

**USTAR TECHNOLOGY ACCELERATION PROGRAM**  
**(TAP) FY17 PROGRAM ANNOUNCEMENT**

**UTAH SCIENCE TECHNOLOGY AND RESEARCH (USTAR) INITIATIVE**

USTAR is the State of Utah's technology catalyst, accelerating the growth of the innovation ecosystem from invention through product development. Guided by Utah's economic clusters, USTAR supports technology entrepreneurs and innovators through training, funding and incubator and accelerator programs; brokering technology transfer by connecting capital, management and industry; addressing market gaps in Utah's technology ecosystem and strengthening the state's research capacity.

**TECHNOLOGY ACCELERATION PROGRAM (TAP)**

The Technology Acceleration Program (TAP) is a USTAR competitive grant program that supports private sector technology development for Utah-based companies. While designed for start-ups and early stage companies, mature companies can apply to TAP for development of a new technology or product. Proposed work can include, but is not limited to, research and development, proof of concept, product validation, and product development.

TAP awardees will receive non-material support, such as referral to USTAR's partner networks, to assist in achieving technical and business milestones with the goal of commercial success.

**ELIGIBILITY**

- Company must be Utah-based
- TAP proposals should align with the targeted industry sectors identified by the USTAR governing authority (see below)
- Proposed technology for TAP funds must be at a technology readiness level (TRL) of 3-5. For information regarding TRLs, visit [USTAR's website](#).

**Targeted Technology Sectors**

USTAR is focused on the following targeted technology industry sectors for FY17 (July 1-June 30):

**Automation and Robotics** - Automation technology is the use of cutting-edge machinery in industrial applications to minimize human exertion. Robotics is the branch of automation that deals with the design, construction, operation and application of robots, as well as computer systems for their control, sensory feedback and information processing.

**Aerospace** - Aerospace is the branch of technology and industry concerned with aeronautics and astronautics. Areas for research include, but are not limited to, innovative approaches in aerodynamics, engineering of aircraft and spacecraft and the autonomous control of aircraft.

**Advanced Materials** - Advanced materials are all fibers, coatings, composites, etc. that are engineered to enhance the efficiency of a product and include new materials or

improvements to existing materials. Advanced materials can be applied to the creation of carbon composites, 3D printing advances, climate control, solar technology, water purification, sports, military equipment and textiles.

**Big Data** - Big data is a term for data sets that are so large or complex that traditional data processing applications are inadequate. Challenges include analysis, capture, data curation, search, sharing, storage, transfer, visualization, querying and information privacy. Analysis of data sets can find new correlations to gather information on topics such as business trends, crime patterns, genome sequences, complex physical environments and more.

**Energy and Clean Technology** – Energy and clean technology encompasses products and processes that harness renewable and nonrenewable materials to dramatically reduce the use of natural resources, cut emissions and waste, and provide options for efficient energy storage and usage.

**Life Sciences** – Life science is defined as the study of living organisms from a cellular, molecular, or macroscopic perspective. Research in this area includes, but is not limited to, medical device development, biotechnology, pharmaceuticals, diagnostics, agriculture, genetics and healthcare IT.

## **APPLICATION PROCESS**

**Stage 1.** Provide a letter of intent that includes your proposal title, technology category and estimated budget request to USTAR by close of business September 14, 2016. A letter of intent is not required to submit a full proposal.

**Stage 2.** Applications will be accepted electronically at TapUtah.com. Applicants will be required to create a profile and agree to all terms and conditions for the program. The website that accepts online applications is optimized for the Google Chrome browser. The application includes submission of a W9, quad chart, white paper and completion of the budget template. Applications are due October 4, 2016 at 8:00 a.m. A paper application will be provided upon request, by emailing TAPinfo@utah.gov.

1. The white paper should be no more than five pages, 1.5 spacing and no less than 12-point font. The white paper should include:
  - a. **Introduction:** describe the overall technology or product and the market need. Technology description should include the current technology readiness level, and that anticipated with successful TAP award.
  - b. **Technical milestones:** Identify the technical milestones that must be achieved under this award. The milestone description should include the technical challenge, need for this challenge to be overcome and the technical approach. A brief discussion of the technical risk and timeline for completion should be included. Project should run no longer than 18 months.
  - c. **Technical team:** Please describe the key personnel and their qualifications and experience that will enable this project to be successful.
  - d. **Commercialization plan:** Describe your commercialization plan, specifically addressing the path to market, regulatory path (if applicable), resources required and how they will be acquired. The commercialization plan should describe the governance structure of your business, your business team and their credentials and experience.

