Technical Interest Item #: 651.1   **Lead Org:** INTEL

Title: (U) User-Generated Content Support (Imagery, Video, and Voice)

Category: Advanced Analytics (AA)

Description:
(U) Special Operations Forces (SOF) are interested in technologies that can generate convincing online personas for use on social media platforms, social networking sites, and other online content. The solution should include facial & background imagery, facial & background video, and audio layers.

Operational Scenario:
(U) SOF will use this capability to gather information from public online forums.

General Conditions:
(U) Austere Site, Tactical Operations Center, Rear

Unique Conditions:
(U) None

Standards:

KPP	DESCRIPTION	THRESHOLD / OBJECTIVE
2D/3D Baseline Facial Imagery with Style Generative Adversarial Network (StyleGAN)	2-Dimensional and 3-Dimensional facial imagery, using StyleGAN or similar technology to mimic a human face. Facial imagery packages created must: (1) Withstand machine and human scrutiny; (2) Appear to be a unique individual that is recognizable as human but does not exist in the real world; (3) Have pictures for all angles and light shadings (e.g. sunlight, dusk, candlelight) from all spectrums (e.g. color, black & white, etc.); (4) Have multiple expressions; (5) Include Government Identification quality photos upon customer request. The customer shall provide unique individual characteristics (e.g. ethnicity, age, gender, etc.)	T = 5 x 2D/3D facial imagery packages with additional photo access within 72 hours that withstand machine/social media platform scrutiny. O = 10 x 2D/3D facial imagery packages with on-demand photo access that withstand both machine and human scrutiny. Additional 5 x 2D/3D facial imagery packages "on the shelf" for user access within 72 hours.
2D/3D facial video, with 360-degree "selfie" video capability	2D/3D video including facial imagery from KPP 1. Capability must include "selfie video" to provide the appearance of self-shot footage to withstand machine and human scrutiny.	T= 5 x 2D/3D video packages with 360-selfie capability that withstand machine/social media platform scrutiny. O= 10 x 2D/3D video packages that withstand both machine and human scrutiny. Additional 5 x 2D/3D facial imagery packages "on the shelf" for user access within 72 hours.
2D/3D Virtual Landscape Image and Video	2D/3D virtual landscape images/video, including landscape/background associated with "selfie video." Images/video must include 360° models	T=Capability must recreate environment and landscapes in 360°.

	within a landscape to create a virtual environment undetectable by social media algorithms. All 2D/3D landscape must be interoperable with facial images and videos in KPP 1-2 to create composite images/videos of individuals overlaid on a specific landscape. Landscape requirements and/or geographic locations shall be provided by the customer.	O= Capability must create artificial environments and landscapes, as well as recreate real landscapes in 360°.
Audio Layers	Audio layers associated with 3D video in KPP 3 that are location-specific, including ambient environment audio.	T = Capability must include video-specific audio layers associated with 3D/360° video. O = Video-specific audio layers available to user within 72 hours.