

# PSCR 2020: THE DIGITAL EXPERIENCE

NIST

#PSCR2020



# PSCR's Pre-Commercialization Program and Notice of Funding Opportunity: 2020-NIST-PSIAP-TABA-01

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# DISCLAIMER

Certain commercial entities, equipment, or materials may be identified in this document in order to describe an experimental procedure or concept adequately.

Such identification is not intended to imply recommendation or endorsement by the National Institute of Standards and Technology, nor is it intended to imply that the entities, materials, or equipment are necessarily the best available for the purpose.

**\* Please note, unless mentioned in reference to a NIST Publication, all information and data presented is preliminary/in-progress and subject to change**

# DISCLAIMER

**The Notice of Funding Opportunity (NOFO) 2020-NIST-PSIAP-TABA-01 is the official competition document.** The following presentation is only a summary of the NOFO document. Please review this document thoroughly prior to starting the application process. Any apparent or actual conflict between the NOFO and this presentation must be resolved in favor of the NOFO.

# Agenda

- Motivation for a Pre-Commercialization Program
- Introduction to Funding Opportunity: **2020-NIST-PSIAP-TABA-01**
  - Overview
  - Location on Grants.gov
  - Business and Technical Assistance Funding
  - Demonstration Project Funding
  - Eligibility Requirements
  - Deep Dive into Application Requirements
- **What's Next for the Pre-Commercialization Program**



