



## Kentucky Counties lower cost of First Responder networks without sacrificing reliability

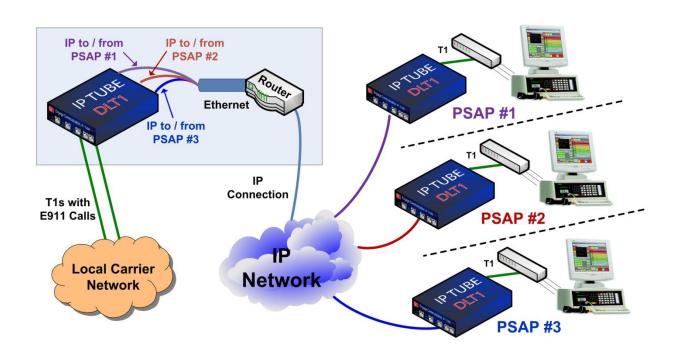
One of the key elements of an E-911 network is reliable routing of emergency calls to the Public Safety Answering Point (PSAP). This often consists of dedicated analog circuits carried on T1 lines from the Local Exchange Carrier to dispatch centers. In order to reduce monthly telecom costs while retaining the existing dispatch gear, a leading E-911 solutions provider employed Engage Communication equipment to seamlessly transport T1 traffic over cost effective IP networks for a number of Kentucky Counties.

E-911 infrastructure, with life changing consequences, must be extremely reliable. At the same time, government service costs are under intense scrutiny. Fortunately the increased availability of affordable Ethernet / IP

networks often make them a viable and cost effective alternative to T1 circuits.

However, many believe the entire E-911 infrastructure must be converted to IP to take advantage of this transport cost savings, including introduction of Voice over IP (VoIP) PSAPs. This would require costly capital expenditures as well as new complexities in training and operations; jeopardizing the Return on Investment (ROI) of replacing T1 with IP circuits.

Fortunately, the Engage IP-Tube product line reliably and cost effectively converts T1 traffic to IP, and then back to T1 again at the other end of the circuit. Thus no changes are required to the PSAP or Local Exchange hand off to take advantage of lower cost IP transport.





## **Case Study**

With the IP-Tube "Mux" feature, different groups of DSO voice channels are groomed from a T1 circuit for IP transport to specific PSAPs. This saves on equipment cost and reduces network complexity. The IP-Tube provides numerous other advanced features to ensure high quality transport, including:

- Echo Cancellation to improve voice quality when echo is encountered due to excessive delay in some IP networks;
- Data Compression to reduce Ethernet bandwidth consumed;

- Protection to automatically switch to an alternate IP path if the primary fails;
- Assured Packet Delivery for challenging network environments;
- Stand alone and Chassis configurations.

The IP-Tube product line also converts T3 and serial circuits (RS232, RS530, V.35, etc.) to packets for effective and efficient transport over IP network.



Engage CHUB-E Chassis – 15 slots

**Engage Stand-Alone Unit** 

Engage Communication is a leading provider of specialized products that connect, protect, and secure networks. Our solutions include circuit to packet, protection switching, T1/E1 link encryptor, Ethernet encryptor, edge-office router, and GPS timing products.

For more information contact Engage Communication at (831) 688-1021 or <a href="mailto:sales@engageinc.com">sales@engageinc.com</a> .