Integrated
Emergency Communications Systems Equipment Policies

Chester County
Department of Emergency Services

Robert J. Kagel
Director

30 March 2018
(Rev from 4/30/16)
Table of Contents

Policy 500-1 ............................................................... 3

Communications Equipment Field User Maintenance, Replacement and Organizational Expansion
Definitions........................................................................... 3
General.................................................................................. 4
Department Owned Communication Equipment....................... 4
Agency Owned Communication Equipment............................ 5
Installation – Transfer – Removal........................................... 6
Radio Personalities............................................................... 6
Mobile Data Equipment......................................................... 6
Fire / EMS Pagers............................................................... 8
Antennas............................................................................. 8
Spare................................................................................... 8
Training............................................................................... 9
Non-9-1-1 Agencies............................................................. 9

Policy 500-2 ........................................................................ 10

Communications Equipment Privately Owned Vehicles

Policy 500-3 Land Mobile Radio............................................ 12

Distribution of Integrated Emergency Communications System Equipment
Procedure........................................................................... 12
General............................................................................. 13
Fire Agency Distribution....................................................... 13
Fire with EMS Distribution.................................................. 15
EMS Only Distribution....................................................... 17
Law Enforcement............................................................. 18

Policy Revisions .................................................................. 19

Appendix............................................................................. 20

MDC Required Minimum Spec ............................................ 20
Required Route: .................................................................. 20
Pager Programming Best Practices....................................... 20
Communications Equipment
Field User Maintenance, Replacement and Organizational Expansion

30 March 2018
(Rev from 4/30/16)

Policy

It is the policy of the Department of Emergency Services to:

1. Establish and maintain a unified maintenance concept for the communications equipment operated by Chester County Emergency Responder Agencies;
2. Retain ownership of, and provide maintenance for, communications equipment and accessories purchased by the County for use by Chester County Emergency Responder Agencies;
3. Require non-County owned communications equipment and accessories used to access any component of the Integrated Emergency Communications System (IECS) to meet certain specifications and be maintained by a County-authorized vendor; and,
4. Ensure all Agencies operating on the IECS observe and abide by all applicable statues, laws, rules and regulations including, but not limited to, those of the Federal Communications Commission (FCC), the Federal Aviation Administration (FAA), the Department of Homeland Security (DHS), the Commonwealth of Pennsylvania, the County of Chester, the manufacturers of equipment, and IECS service providers.

Definitions

1. Agency: An organization, company, department, or bureau that provides a public safety service to include, but not limited to, fire, Emergency Medical Services (EMS), law enforcement, emergency communications, fire police, and emergency management
2. Accessories: Ancillary items such as but not limited to microphones, cases, batteries, mounts, docking stations, keyboards, monitors, and chargers
3. CADS: Computer Aided Dispatch System
4. Communication equipment: Any device such as but not limited to land mobile radios (fixed, vehicle, and portable), antennas, computers (ruggedized Mobile Data Computer or non-ruggedized desktop / laptop), modems, voice alerting devices (pagers), and LTE High Speed Routers used in conjunction with the Department’s IECS
5. County: The County of Chester
6. Department: Chester County Department of Emergency Services
7. DES: Department of Emergency Services
8. EMS: Emergency Medical Services
9. EW: Enterprise Wizard
10. IECS: Integrated Emergency Communications System
11. Service Vendor: The Department’s communications maintenance contractor(s)
12. Station: A physical building from which an Agency provides public safety services
Procedures

General

1. All communications equipment used in conjunction with the IECS will be maintained by a Department approved Service Vendor.

2. The Department may deactivate IECS equipment (Department or Agency owned) that do not meet the proper security measures, uses an unauthorized service vendor or ignores manufacturer recommended maintenance, without the prior written approval of the Assistant Deputy Director of Technology. The equipment shall remain deactivated until the Service Vendor has declared the equipment usable. All costs associated with returning communications equipment to an approved condition shall be borne by the Agency.

