



Surveillance Impact Report

Dejero Downlink Transmission System
San Diego Police Department

DESCRIPTION

The Dejero Downlink Transmission System (DTS) is a live video transmission system based on bonded cellular network technology.

The Dejero DTS is comprised of the following three components:

1. Dejero Engo (Video transmitter). The Engo takes video from a “video source” and transmits it via a cellular signal to a receiving server, the Dejero Waypoint.
2. Dejero Waypoint (Video receiver). The Waypoint receives video transmission from the Engo.
3. Dejero Cuepoint (Video Management System). The Cuepoint takes the received video from the Waypoint and creates a secured video access point that can be accessed via the internet.

None of the Dejero DTS equipment contains any cameras or microphones or directly collects any data.

The Dejero DTS must be connected to a video source like a video camera or the ground controller display of an Unmanned Aircraft System (UAS). The Dejero DTS, specifically the Engo, takes the live video feed from the video source and transmits it via a cellular signal to the Waypoint. The Waypoint is connected to the Cuepoint, which creates an internet access point. San Diego Police Department personnel with access credentials can then access this live video via the internet.

MANUFACTURER’S PRODUCT DESCRIPTIONS:

1. Dejero EnGo 265

- i. Manufacturer: Dejero
- ii. Manufacturer Description: Reliable, simple to use, and built tough for field use, the award-winning EnGo 265 is designed for video professionals who demand resilient wireless internet access in the most challenging environments. EnGo 265 efficiently encodes and securely transmits high-quality live video from the field while also empowering mobile teams to work more efficiently with resilient, high-bandwidth, wireless internet access.
- iii. (Description source: <https://www.dejero.com/products/engo-265>)

2. Dejero EnGo 263

- i. Manufacturer: Dejero
- ii. Manufacturer Description: Reliable, simple to use, and built tough, EnGo 263 is designed to securely transmit high-definition, real-time tactical video from the field.
- iii. (Description source: <https://www.dejero.com/products/engo-263>)

3. Dejero Waypoint 3

- i. Manufacturer: Dejero



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- ii. Manufacturer Description: Dejero Waypoint receivers reconstruct video transported over multiple IP connections from Dejero transmitters, decode HEVC or AVC, and output to your desired workflow—SMPTE ST 2110, SDI, or MPEG-TS.
- iii. (Description source: <https://www.dejero.com/products/waypoint>)

4. Dejero Cuepoint 100

- i. Manufacturer: Dejero
- ii. Manufacturer Description: Dejero Cuepoint return video servers send low-latency, live program video and teleprompter feeds to on-air presenters, camera operators, and other production personnel in the field to help them stay synchronized with central production during live broadcasts.
- iii. (Description source: <https://www.dejero.com/products/cuepoint>)

PURPOSE

The Dejero Downlink Transmission System (DTS) is used for the following purpose:

1. To support first responders during critical incidents, special events, and large gatherings by transmitting real-time video to a command post or tactical teams from a remote location via a cellular data-based video transmission system.

The Dejero DTS's procedural use is based on the authorized use of the video source it is transmitting. The Dejero DTS is primarily used by the SDPD UAS Unit. Below is the SDPD UAS Unit's policy use.

The UAS Unit is authorized to support the following types of operations:

1. Search and Rescue support for lost, missing, missing-at-risk, stranded persons or suspects.
2. Provide aerial observation and imagery for safety and situational awareness in support of fire response and disaster response.
3. Provide photo and video digital media recordings in support of crime scene evidence collection.
4. Provide aerial and remote camera observation and imagery during incidents involving barricaded suspects, hostage incidents, and high-risk tactical operations.
5. Provide aerial imagery and photo/video support for department training.
6. Provide enhanced safety overwatch during large gatherings and special events.
7. Any other missions deemed necessary by the Chief of Police.

