

Options for the Conduct of TSCM Services

The following alternatives and options were reviewed in arriving at a recommendation as to how TSCM Services should be conducted on the most cost-effective basis within the Corporation:

Option 1: Employ a trained, experienced TSCM Technician and acquire the countermeasures equipment necessary for the accomplishment of the Corporate Security Division's TSCM Mission.

A. Advantages:

- Provides Corporate Security Division with a fully trained, experienced TSCM Technician dedicated to the conduct of TSCM Services.
- Ensures in-house expertise and uniformity of services conducted throughout the Company.
- No training costs would be incurred other than those associated with periodic updates and new equipment/development familiarization.

B. Disadvantages:

- Envisions an estimated \$100,000.00 annually in salary and benefits.
- Envisions an undetermined increase in current travel expenditures.
- Not practical in terms of current manpower and funding constraints. Operational requirements cannot support a Security Representative dedicated solely to TSCM Services.
- Envisions a capital expenditure of \$25,000-\$100,000 to minimally equip a Central TSCM Facility. Minimal equipment requirements, together with reasonable acquisition costs estimates are provided in enclosure 3A.

Option 2: Train all current Security Representatives in TSCM procedures and acquire the countermeasures equipment necessary for the accomplishment of the Corporate Security Division's TSCM Mission.

A. Advantages:

- Provides Corporate Security with four minimally trained TSCM Technicians.
- Ensures in-house expertise and some degree of uniformity of TSCM Services conducted within the Company.

B. Disadvantages:

- Envisions an undetermined increase in annual travel expenditures.
- Envisions an initial Capital expenditure of \$50,000-\$200,000 to equip two Regional TSCM facilities. Minimal equipment requirements, together with reasonable acquisition costs estimates are provided in Enclosure 3B.
- Envisions an initial expenditure of \$5,000.00 to minimally train each current staff members.
- The majority of current staff members have neither the requisite background nor the desire to become involved in TSCM activities.
- Current operational requirements, customers serviced, and geographic areas of responsibility are such that even partial dedication to the conduct of TSCM Services would have a detrimental effect on Corporate Security Division's ability to satisfactorily perform its mission.

Option 3: Train two or more Corporate Telecommunications personnel in TSCM procedures. Familiarize all current Security Representatives with TSCM Procedures. Acquire the countermeasures equipment necessary for the accomplishment of the Corporate Security Division's TSCM Mission.

A. Advantages:

- Provides two or more individuals having the requisite skills, education, and electronic/communications background appropriate to TSCM Services.
- Provides Telecommunications with two or more minimally qualified TSCM Technicians.
- Provides corporate Security Division with four staff members familiar with TSCM procedures and terminology.
- Provides in-house expertise and some degree of uniformity throughout the Company in the conduct of TSCM Services.
- Provides for joint responsibility regarding TSCM and COMSEC activities within the Company.

B. Disadvantages:

- Presents potential conflicts in terms of control, direction, funding, and program management.
- Envisions an initial capital expenditure of \$30,000-\$100,000 to equip a Central TSCM facility; or \$60,000-\$200,000 to equip two regional facilities (Enclosures 3A and 3B).
- Envisions an initial training expenditure of approximately \$30,000.00 to minimally train two TSCM Technicians and four Security Representatives.
- Envisions an undetermined annual expenditure for refresher training.
- Envisions an undetermined increase in funding based on TSCM exclusive travel requirements.
- Personnel reductions, funding limitations, and work-load constraints may preclude the participation of telecommunications personnel.

Option 4: Establish a National Account Agreement with one qualified TSCM Contractor for the conduct of all Corporate TSCM requirements.

A. Advantages:

- Provides Corporate Security Division with one contractor for the conduct of all TSCM Services.
- Provides for uniformity of services and reports throughout the Company.
- Provides for centralized program control, scheduling and billing.
- Requires no capital expenditures for TSCM equipment.
- Requires no expenditure for TSCM Training.
- Does not significantly increase corporate Security Division travel expenditures.

B. Disadvantages:

- Location of single contractor, may result in significant travel and/or per diem charges.
- Potential exists that single contractor may not be able to react in a timely fashion to unscheduled or emergency requirements.
- No valid data exists upon which to base a meaningful estimation as to what costs would be incurred through the use of a single TSCM contractor.

Option 5: Establish two or more account agreements with several regional TSCM Contractors for the conduct of Corporate TSCM requirements.

- Advantages:
 - Provides Corporate Security Division with several contractors for the conduct of TSCM Services.
 - Provides for contingency backup services in the event that one contractor cannot respond in a timely fashion to unscheduled or contingency requirements.
 - Provides for centralized scheduling, reporting and billing.
 - Requires no capital expenditures for TSCM Equipment.
 - Requires no expenditures for TSCM Training.
 - Does not significantly increase Corporate Security Division travel expenditures.
 - Provides for uniformity of services and reporting.
 - Strategic locations of multiple contractors may result in significant reductions in travel and/or per diem charges.
- Disadvantages:
 - No valid data exists upon which to base a meaningful estimation as to what costs would be incurred through the utilization of multiple TSCM contractors.
 - It may prove difficult to identify and evaluate multiple TSCM providers strategically located throughout the Company's area of operation.

Enclosure 3A
Centralized TSCM Facility

Equipment Requirements and Cost Estimates

The following minimum equipment requirements and cost estimates represent a one time capital outlay necessary to equip a central TSCM facility. Estimates do not include maintenance, calibration, and/or replacement expenditures.

Item	Item
Electronic countermeasures Receiver	\$9,000-\$100,000
Non Linear Junction Detector	\$18,000-\$30,000
Time Domaine Reflectometer	\$1,500-\$4,500
Miscellaneous Audio Amplifiers, meters, cables, etc.	\$2,000-\$4,000
TSCM Tool Kit	\$100-\$600

Enclosure 3B
Regional TSCM Facilities (2)

Equipment Requirements and Cost Estimates

The following minimum equipment requirements and cost estimates represent a one-time capital outlay necessary to equip two regional TSCM facilities. Estimates do not include maintenance, calibration, and/or replacement expenditures.

Item	Cost
Electronic countermeasures Receiver	\$9,000-\$100,000
Non Linear Junction Detector	\$14,000-\$28,000
Time Domaine Reflectometer	\$1,500-\$4,500
Miscellaneous Audio Amplifiers, meters, cables, etc.	\$2,000-\$4,000
TSCM Tool Kit	\$100-\$600