# Motivation for a Pre-Commercialization Program



# PSCR's Mission:





# 5 KEY RESEARCH AREAS



USER INTERFACE USER EXPERIENCE

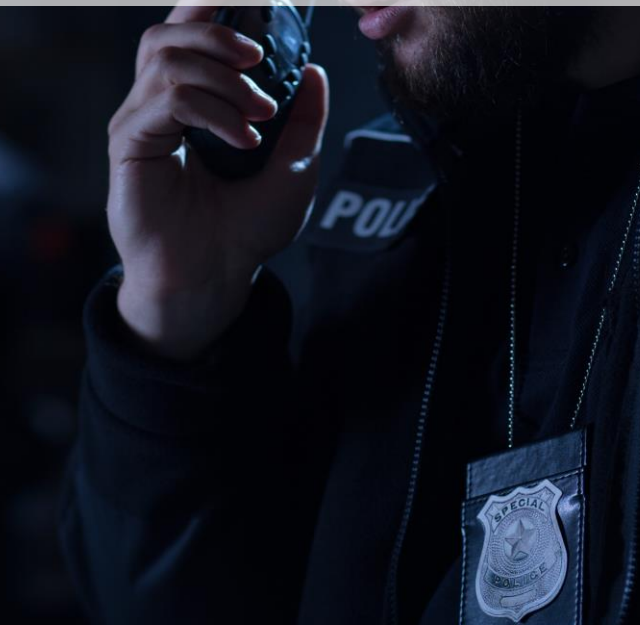


LOCATION-BASED SERVICES

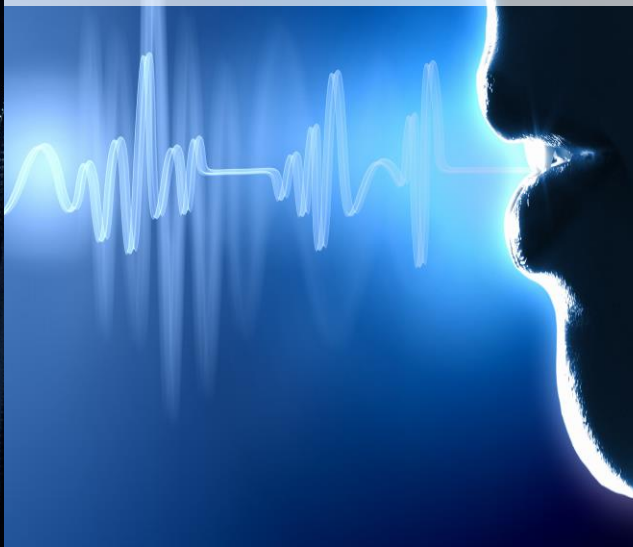


SECURITY

LMR to LTE



MISSION CRITICAL VOICE



RESILIENT SYSTEMS



CROSS CUTTING RESEARCH AREAS

PUBLIC SAFETY ANALYTICS





# HOW ARE WE DOING THIS?

1

INTERNAL RESEARCH

2

EXTERNAL RESEARCH

3

Open Innovation Program

# PSCR Impacts – Overview

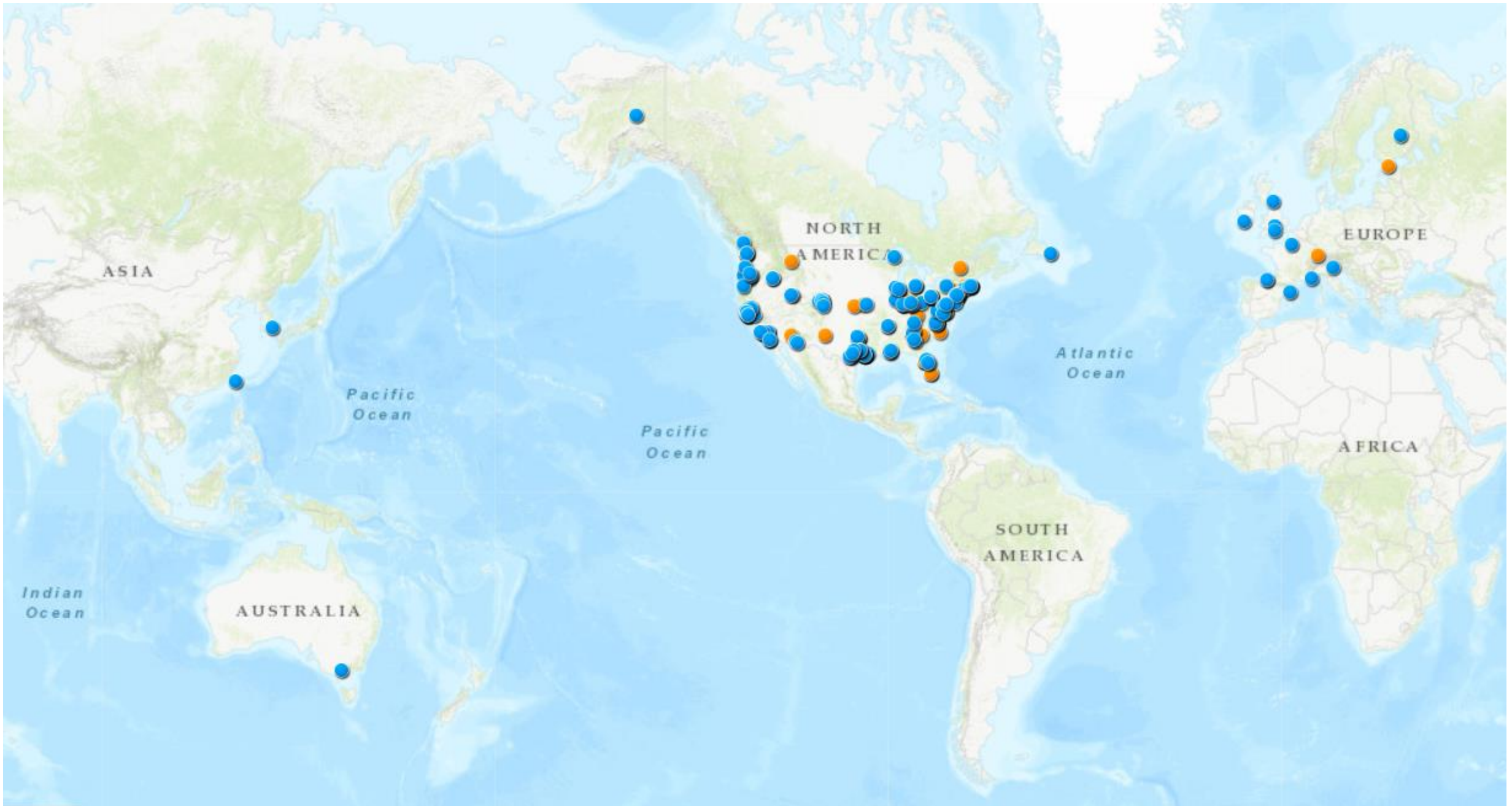
## PSIAP Grant Program:

