



## DHS SCIENCE AND TECHNOLOGY

# 2020 Privacy Technology Demonstration

March 2020

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**Homeland  
Security**

Science and Technology



# Biometric and Identity Technology Center

## Vision

- **Drive biometric and identity innovation** at DHS through RDT&E capability
- **Facilitate and accelerate understanding of biometrics and identity technologies** into new DHS use cases
- Follow “Build once, use widely” approach

## Goals

- **Drive efficiencies** by supporting cross cutting methods, best practices, and solutions across programs
- **Deliver Subject Matter Expertise** across the DHS enterprise
- **Engage Industry** and provide feedback
- **Encourage Innovation** with Industry/Academia



# Video Surveillance and Privacy

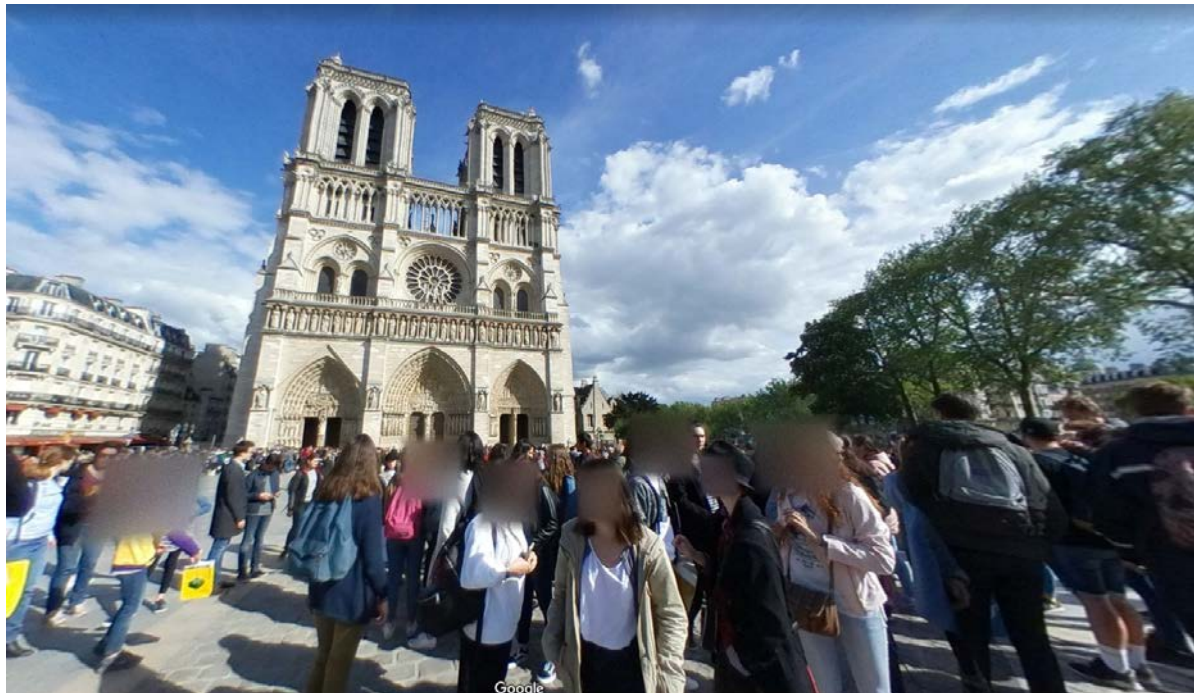
- DHS S&T is engaging industry to develop technologies to address public concerns that video surveillance capabilities could be misused for face recognition surveillance.
- The aim is to balance concerns, while allowing public safety organizations to safeguard our homeland.
- DHS S&T is interested in understanding the product landscape of technologies that can assist in protecting the privacy of individuals in photos and videos.

# Protecting Privacy

- Identity obfuscation technologies are technologies designed to protect users' identity, and help ensure user privacy is maintained
- Video obfuscation technologies prevent identities from being recognized by humans or machines in live or recorded videos
  - Blur, distort, or block face images
  - Replace face images with other images
  - Apply other masking techniques

# Real-World Example

- Google Maps Street View
  - Blur faces and license plates in street view images
  - Maintain users' privacy while allowing others to view real-world images





# 2020 Privacy Technology Demonstration

- DHS S&T is looking for full and partial Identity Obfuscation Systems that are capable of collecting and/or processing live and/or stored video footage
  - Systems should output videos where the faces of individuals in the recording are obfuscated such that they cannot be identified by humans or face recognition systems
- DHS S&T encourages providers of any type of Identity Obfuscation System to apply for this demonstration, including, but not limited to:
  - Camera systems with edge processing
  - Software capable of processing live video in real-time



# Technology Demonstrations

- Demonstrations are a new type of evaluation
  - Allows DHS S&T to survey the current state of a technology
  - Provides technology providers an opportunity to:
    - Demonstrate their capabilities to government and private sector stakeholders
    - Collaboratively evaluate technologies with DHS S&T
- Results of the Privacy Technology Demonstration will be shared within the government but not released publicly

# Detailed Application Package Requirements

- Submission Deadline: **April 30, 2020**
- Provide an application package (limit 5 pages), in the form of a white paper addressing all of the following:
  1. Description of the company
    - a) A brief history of the provider
    - b) Location, including country, of the provider's headquarters
    - c) Contact information (name, email, telephone number, citizenship) of a business representative
    - d) Contact information (name, email, telephone number, citizenship) of a technology representative
  2. Description of the system
    - a) Hardware utilized, if applicable
    - b) Description of software, if applicable
    - c) Goal of the system- obfuscate faces to humans, computers, or both?
    - d) Process video stream(s) in real-time or post-hoc



# Application Package Requirements (Con't)

3. Description of the complexity and maturity of the Identity Obfuscation System
    - a) When was the system first conceived and developed? Is it still under development?
    - b) Has a third party integrated your system into a larger system? If so, how much effort was needed?
    - c) A description of any past or present operational deployments
  4. Descriptions of the imagery acquired and/or output by the system
    - a) Formats (wmv, mov, mp4, avi, etc.)
    - b) Video quality (720 p, 1080 p, 4K, etc.)
- Demonstration video of system functionality
    - a) Provide up to 2-minutes of video demonstrating your system in use
    - b) Video should reflect information included in white paper
    - c) Should video file be too large to be included in an email, provide a URL and instructions to reviewers for access

# What to Expect

- Any hardware and/or software required to implement your privacy technology will need to be sent to the Maryland Test Facility
  - Shipment information and logistics will be reviewed in a follow-up webinar after acceptance notification (**May 26, 2020**)
- Obfuscation Technology Providers will **NOT** be able to install their systems at the Maryland Test Facility for the Fall test event
  - Include a thorough installation manual with your system
  - Technology POC should be available for support in the event that issues arise during installation
- Following the Fall test event, the MdTF will ship your system back
  - Any software packages provided should have an expiration date in Summer 2021

# Timeline

- Identity Obfuscation System applications due are due by **April 30, 2020**
- An announcement webinar will be held on **March 19, 2020**
  - Email [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) to receive information on how to join the webinar
- Notification of conditional acceptance will be sent **May 22, 2020**
- A post-conditional acceptance webinar will be held on **May 26, 2020**
- The demonstration is scheduled to occur in Fall, 2020

# Thank you!

- Questions? Please direct emails to:
  - [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov)
- Webinar materials will be posted to <http://mdtf.org/Demo2020>

For more information, contact: [peoplescreening@hq.dhs.gov](mailto:peoplescreening@hq.dhs.gov) or <http://mdtf.org>



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# Homeland Security

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