LOCATION

The Dejero DTS is deployed with the SDPD UAS, primarily deployed citywide. SDPD UAS may also be deployed out of city limits and out of the county if requested by an outside agency or if requested by an authorized SDPD unit that is responsible for a law enforcement operation beyond city limits. A primary example is when the UAS Unit is requested to collect aerial evidence photos for the SDPD Homicide Unit, which is responsible for conducting the investigation when the San Diego Sheriff's Department has an officer-involved shooting.



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The Dejero DTS is not used on every UAS deployment. The Dejero DTS is only used on UAS deployments where a live video transmission from the UAS is requested.

Dejero DTS deployment is based on the equipment and capabilities needed for each specific incident.

The City of San Diego crime statistics can be viewed at [Crime Statistics & Crime Mapping | Police | City of San Diego Official Website](#).

IMPACT

Dejero DTS equipment is used during UAS deployments. All UAS deployments and use are intentional and must follow strict authorization rules and processes.

The following rules and processes are required prior to each use of a UAS:

1. All requests for UAS support must be initiated by an incident commander in response to support a specific incident or event with a specific support objective.
2. A UAS supervisor must evaluate the request and approve the UAS operation prior to deployment to support each individual incident. This UAS supervisor is specially trained to assess the request and determine if the UAS operation will comply with the SDPD's list of authorized uses for UAS. The UAS supervisor is also specially trained in the use of UAS as it relates to the protection of citizens' privacy, civil rights, and the preservation of citizens' First and Fourth Amendment rights.
3. If UAS deployment is approved by the UAS supervisor, notifications are made to the lieutenant who supervises the UAS Unit and to the Commander of the Operational Support Division.
4. Only authorized members of the UAS Unit shall use or be in possession of Department UAS equipment. All UAS members certified as UAS Pilots must obtain an FAA Remote Pilot's license and must complete the SDPD UAS Academy.

UAS are deployed only to specific incidents with a specific target or specific objective. The UAS Pilot manually controls the UAS camera system and activates either video or photos to be captured based on the objectives and goals of the UAS mission. During a UAS Evidence Collection Operation, the UAS pilot will manually control the UAS to take photographs or video as requested by the investigative unit that requested UAS Support.

When a UAS is deployed, a specific target, person, address, building, vehicle, object, or area is the intended point of interest in which the operator is in charge of observing and potentially collecting photographs or video. During this specifically targeted operation, there may be some unintentional observation or imagery collection of adjacent private property in the background, similar to what may be captured from the background in a normal officer's Body Worn Camera, except from an aerial vantage point.

When the Dejero DTS is used in conjunction with UAS, the Dejero DTS may transmit the live video imagery of these unintentional adjacent locations. However, the Dejero DTS is not used to collect or retain any video or photographic data at any time. The Dejero DTS is only used to transmit live video.



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The live video transmitted can only be received by authorized SDPD personnel, and access to this live video is strictly controlled.

The SDPD's Dejero DTS and UAS Surveillance Use Policies safeguard civil liberties and civil rights. The uses and deployments of surveillance technology are not based upon discriminatory or viewpoint-based factors. The Department's use of surveillance technology is intended to support and benefit the communities of San Diego while minimizing and mitigating potential impacts on the civil rights and civil liberties of community members.

MITIGATIONS

Mitigations related to the impact of the Dejero DTS are embedded within the operating procedures of the UAS Unit. The Dejero DTS only transmits live video of some UAS deployments. During a law enforcement operation or during observation of a crime, or in anticipation of a crime, the UAS pilot will manually activate the video recording capability of the UAS, similarly to how a ground-based officer activates their Body Worn Camera during a contact. This captured video is regarded as Digital Media Evidence (DME). It is treated as evidence throughout the remainder of the operation until the DME is properly impounded and documented by the UAS staff assigned to the operation.

During observation and overwatch support of High-Risk Tactical Operations, the UAS Pilot will manually control the UAS to take a video of the entire operation to record all police activity during the incident. During UAS safety and enhanced security overwatch operations at special events and other large gatherings, the UAS Pilot generally does not activate video recording unless necessary to record a law enforcement contact, a crime occurring or in anticipation of a crime.

