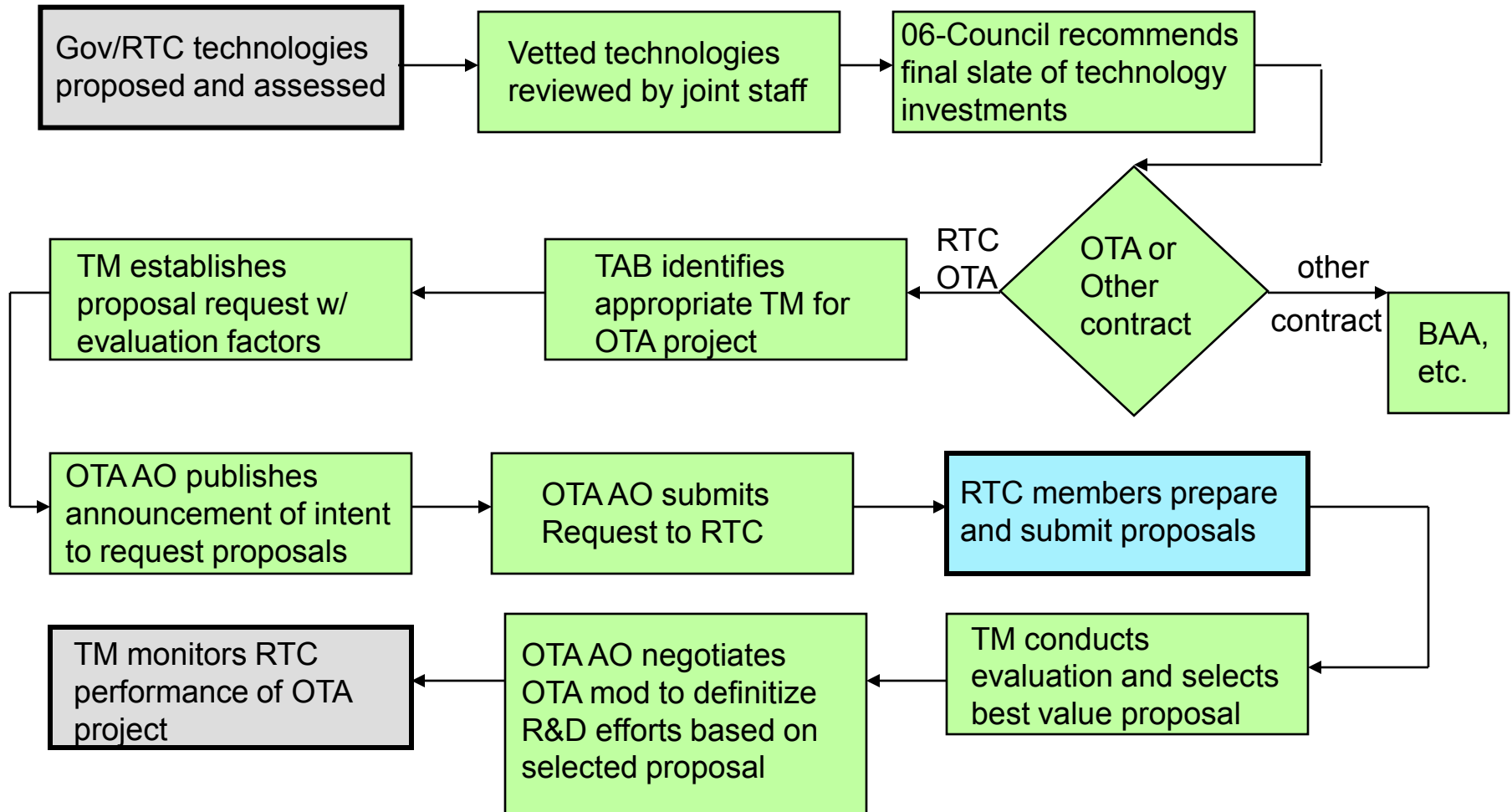
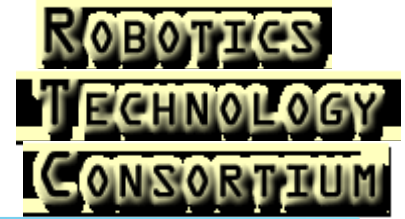
- Primary Purpose: Support the DUSD LW&M Joint Ground Robotics Enterprise
 - Leverage defense and commercial technologies in the advancement of robotics
 - Industry provide a voice in vetting technology issues and developing long-term plans
 - Facilitate dynamic, project-by-project industry teaming
 - Increase the R&D tempo
 - Increase the funding for robotics—support other Government organizations/customers
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The RTC