- **167** Total Award Recipients, Subcontractors & Public Safety Practitioners
- **123+** Professional Journal & Conference Publications cited in over **50** countries
- **20+** Publicly available open source code, VR environments & analytic frameworks
- **1** U.S. Patent Granted, **3** Patent applications submitted for PSCR-funded products

## Open Innovation Program:

- **12** Challenges launched garnering over **350** submissions
- Participants from **20** U.S. States and **7** countries
- **Over \$2.1 Million** in Prizes awarded to-date to over **130** winning teams





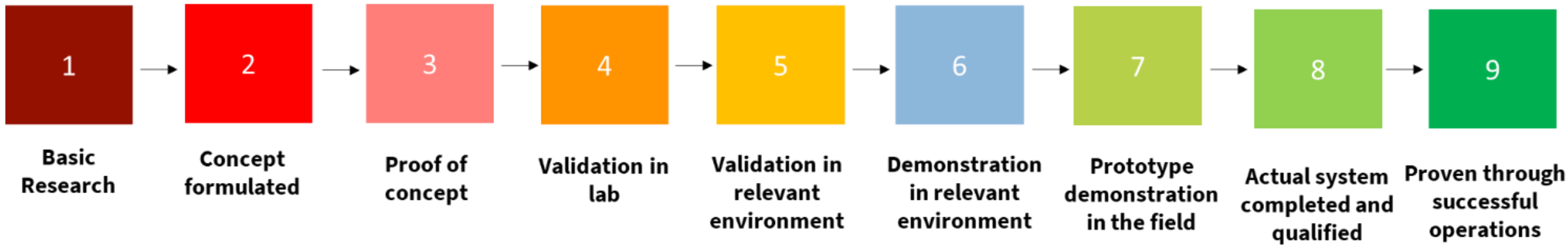


# Your Innovation Efforts:





# Technology Readiness Level





PSCR



Internal R&D

External R&D

Prize Challenges



# Pre-Commercialization Goal

*“Innovation is more than a new idea or an invention. An innovation requires implementation, either by being put into active use or by being made available for use by other parties, firms, individuals or organizations.”*

*- 2.1 Oslo Manual 2018*

**Goal:** To advance the innovative communication technology for public safety along each of their technology’s innovation pathway while supporting the development/longevity of the teams, organizations or small businesses.



**Notice of Funding  
Opportunity (NOFO):  
2020-NIST-PSIAP-TABA-01**

# Overview of 2020-NIST-PSIAP-TABA-01

## Follow-on Funding for Technical and Business Assistance and Demonstration Projects with Public Safety Agencies

- **Funding Instrument:** Grant or Cooperative Agreement; no cost sharing requirements
- **Timeframe for Funding Opportunity:** Applications will be accepted and considered on a rolling basis as received and subject to the availability of funding.





# Overview of 2020-NIST-PSIAP-TABA-01

**Focus:** The NIST PSIAP is seeking applications from eligible organizations - **previous entities that were awarded** a grant, cooperative agreement, prize challenge, Small Business Innovation Research, Small Business Technology Transfer **award or subaward by a federal entity**, such as NIST Public Safety Communications Research Division, National Telecommunications and Information Administration, Department of Homeland Security, etc, **for communication technology innovation focused on public safety** - to propose activities that will either: (1) more rapidly advance their prototypes through needed technical and business assistance or (2) execute a demonstration project with a partnering public safety agency, to provide additional testing and research.