- e. **Market assessment:** Provide a brief description of the intended market, competitors, innovation in your product that will allow it to compete in the market, as well as market size and potential revenue.
- f. **Economic impact:** Characterize the potential economic impact on the state of Utah if your company is successful in meeting the technology objectives and taking the technology to market. This can include potential jobs, revenue, etc. The economic impact description should also include anticipated time to market.
- g. **Funding:** Please identify in the template any private or government funds raised to date or pending. Include the source of government funds. Include total amount raised. Describe potential matching funds available. If USTAR funds have been used to date please specify the amount including whether PI salary is paid by USTAR.

**Stage 3.** USTAR reserves the right to invite selected applicants to give a brief presentation to a review panel. A presentation template will be provided in that instance.

## **BUDGET**

Proposals must use the TAP budget template. Budget requests must be presented both by technology milestones and FY. The state's fiscal year is July 1 - June 30. We anticipate funds being made available at the beginning of December. Please develop your budgets using December as your starting point.

## **FUNDING SPECIFICATIONS**

USTAR receives an annual appropriation. Therefore funding for TAP is dependent on USTAR's appropriation, as well as the attainment of technical milestones.

## **EVALUATION CRITERIA**

An independent panel of technical experts, business and investments experts and state government staff will review USTAR TAP proposals. Panelists will be prescreened for conflict of interest. Please mark any proprietary material appropriately. An initial screen will be conducted to assure eligibility criteria and TRL are met. Proposals will be reviewed based on the following criteria:

- Technical merit
- Strength and maturity of company and management
- Potential for economic impact, as measured by:
  - Job creation
  - Product sales
  - Potential revenue due to expansion of current business or development of new businesses
  - And/or projected time to revenue or job creation
- Market need, technical and management experience and qualifications
- Reasonableness of cost proposal (size and allocation of budget is appropriate for the work proposed and matching funds available)
- Reasonableness of proposed milestones and timelines
- Any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR's activities.

TAP grants must be used to accelerate the development and commercialization of a technology and project proposals must identify specific technical milestones leading to the proposed outcome.

USTAR reserves the right to invite selected applicants to give a brief presentation to a review panel. If this occurs, a presentation template will be provided.

## **SCORING RUBRIC FOR TAP**

### **Technical Merits (score 1-5)**

Technical merits (score 5)

- Appropriate TRL 3-5
- Milestones are specific and measurable and align to technology goals
- Approach demonstrates a strong understanding and application of technology development best practices
- Technical approach has high likelihood of success, is well defined and considers alternative approaches if the original is not successful
- Reasonable timeframe for development

Technical merits (score 3)

- Semi-appropriate TRL
- Milestones are not specific or measurable, but align to technology goals
- Approach demonstrates basic understanding and application of technology development best practices
- Technical approach has a high likelihood of success and is well defined

Technical merits (score 1)

- Not the appropriate TRL
- Milestones are not specific or measurable and do not align to technology goals
- Approach does not illustrate understanding of technology development best practices
- Development timeframe is not reasonable
- Technical approach lacks detail or has low chance of success

### **Potential Economic Impact in Utah (score 1-5)**

Economic Impact in Utah (score 5)

- Company will expand high wage jobs in the state in the next 2-3 years
- High revenue and sales anticipated
- Significant funding leveraged from private/public sources

Economic Impact in Utah (score 3)

- Company will create high paying jobs in the state over the next 5-7 years
- Company will create low or middle income jobs in the state

- Moderate sales and revenue expected in 5-7 years
- Moderate funding secured from private/public sources

Economic Impact in Utah (score 1)

- No job creation in Utah
- Revenue outlook is minimal and with long lead time (less than 10 years)
- Minimal funding raised from public or private sector

**Market Need/Commercialization Plan (score 1-5)**

Market need for the product (score 5)

- Clear potential market identified
- Company can provide data driven definition of market
- Specific plan identified to take the technology to market
- Technology has defined market advantage to current competitors
- Aligns to targeted technology sectors

Market need for the product (score 3)

