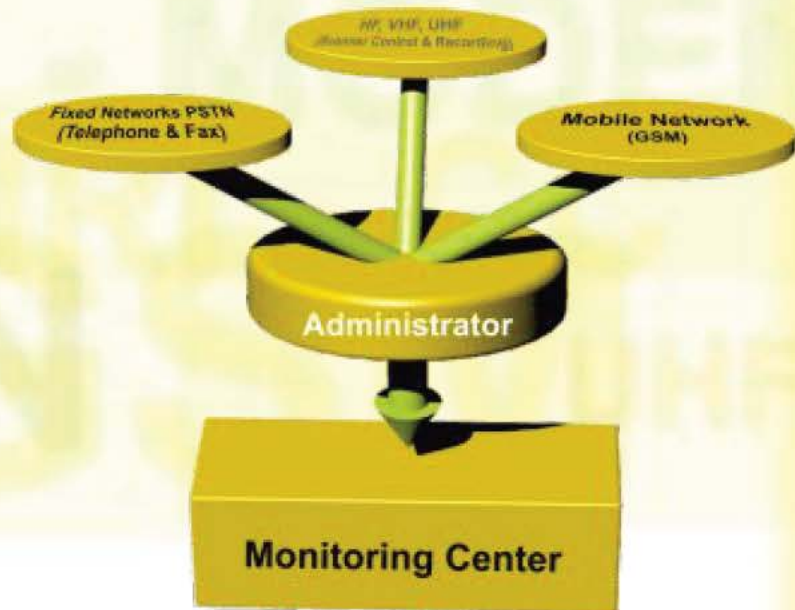




Powerful **duman** systems enable telecom operators and law enforcement agencies to fulfill telephone interception requirements in a way that is;

- **reliable,**
- **accurate,**
- **fast,**
- **secure,**
- **economical**



BTT Monitoring Systems, are specifically developed to handle tasks of law enforcement agencies.

Systems are used to intercept communications in public fixed (local and international exchanges), mobile circuit switched networks (GSM), and radio with wide band scanners.

All BTT systems are designed to interface both analog and digital telephone lines to capture call content and intercept related information from the exchanges of telco's.

DUMAN Monitoring Center is constructed using state-of-art software modules and hardware components for monitoring in an auditable, secure and reliable manner.

The system is composed of modules that connect to the network by custom hardware and computer systems at the control center to analyze the collected recordings.

Duman has options to fit all needs from small scale local applications to nationwide systems with central management. Reliable options range from few passive connection to analog lines and cover all GSM, PSTN networks.





**PSTN** ●

**GSM** ●

**RADIO** ●

**FAX** ●

**MODEM - DATA** ●

### **Solutions for High density:**

#### *Concentrator & Copier (DCS)*

TMRDouble DCS acts as a passive link concentrator and/or copier which takes out and copies the necessary signaling information from tapped link signaling time slots. All signaling time slots are analyzed by related analyzing modules.

#### *E1 Analyzer:*

Analyzer checks all established connections to see whether they will be intercepted. If calls should be intercepted then analyzer orders recording and forwarding modules to take necessary action.

#### *Buffer, Forward:*

All call content and intercept related information are stored until monitoring center reports that it has received all CC and IRI. In order to deliver the CC and IRI, Duman E1P converts them into standard formats which are commonly used by telco's and legal monitoring centers. Conversion and delivery is done in near real time in order to enable LEA's to act immediately. As soon as delivery is completed successfully, all related records are erased from Duman E1P.

#### *Collect & Store:*

Duman PSTN and GSM logger is able to collect and store all information from handover interfaces coming from telecom operators.



## Solutions for low density: (Duman Corvus)

Analog probes especially developed for low density rural areas minimize cost to intercept when trunk intercept is not available.

### *Analog probes*

Remote systems capture and send CC and IRI to LEMF with PSTN or GSM lines. Mobile systems offer flexibility and economy to fulfill LI needs.