# Location on Grants.gov

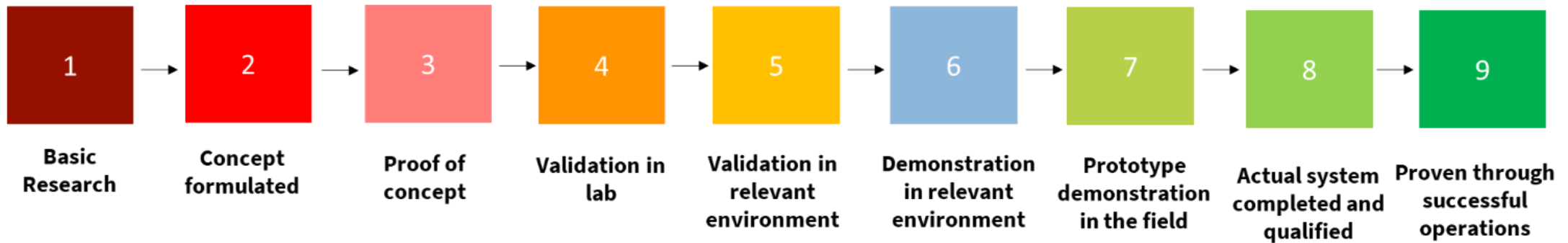
The screenshot shows the Grants.gov search results page. The search criteria are set to 'Grant Opportunities' and '2020-NIST-PSIAP-TABA-01'. The results are sorted by 'Posted Date (Descending)'. The table below shows the first four results:

Opportunity Number	Opportunity Title	Agency	Opportunity Status	Posted Date	Close Date
<a href="#">ND-NOFO-20-113</a>	Nexus Start-Up Hub 2.0	DOS-IND	Posted	05/11/2020	07/31/2020
<a href="#">DOS-CPT-RSOI-202003</a>	Study in the United States Advising Network for South Africa	DOS-ZAF	Posted	05/11/2020	06/11/2020
<a href="#">DOS-KAZ-NS-AEECA-003</a>	Design and Implementation of a	DOS-KAZ	Posted	05/11/2020	06/17/2020
<a href="#">ED-GRANTS-051120-002</a>	Office of Postsecondary Education (OPE): Transition Programs for Students with Intellectual Disabilities into	ED	Posted	05/11/2020	07/10/2020

To view the Notice of Funding Opportunity, please visit:  
<https://www.grants.gov/web/grants/view-opportunity.html?oppld=327052>

# Technical and Business Assistance Opportunity

## Technology Readiness Level



### (1) Rapid Prototype Advancement through Needed Technical and Business Assistance (\$5,000 - \$25,000)

Should be at a minimum TRL of 3

- name what type of needed technical and business assistance would assist them in more rapidly advance their prototypes or business/entity;
- describe why they feel this specific assistance would assist their research/prototype, and
- from where they would receive this type of assistance.





**Technical and Business Assistance Opportunity**  
**assistance with securing intellectual property rights;**  
**licensing assistance;** business model canvas;  
customer development;  
conducting market research; technology readiness levels tests;  
business plan assistance; **financial planning for businesses;**  
**manufacturing/sourcing assistance;**  
export assistance;  
**pitch assistance;**



# Technical and Business Assistance Opportunity

Research other free or low-cost assistance, programs and services provided by federally-funded resource partners:

- [Manufacturing Extension Partnership Centers](#)
- [FAST Grant designees](#) for businesses interested in applying for SBIR and STTR funding
- [Federally funded accelerators](#)

## **SBA Local Resource Partners:**

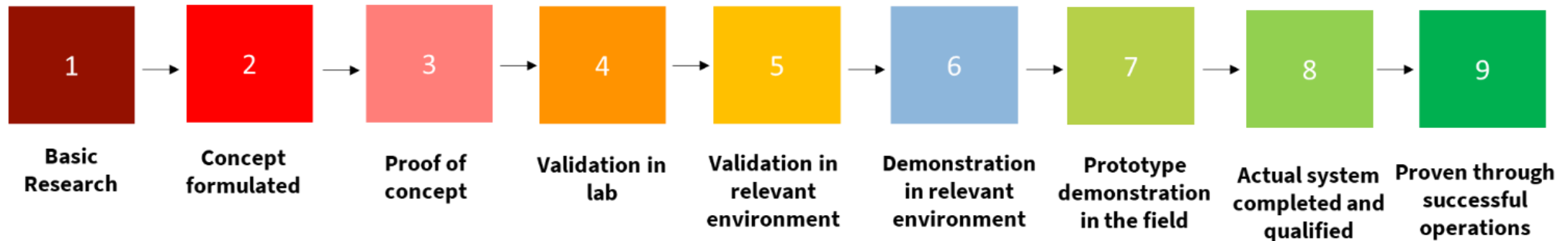
<https://www.sba.gov/local-assistance/find/>