- Clear potential market identified
- Company can provide data driven definition of market
- Specific plan identified to take the technology to market
- Technology has defined market advantage to current competitors
- Aligns to targeted technology sectors

Market need for the product (score 1)

- Market not identified, or market potential small
- No clear market advantage for this product
- Does not align to targeted technology sectors
- Unclear or undefined plan to take product to market

**Management Team Capabilities**

Management team's capabilities/experience that will lead to market success (score 5)

- Management team demonstrates strong capabilities and experience for market success
- Management team has previous experience in starting successful companies
- Governance structure including a board are in place for company

Management team's capabilities/experience that will lead to market success (score 3)

- Management team's capabilities and experience demonstrate potential for market success
- Management team has previous experience in starting companies
- Governance structure has not been established

Management team's capabilities/experience that will lead to market success (score 1)

- Management team does not have experience with startups
- Governance structure is unclear

### **Technical Capability of Team (score 1-5)**

Technical capabilities/experience of the team that will enable market success (score 5)

- The team has the technical background and experience to meet the milestones identified in the proposal
- Team has experience working together with a history of success
- Team has diversity of technical expertise to overcome challenges

Technical capabilities/experience of the team that will enable market success (score 3)

- Team has sufficient technical credentials to meet the milestones identified in the proposal, but does not have prior experience with taking technology to market
- Team has minimal experience working together

Technical capabilities/experience of the team that will enable market success (score 1)

- The team does not have the adequate technical capabilities and experience for market success
- Team does not have experience working together as a team

### **Realism of costs (score 1-5)**

Realism of the proposed costs and availability of funds (score 5)

- Proposed budget is both adequate and sufficient to complete the proposed work
- The personnel budgets provide adequate hours for the work to be completed
- Categories of expenses are reasonable and appropriate for the work

Realism of the proposed costs and availability of funds (score 3)

- Proposed budget may be insufficient or more than necessary to complete the work

Realism of the proposed costs and availability of funds (score 1)

- Not realistic in proposal of cost

### **AWARD**

USTAR will have the discretion to determine the maximum amount of grant funding awarded based on available funds and quality of applicant pool. Upon award of the TAP grant, and prior to any disbursement of funds, company must enter into a written agreement with USTAR governing the use of grant funding. Unless addressed in the terms and conditions of the written agreement between company and USTAR, the following provisions shall apply:

- Company must remain a Utah-based company for at least five years from initial disbursement of TAP funding

- Company may not use TAP grant funding to provide a primary benefit to any state other than Utah
- For all other eligibility requirements, company must maintain eligibility status for the TAP program until the project is complete, all milestones have been met, final disbursement of funding has been made, and first year reporting has been completed.

A company that violates the requirements above forfeits the grant funding and may be required to repay all or a portion of funds received as part of the TAP grant.

Awardees will be contractually obligated to report to USTAR or affiliated auditors/contractors regarding jobs created and salary ranges, follow on investment, revenue, sales and other information as outlined in the Industrial Partnership Rules for a minimum of five years following completion of award. Funding will be contingent on successful completion of milestones and availability of appropriated funds. Awardees will be contractually obligated to respond to USTAR or a third party auditor/contractor regarding jobs created and salary ranges, follow on investment, revenue and/or sales for a minimum of five years following completion of award. The schedule for disbursement of funds will be outlined in the contract between the company and USTAR.

Prior to disbursement of funds, awardees may be required to demonstrate that they are properly authorized to operate in the state of Utah (LLC, S-Corp, C-Corp, etc.). Awardees will be required to meet program milestones and to meet regularly with USTAR staff to assess progress on milestones. Awards will be given as contracts.

If the company moves out of Utah or is acquired in 5 years, awardee may be required to pay the state back.

Schedule of disbursement of funds will be defined in the contract. Awards will be for no more than 18 months.

**Timeline:**

USTAR anticipates announcing selected proposals within 30 days of the call for close of submission, and contracts will be given within 30 days following announcements.

Applications will not be reviewed until associated administrative rules have taken effect. In the event of a change to administrative rule, applicants will be notified, and USTAR will post any changes to its website.

**Contact Information**

Questions regarding TAP must be submitted in writing via email to [TAPinfo@utah.gov](mailto:TAPinfo@utah.gov). Inquiries made via phone or other method will not be accepted.

All frequently asked questions and answers will be posted under TAP Questions on the USTAR website.