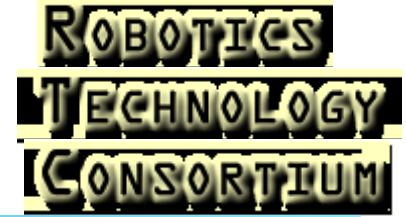
- Three-fold initial mission
 - Front End
 - Industry submits technical concepts
 - Joins with Government to vet technology readiness and applicability (serves as critical inputs for Government planning)
 - Back End
 - Government solicits proposal on prioritized projects to mature, transition, and/or integrate technology to product prototype solutions from Consortium members
 - Industry dynamically forms teams as appropriate to submit responses
 - Government competitively selects companies and teams best suited to perform the work under an OTA Agreement
 - Increase available funding for robotics
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JGRE Process

From concept submission to project selection



The Makings of a Good Concept

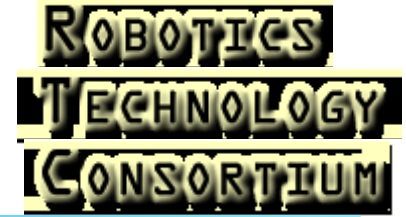


- Concepts are NOT proposals
 - Concepts are “technical ideas” that would, in general, advance the state-of-the-art in some robotic technology area
 - Concepts are general, providing proprietary information is not included
 - Specific products and company names should not be included in the summary, general classes are OK.
 - Some concepts will form the basis of topics in a future Request for Project Proposals (RPP)
 - Concepts might change substantially during the JGRE process
 - Grouping of like concepts
 - Additional information being provided as a result of a request for further information
 - Government Technical Managers write a topic for an RPP using the concept as a basis (they don’t necessarily use the concept verbatim)
 - Concepts successfully making it through the JGRE process:
 - Meet a warfighter need
 - Describe the deliverable—what is OSD getting
 - The end result has to work in a relevant operational setting
 - How is it faster, cheaper, and better—quantify this
 - BE FOCUSED and to the point
 - Speak in warfighter terms
 - Achievable (not magic)
 - All cell entries hold together well
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TAB Overview

- The TAB is the first step in the overall JGRE process
 - Provide technical experience and expertise during the review of concept submissions
 - The JGRE TAB is comprised
 - Representatives from Government agencies/laboratories
 - Technical representatives from RTC member companies
 - The TAB meets (face-to-face or virtually) three times from Dec-Feb
 - Face-to-face meetings are usually held in the Washington DC area
 - The TAB is divided into four working groups, based on the Joint Capabilities Areas
 - Each group is responsible for reviewing a set of concepts
 - The TAB meets as a whole, first to coordinate activities and later for base-lining the results of the individual groups
 - The final results of the TAB are sent to the next step (review by the Joint Staff) in the JGRE process
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FY09 TAB Teams



Ellen Purdy, Andy Dallas, *Co-Chairs*

Battlespace Awareness

P. Mckinney, M Bruch
Co-Chairs

P. Rowe	R. Wade
A. Stentz	B. Smuda
P. DiBitetto	A. Kopeiken

Force Application

A. Mangolis, J Overholt
Co-Chairs

T. Jochem	M. Shields
B. McBride	K. Hacker
R. Finkelstein	L. Martinez

Protection

K. Massey, B. Skibba
Co-Chairs

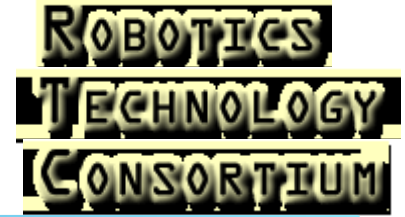
T. Cable	B. Brezina
C. Jones	B. Griese
D. Theobold	G. Gilbert