- SCORE chapters;
- Small Business Development Center Centers (SBDC);
- Women's Business Centers (WBC);
- Procurement Technical Assistance Centers (PTAC)
- Veteran Business Outreach Centers (VBOC);
- And many other resources.



# Demonstration Project Opportunity

## Technology Readiness Level



### (2) Demonstration Project with Partnering Public Safety Agency (\$50,000 - \$200,000)

Minimum: 4 rating. Applicants should seek to validate or demonstrate their prototype in a relevant public safety environment (TRL 5 or 6 rating) or conduct a prototype demonstration in the public safety field (TRL 7 rating).

Up to one-year user testing and demonstration project; applicants may include funding in their proposed budget for non-federal first responders and public safety personnel.

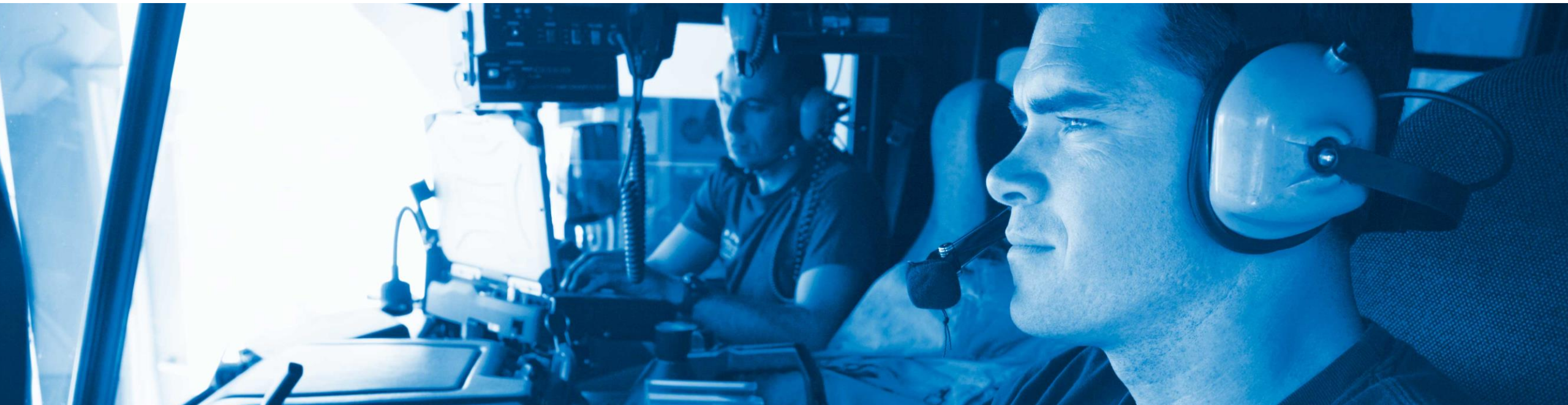


# Eligibility Requirements

This NOFO is open to entities that have been awarded from a federal agency:

- a grant or cooperative agreement
- a Small Business Innovation Research and Small Business Technology Transfer awards
- a prize challenge

for a public-safety focused communication technology innovation.