3. All requests for changes in Alias / Alpha Tag labeling shall be submitted through EW. The Department will acknowledge all requests within two working days.

4. Agencies shall keep EW updated with current vehicle fleet information.

5. This policy will be reviewed in March by the Assistant Deputy Director for Technical Services in accordance with Policy 100-28.

Department-Owned Communications Equipment

1. Communication equipment provided by the Department will remain Department property.

2. Communication equipment provided by the Department will be maintained by the Department or Department approved Service Vendor, including all programming, maintenance, and repair.

3. No alterations, additions, or deletions to Department-owned communication equipment may be performed unless authorized, in writing, by the Department Technical Division.

4. Agencies will be responsible for completing an annual inventory of Department-owned communication equipment. The results of the annual inventory must be provided to the Assistant Deputy Director for Technical Services no later than June 30 each year.

5. The Department will conduct a physical inventory of all Department-owned communication equipment every five years.

6. Requests for additional quantities of Department-owned communications equipment and accessories shall be addressed in writing to the Assistant Deputy Director of Technology. In general, these requests will only be approved because of the acquisition of additional eligible apparatus / vehicles or personnel.

7. Agencies shall take all reasonable actions to prevent loss or damage to Department-owned communications equipment. In the event Department-owned communications equipment is damaged in the line of duty, the Department will replace or repair the equipment at the Department’s expense. All discrepancies in determining damage responsibility shall be determined by the Assistant Deputy Director of Technology.

8. In the event Department-owned communications equipment is lost or damaged, the Agency will be responsible to notify the Department within 24 hours of the loss or damage.

9. Agencies shall be responsible for replacing communications equipment damaged or lost as a result of negligence or willful misconduct. All communications equipment shall be replaced at the current
price of replacement. All discrepancies in determining damage responsibility shall be determined by
the Assistant Deputy Director of Technology.

10. An Agency using Department-owned communications equipment which ceases operations within the
county will return all Department-owned communications equipment within 30 days of the last day of
operation. Failure to return all communications equipment shall result in the Agency being invoiced
for the communications equipment at current replacement cost. The Department will utilize the
fullest extent of the law to retrieve equipment or restitution.

Agency-Owned Communications Equipment

1. Agency will be responsible for the cost of communications equipment purchased by the Agency
for operation on the IECS, including any recurring connection, service, or maintenance costs.
This is also applicable to Mobile Data Equipment provided by the Department.

2. Communications Equipment provided by an Agency will remain Agency property.

3. Agency will establish appropriate maintenance contracts with department approved service
vendor to provide both preventative maintenance and repair for all communications equipment
operating on the IIECS. Agency is responsible for all maintenance, repair, and replacement costs
associated with Agency-owned communications equipment. Service Vendor if used will invoice
Agency directly.

4. The Department will be notified and authorize, in writing, any communications equipment to be
used on the IIECS prior to procurement of the equipment being placed into service.

5. Any equipment operating on the Voice Radio System must be Association of Public
Communication Officials (APCO) Project 25 (P25) Phase 2 compliant.

6. All data connection fees for Agency-owned MDE operating on the IECS shall be paid for by the
Agency.

7. The Department or the Service Vendor will program all communications equipment to be used on
the IECS, at the Agency’s expense.
7.1. If the Department or Service Vendor does not have the equipment necessary to program
Agency’s communications equipment, Agency is responsible for providing the necessary
equipment at its expense.
7.2. The Department must authorize all programming and personalities of Agency-owned IECS
communications equipment.

8. Agencies shall take all reasonable actions to prevent loss or damage to Agency-owned
communications equipment.

9. In the event Agency-owned communications equipment is lost or damaged, the Agency will be
responsible to notify the Department within 24 hours of the loss or damage.

10. An Agency with communications equipment operated on the IECS which ceases operations
within the county will notify the Department within 30 days of the last day of operation.