During all operations, the UAS Pilot is trained to make every effort only to capture visual imagery of the law enforcement contact or intended target of observation to protect the privacy of nearby uninvolved citizens and their property.

All UAS Pilots and Supervisors must attend the SDPD UAS Pilot Academy, which includes approximately 80 hours of specialized UAS Flight training and classroom to include procedures on evidence collection, retention, and impounding, and the protection of citizens' privacy, civil rights, and the Fourth Amendment during operations.

The department procedure associated with the use of UAS, D.P. 8.23 – Use of Small Unmanned Aircraft System Section VIII. D., states the following:

D. Privacy Considerations

1. Members of the sUAS shall take reasonable precautions to avoid inadvertently recording or transmitting images of areas where there is a reasonable expectation of privacy.
2. The collection, use, retention, or dissemination of data shall not be used to violate the Constitutional rights of any person or in any manner that would discriminate against any person based upon their race, color, ethnicity, religion, national origin, age, disability,



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gender (to include gender identity and gender expression), lifestyle, sexual orientation, or similar personal characteristics.

3. In all cases of sUAS deployment, reasonableness and respect for the privacy of individuals shall guide the actions of all sUAS personnel.

DATA TYPES AND SOURCES

The Dejero DTS is not used to collect or retain any video or data. The Dejero DTS is only used to transmit live video.

DATA SECURITY

The San Diego Police Department UAS Unit is the only unit that holds the Dejero DTS. Only authorized UAS Unit personnel shall use or be in possession of Dejero DTS equipment.

Control of Dejero DTS access and transmission capabilities is limited to SDPD UAS personnel.

For SDPD personnel to view any Dejero DTS live video, they must be electronically invited by the UAS Unit, which has access control. The live video transmitted is encrypted, and the live video electronic invitation has an automatic expiration. New electronic access invitations are created for every specific incident that the Dejero DTS is being used on. These procedures are used to prevent any previous invitations from being used and to prevent unauthorized viewing of live video.

FISCAL COST

The cost of the current Dejero DTS system was approximately \$105,000.00. The cost included the initial purchase of DTS equipment and maintenance costs for four years. The funding source for this procurement was a combination of the following sources.:

(All amounts are approximate)

1. \$75,000.00 – Grant funds.
2. \$30,000.00 – Special (Asset forfeiture fund and other non-general budget special fund sources).

THIRD PARTY DEPENDENCE

The live video transmission from any law enforcement operations is not shared with third party vendors.

ALTERNATIVES

When the Dejero DTS was procured, the alternative to the Dejero DTS considered was the LiveU Video Transmission Systems. This alternative system had similar costs, however, the LiveU system had compatibility difficulties when interfacing with the UAS controller.



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TRACK RECORD

The following companies are just some of the leading organizations that rely on the Dejero DTS to send and receive mission-critical video and data around the globe: Aljazeera, Bell Media, CBC, CBS, Disney Television Group, FOX, Microsoft, NBCUniversal, Nexstar, NHK, Rogers, Scripps, L3 Harris.

Some additional government entities that use the Dejero DTS include the San Diego Sheriff's Department, U.S. Customs and Border Protection Office of Information Technology and CPB Marine Operations, CalFire, the Los Angeles Sheriff's Department, the New Mexico State Police, the California Office of Emergency Services, the Denton County TX Sheriff's Department, and the Albuquerque Police Department.

PUBLIC ENGAGEMENT AND COMMENTS

On November 8, 2023, at 1800 hours, there was a publicly held meeting in all nine council districts in the City of San Diego. The following surveillance technologies were presented by the San Diego Police Department:

1. Avalex DRV and FLIR-HDc
2. WHOOSTER
3. MSABs Raven Mobile Triage Tool
4. MSABs XRY Mobile Forensic Data Recovery Software
5. National ICAC Data Systems
6. PENLiNK
7. Vigilant
8. Unmanned Aircraft Systems

There were five attendees in District 1. There were zero attendees in District 2. There were zero attendees in District 3. There were zero attendees in District 4. There were zero attendees in District 5. There were zero attendees in District 6. There were two attendees in District 7. There were two attendees in District 8. There were zero attendees in District 9. There was a total of one comment and two questions out of the nine attendees. There was one comment submitted to an online public comment form.

