

# VMS

VIDEO MANAGEMENT SYSTEM FOR  
INTELLIGENT TRANSPORTATION APPLICATIONS





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## VIDEO MANAGEMENT SYSTEM FOR INTELLIGENT TRANSPORTATION APPLICATIONS

ASELSAN ITS Video Management System has been developed with the aim of providing a framework specifically for ITS systems integration. The system design has benefited largely from ASELSAN's own Highway Toll Collection and Traffic Management Systems development efforts. The state-of-the-art design provides for a comprehensive solution geared to the requirements of such applications as video enforcement in toll collection and traffic surveillance systems.

### System Features

- Real time, frame synchronized. transaction data (any meta-data) video overlay for display
- Transaction (meta-data) database related with the IP video for event search.
- Data integrity and source identification for evidence verification
- Fast export of event clips to external media
- Extensive archive capabilities
- Scalable-distributed architecture, from single node to a complete highway network
- Multi signal format (CVBS, DVI/VGA, HD-SDI, GigE) encoders for legacy and new system integrations
- Standard interface support for integration of third party cameras

### Critical Components

The key Video Management System components are

- High resolution, high sensitivity, global shutter, time synchronized traffic cameras
- Traffic cameras provide H.264 IP stream for surveillance and high quality images for enforcement
- Multi format signal input encoders for integrating legacy and new systems
- Video System Manager for network, device, alarm and user management
- RAID 6 Network Video Recorder and Network Video Archive
- Video Display and Management Client, Mobile Viewer

### Capabilities

- Provides legible license plate and vehicle image under all weather, illumination and traffic conditions
- Transaction data can be merged with the IP video data in the encoder for providing frame synchronized overlay on the online viewer's screen
- The data integrity (SHA1) and source information (RSA) is inserted to the IP video stream in the encoder
- The transaction database can be searched to get the exact frame of the related event video clip
- The NVR provides fast export to external storage (IP/USB disk, DVD, Blu-Ray)
- The exported video also provides the meta-data such as transaction data, data integrity and source information
- Multi layer recording and archiving can be customized to the application to provide for stable NVR performance during archiving and export
- In an analog (CCTV) surveillance system or in the case that it is desired to record the screen output of any system, custom analog or DVI/VGA encoders can provide easy integration, while taking advantage of the above capabilities
- A hierarchy of authorization levels based on user accounts and profiles allow easy control of access privileges to the stored video and cameras
- Operators or users with appropriate authorization can log on encoders via the LAN/WAN and view events and videos any time with a network connected device