11. Agencies will be responsible for completing an annual inventory of Agency-owned
communications equipment operating on the IECS. The results of the annual inventory must be
provided to the Assistant Deputy Director for Technical Services no later than June 30 each year.

12. The Department will conduct a physical inventory of all Agency-owned communications
equipment on the IECS every five years.
Installation, Transfer, Removal, Repair or Service, and Programming

1. All requests for repair, service, programming, transfer, replacement, installation, or removal of mobile communications equipment shall be submitted through EW.

   1.1. The Department will be responsible for initial installations and transfers to new vehicles of Department-owned communications equipment.
   1.2. The Agency will be responsible for relocation of mobile communications equipment due to vehicle maintenance.
   1.3. The Agency will be responsible for removal costs when a vehicle has been involved in any incident involving damage or destruction of the vehicle.
   1.4. No mobile communications equipment will be installed in a vehicle scheduled for replacement within six months.

2. An Agency-authorized representative will be responsible for appointment scheduling as well as coordinating and approving the mounting locations of all Department-owned equipment with the Service Vendor.

3. An Agency-authorized representative will be responsible for indicating satisfactory installation, transfer, and/or removal work by the Service Vendor.

4. Service Vendor to return to the Department all Communication Equipment removed from a vehicle with the exception of vehicle transfers provided the new vehicle is immediately available for equipment installation.

5. Upon Service Vendor completion of requested service, Agencies shall verify the repair in EW within 10 days of receipt of repaired communication equipment. If not verified within 10 days, the Department may at its discretion close the EW service request.

6. After completion of an EW service request, portable communication equipment such as portable radios and fire/EMS pagers will be delivered by the Agency to the Service Vendor or the Department.

7. After completion of an EW service request, communication equipment mounted in vehicles will be repaired at either the Service Vendor’s facility or the Agency’s location provided the Agency’s location has adequate facilities to perform the repair. The location for repair will be determined by the Agency and communicated to the Service Vendor by the Agency.

Radio Personalities

1. Department-owned and Agency-owned Radio personalities must be approved by the Department.

2. Agency private talk groups may be shared with other responder agencies with prior written approval (Department MOU) from the controlling Agency.

3. Radio personalities may be changed no more than once every 12 months.
   3.1 Requests for changes to radio personalities must be submitted through Enterprise Wizard.
   3.2 Changes to radio personalities must be approved by the Department.
   3.3 The only exceptions to the frequency of changes to radio personalities are those which impact a radio’s operational capabilities.
   3.4 Department will be responsible for costs associated with reprogramming Department-owned communications equipment.
3.5 Agency will be responsible for costs associated with reprogramming Agency-owned communications equipment.

**Mobile Data Equipment**

1. Department owned Mobile Data Computers (MDC) will be locked into docking station and shall not be permitted to be removed by anyone other than the Service Vendor or the Department’s Technical Division Staff.

2. A standard MDC image will be supplied with all Department-owned MDC units. This standard image will be coordinated with input from each discipline’s Advisory Group.

3. All MDC’s shall have County approved Cyber Security software and the local firewall enabled.

4. All MDCs must be connected to a Department approved router.

5. All MDCs must be able to transmit active GPS data to the CADS via a router or other dedicated GPS device which provides data in NMEA format.

6. All approved Department owned routers installed with the intent of connecting to CADS must connect over FirstNet and via Radio IP secure VPN.

7. All Mobile Data Equipment operations will be restricted to official public safety business.

8. Mobile data equipment (router & MDC) must connect to the network at least two times per month for a minimum time of two consecutive hours each time connected.

9. All approved routers will provide WiFi via a hidden SID and be password protected.

9.1. WiFi passwords will be maintained by the Department.

9.2. WiFi passwords will be changed by the Department at a minimum of twice a year or at the Departments discretion.

10. All Agency-owned computers connecting to the Computer Aided Dispatch System (CADS) must meet minimum operating specifications of the CADS vendor.

