

SHOWCASING YOUR S&T CAPABILITIES RFIs AND PRIZE CHALLENGES

How can I participate in ODNI In-VEST activities?

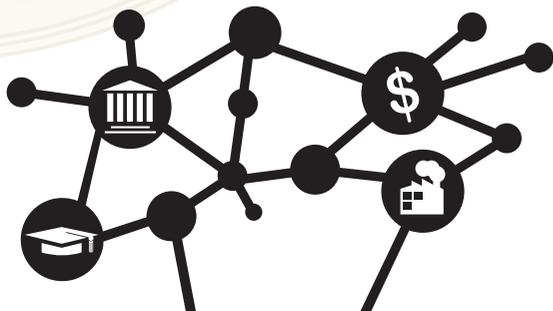
- In-VEST will initially offer Requests for Information (RFIs) and prize challenges in seven research challenge areas throughout 2016 and 2017.
- Offerors and prize competitors are invited to participate in any or all of these opportunities over this period.

In-VEST RFIs

- Offerors' submissions should focus on how research and development (R&D) efforts align to the technical roadmaps included in each RFI.
- Submitted RFI materials are further distributed to government stakeholders.

In-VEST Prize Challenges

- Intended to provide experimental evidence supporting the In-STeP-derived technical roadmaps.
- Stimulate breakthroughs in science and technology while supporting the White House's Strategy for American Innovation and the ODNI's transparency and efficiency initiatives.



The In-VEST program provides the DNI with substantiated research investment guidance to resolve In-STeP-identified challenges. Furthering this mission are the DS&T's In-STeP, 1-on-1 Meetings, and Intelligence Formulation of Risk Management (In-FoRM) activities:

- **In-STeP:** Provides the rational, traceable, and defensible foundation for aligning IC S&T enterprise and partners' activities against National Intelligence Manager Needs.
- **1-on-1 Meetings:** Provides industry the opportunity to present proprietary R&D projects to IC stakeholders.
- **In-FoRM:** Leverages In-STeP to inform IC acquisition planning.

Please contact the In-VEST team to learn more about these emerging activities.

Email: S&TInvestment@dni.gov
S&TInvestment@dni.ic.gov (JWICS)

Website: <http://www.dni.gov/in-vest>

R-Space: <https://ospace.dodis.ic.gov> (JWICS)



INTELLIGENCE VENTURES IN EXPLORATORY SCIENCE & TECHNOLOGY

CATALYZING DISRUPTIVE RESEARCH
APPROACHES FOR ADDRESSING
INTELLIGENCE COMMUNITY NEEDS

Office of the Director of National Intelligence
Director of Science and Technology



Stimulating cutting-edge public- and private-sector research is critical to ensuring strategic and tactical intelligence advantage for our nation's policymakers and warfighters. Building upon the new science opportunities identified by the ODN's Intelligence Science and Technology Partnership (In-STeP) technology roadmaps, In-VEST is intended to provide the private sector with early signals for the types of advanced technology that the IC is anticipated to require, providing industry and academia an opportunity to invest appropriately now to support the IC's future needs. In parallel, In-VEST will leverage and influence US Government-wide research to help meet these same challenges.

In-VEST Vision:

Explore In-STeP-identified technical approaches for realizing transformative IC capabilities.

In-VEST Mission:

Efficiently meet In-STeP-identified challenges by stimulating, leveraging, or—at a minimum—influencing current public- and private-sector initiatives relevant to these challenges.

Adoption and implementation of In-VEST will be critical for providing the Director of National Intelligence (DNI) with substantiated research investment guidance to resolve In-STeP-identified challenges.



In 2016 and continuing into 2017, In-VEST will pursue a series of prize challenges and RFIs aimed at ascertaining and advancing the state-of-the-art in natural language processing, cognitive computing, and other artificial intelligence approaches with the potential to revolutionize IC capabilities. Collectively, these efforts will explore technical opportunities for accelerating and automating the production of intelligence.

Anticipated to award approximately \$1 million in prizes, the In-VEST Xploratory Challenge Series will include:

Xpress

Explores the potential for artificial intelligence techniques to offload routine finished intelligence production tasks to machines.

Xpect

Explores the potential to use machine methods to determine causality from correlation.

Xtract

Explores the potential for automatically extracting structured observations from existing analytic toolsets and workflows.

Xtend

Explores the potential for the roles of analysts and machines to evolve by identifying tasks that may no longer need analysts to provide final supervision.

Xchange

Explores the potential for connecting analysts from across the IC based on what they know, what they observe and what questions they're asking.

Xamine

Explores the potential for statistical methods to connect underlying data, establish a confidence hierarchy, model error propagation, and manage risk as a function of time and complexity.

Xplore

Explores the potential for creating complex information discovery techniques for machine analysis to discover unknown and complex relationships within data.