# Eligibility Requirements

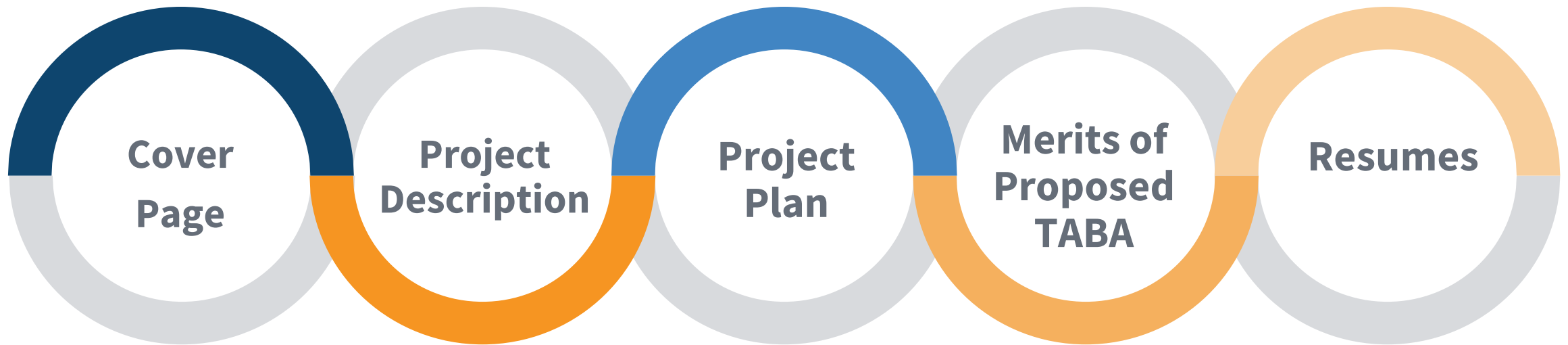
## Remember:

- NIST will only consider one application per applicant, for a single technology innovation, at a time.
- In addition, applicants may only request funding for either (1) technical and business assistance or (2) a demonstration project, in a single application.
- After completion of one award or if the first application is not funded, applicants may reapply to this NOFO for the other type of funding offered under this program, e.g. business assistance or demonstration project, for their technology innovation.

# Application Requirements:

## Technical and Business Assistance – Technical Proposal

What assistance would you need that will make a measurable difference in their process to bring their public-safety focused communication technology product to market?