### *Remote management:*

All systems offer remote management and maintenance. All software options are field upgradeable and configurable by authorized personnel.

### *Security:*

All modules are secured by multi-level passwords, and content is encrypted with digital signatures.

### *Flexibility:*

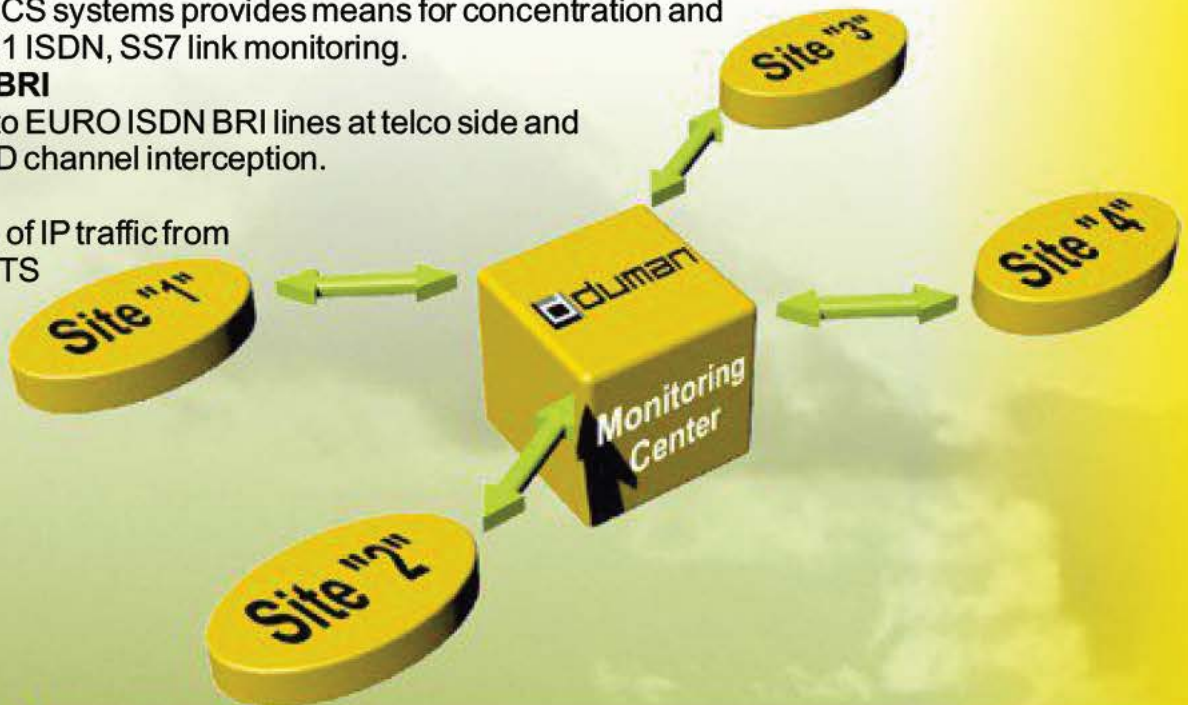
Using Duman's flexible and strong architecture, it can be engineered according to the customer's exact needs.

### *Central management:*

Central monitoring and management center offers all necessary modules to collect, analyze, and store the intercepted information. Voice, fax, data collected from low or high density probes of fixed or mobile networks can be presented to authorized personnel in original formats. This information can be presented in more explanatory ways, such as on GIS maps or case grouping.

### Monitoring Center modules for interception are:

- **Duman-Corvus**  
hooks to PSTN or conferenced E1 trunks and provides Lawful Interception systems for Fixed and GSM Mobile networks.
- **Duman E1P**  
together with DCS systems provides means for concentration and monitoring of E1 ISDN, SS7 link monitoring.
- **Duman ISDN-BRI**  
hooks parallel to EURO ISDN BRI lines at telco side and provides 2B+1D channel interception.
- **NETC**  
for interception of IP traffic from ISP, GPRS, UMTS sources.



**btt**

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