Logistics

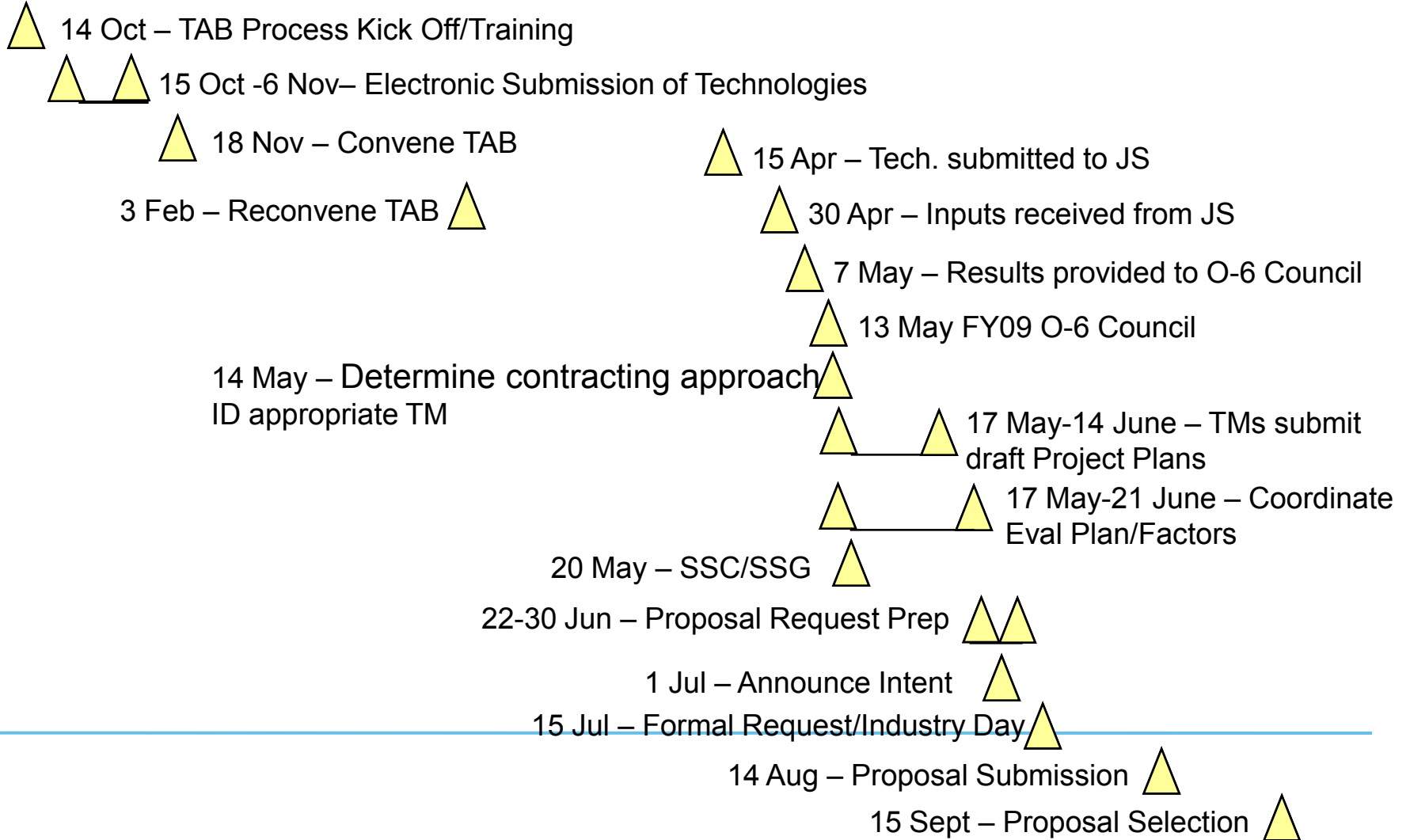
K. Kirkpatrick, J Lasswell
Co-Chairs

K. Bonner	E. Shoenherr
P. Koon	E. Pacis
F. Oliver	J. Hobson

FY10 TAB Schedule



Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
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Summary

- Opportunities for Intelligent Vehicles in the RTC
 - Become an active member of the RTC
 - Submit concepts to the FY10 TAB
 - Volunteer to be a member of the RTC TAB team
 - Propose to the Request for Project Proposals
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