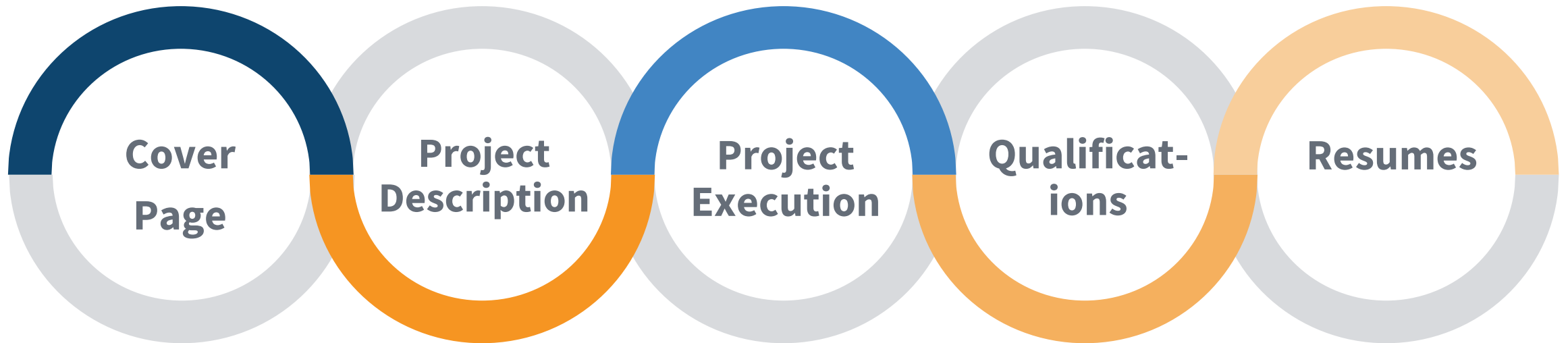
● IP Ownership Disclosure



# Application Requirements:

## Demonstration Project – Technical Proposal

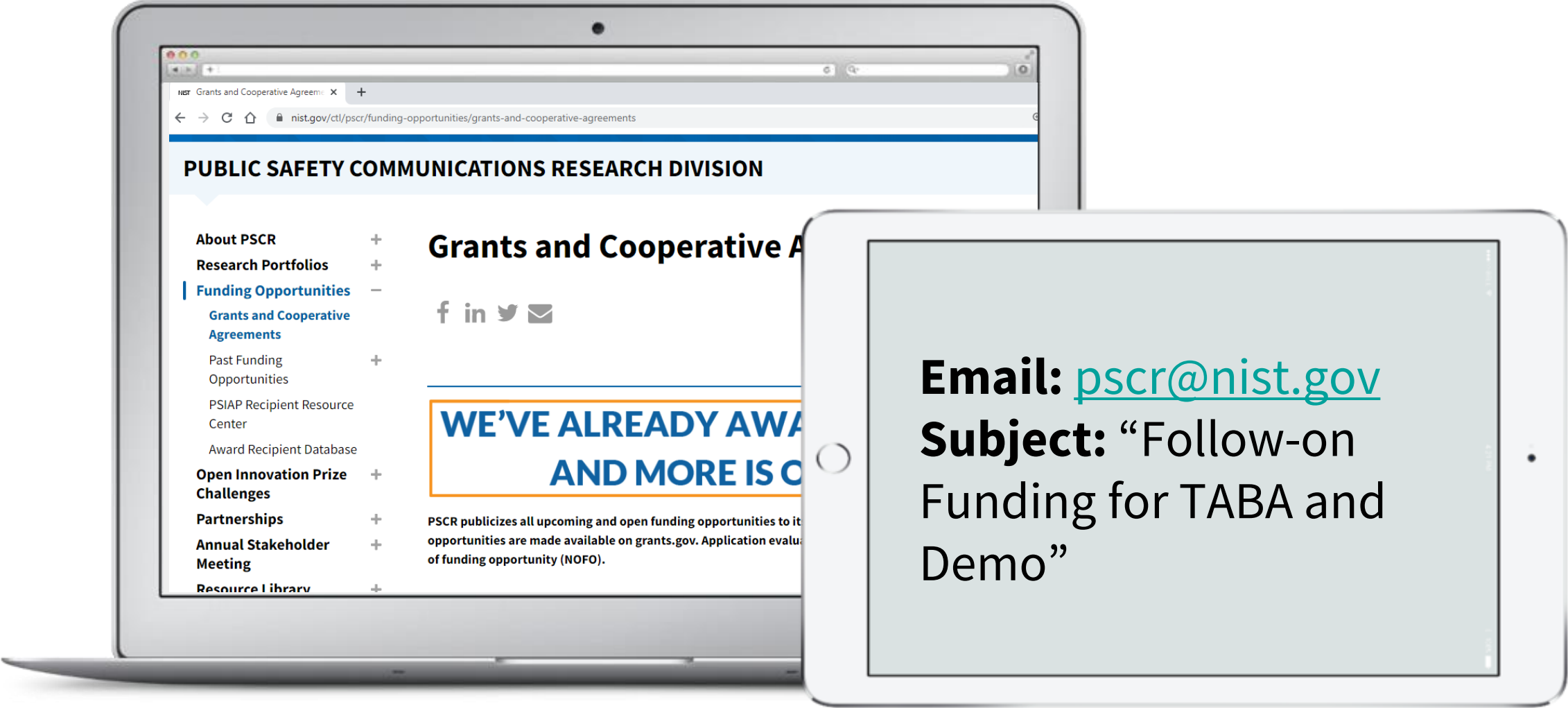
How would a demonstration project with a public safety agency either validate or demonstrate your prototype in a relevant public safety environment (TRL 5 or 6 rating) or conduct a prototype demonstration in the public safety field (TRL 7 rating)?



● IP Ownership Disclosure

● Letter from Partnering Public Safety Agency

# Questions about 2020-NIST-PSIAP-TABA-01





Stay Tuned for Additional  
Opportunities from the PSCR  
Pre-Commercialization Program:

[www.pscr.gov](http://www.pscr.gov)



FUTURISTIC DESIGN

UI ELEMENTS

# THANK YOU



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00028	00169	07895	00145	00332
00074	00085	00120	45697	07074
00112	00123	78952	03694	00110
00089	00045	00569	00070	00972



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A 002

A 003

A 004

PROFILE

HUD VISUALIZATION

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