Comment #1:

These are all technologies that provide advanced safety to each and every citizen of our city. What I am not in favor of is the requirement that these presentations be held in nine locations throughout the City. Staffing so many locations with SDPD and San Diego Fire and Rescue personnel takes these critical First Responders away from their far more important jobs of keeping the City's citizens of San Diego safe. Our police and fire departments are already understaffed. This is a blatant misuse of our resources. Thank you.



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Online Comment #1:

The policy is vague in which instances the deployment of aerial surveillance with no safeguards to prevent misuse of this technology. Without addressing these shortcomings, I cannot support the use of DJI Avata by San Diego PD.

Question #1:

Is the license plate reader data looking for specific cases and/or are all plates looked at to see if they fit a specific case?

Answer:

License plate readers can look for specific plates if they are involved in an active investigation. An investigator can upload license plate information into the license plate reader operating system and set an alert to notify the San Diego Police Department when the license plate is read. Investigators may upload license plate information into the license plate reader because the plate may be associated with a crime, a missing person, or an identified suspect. The SDPD Communications Division may dispatch officers to investigate a hit on a license plate reader entry. Dispatched officers will confirm that the license plate was identified by the reader correctly before any action is initiated.

Question #2:

I think it is very important that San Diego advances in technology but is also aware of some of the issues that come from having so many technologies. The questions that I have are in three phases. One has to do with lobbying from technology companies to government agencies. I sometimes have concerns over technology companies going to conferences and lobbying Fire Chiefs, Police Chiefs and many other officials during those conferences. How does the City protect itself through accountability on that?

The second is data analytics. I worked in data analytics before and one of the things that I do see is sometimes data analytics has missing information. How do we account for that through the data information that we are gathering that way we can make proper information when citizens don't report crimes that don't add up to the statistics?

The third is, what's going to happen next with all this technology?

Answer:

In terms of lobbying, there are a couple of different processes now in place. The Police Department had a process before the Privacy Advisory Board and a process that took place after. Each technology that goes forward is evaluated by Commanding Officers and personnel to see what need it fits or what mission it serves within the Police Department, Fire Department or whichever Department looks to that technology to solve a problem.

As that solution is suggested, there really is a robust process that begins with discussions throughout the various units and continues on. We look toward guidance and have an established



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technology process. We have significant in-house experts and a STAC Committee, Strategic Technology Alliance Committee, who look at how technology fits into the overarching goals of the City and ask questions like about their alignment. Are they repetitive in nature? How can we create efficiency and effectiveness? Then we move on and look at funding sources, purchasing and contracting, request for proposal, and what contracting needs to take place. An assessment by Risk Management and an evaluation by the City Attorney's office is done. This process is to ensure that the technology serves the Department and ultimately the City as a whole. That then goes to our City Council members for a vote, depending on the dollar amount.

Overlapping that process is our Surveillance Ordinance process. In addition to the already established process we now notify the Privacy Advisory Board, complete community outreach, and complete Use Reports and Impact Reports.

People can lobby but Commanding officers are not making any decisions based on that lobbying group due to the established process.

There is a push being made by law enforcement, and with other City departments, to use data to make informed decisions. The office of the City auditor has stressed the need for the City to use data to make more informed decisions, and that is what we are consistently striving for and implementing.

The next part of this process calls for the Police Department to hear from the community. Each one of the technologies presented has a Use Report to accompany it. After these meetings, we take the Impact Reports along with any community feedback and forward them to the Privacy Advisory Board. The Privacy Advisory Board will assess the technologies, roundtable them, form subcommittees, and make recommendations to the City Council to consider.