11. The Department will provide Agencies the CADS mobile client for Agency-owned equipment.

12. Agencies will be responsible for purchasing Radio IP VPN connectivity software for Agency-owned equipment.

13. No additional software, hardware, or other devices shall be installed into or connected to the Mobile Data Equipment without prior written approval from the Assistant Deputy Director for Technical Services. Authorization will be contingent upon the following:

13.1. It does not cause any mechanical problems with the computer, docking station, or router.

13.2. It does not cause any problems with the standard operating system provided by the Department.

13.3. It is clearly understood that if the Mobile Data Equipment must be removed or replaced as part of upgrading or maintenance, the Department will NOT be responsible for loss of or damage to the additional hardware, software (including data), or other device.

13.4. It is clearly understood that if the Mobile Data Equipment must be removed or replaced as part of upgrading or maintenance, the Agency is responsible for re-connecting or re-installing the additional hardware, software (including data), or other device.

13.5. Agencies will provide the Department a copy of any software they wish to utilize in order for the Department to evaluate interaction with the Department’s image.
14. Law Enforcement Agencies accessing the Commonwealth Law Enforcement Assistance Network (CLEAN) and National Crime Information Center (NCIC) functions must ensure every officer accessing CLEAN/NCIC is certified according to CLEAN operating rules.

14.1. The Department can provide this training.
14.2. An Agency with a TAC Officer may provide this training to their Agency.
14.3. Agencies operating outside of Chester County will use the Department CLEAN-provided certification test and provide to the Department TAC the results of the tests.
14.4. A passing grade is necessary for access.
14.5. Failure to comply with this procedure will result in termination of MDC CLEAN/NCIC access.

15. Each Agency will be authorized to have a MDC Administrator.
15.1. The Administrator will be issued a password for their use only.
15.2. The Administrator is authorized to install additional software, hardware, or other devices after receiving the written approval of the Assistant Deputy Director for Technical Services.
15.3. The Department will hold the Agency responsible for the proper use of the Administrator password.
15.4. The Department shall have the right to issue a new Agency Administrator password at the Department’s discretion.

Fire/EMS Pagers

1. All requests for additional Fire/EMS pagers / equipment shall be addressed in writing to the Assistant Deputy Director of Technology of Emergency Services justifying the need for additional equipment.

2. Agencies shall ensure EW is updated with the name of the individual responder issued a pager.

3. Each pager is issued with a carrying case and a standard charger. The pager is to be carried in the case at all times to prevent accidental damage and inadvertent movement of the control knobs.

4. Agencies are authorized to make programming changes to the pagers issued by the Department.
4.1. The programming software is available free of charge through Motorola’s website.
4.2. It is the responsibility of the Agency to acquire the necessary hardware to program pagers.
4.3. Should a pager become non-functional due to an Agency’s programming changes and require the Department to repair or reprogram the pager, the Agency will be charged for the costs.
4.4. To insure proper activation and operation of individual pagers, Agencies should follow best practices guidelines.

Antennas

1. The use of unauthorized antennas such as “patch” antennas for mobile units and “stubby”, or half wave antennas for portable radios results in an unacceptable reduction in communication systems performance and coverage.

2. The following antennas are approved for use:
   2.1 Mobile Radio: Harris 3db gain whip antenna (PN AN-225001-001)
   2.2 Mobile Radio: Harris 2db gain low profile antenna (PN AN-225001-004)
   2.3 Portable Radio: ½ wave whip antenna
   2.4 Mobile Data Router (Standard):
      2.4.1 IMANT4701 LTE/GPS Antenna
      2.4.2 IMANT 1201 WiFi Antenna
   2.5 Mobile Data Router (Covert Option):
2.5.1 Mobile Mark – CVL-WLF  
2.5.2 Mobile Mark – CVS-2400/5500  
2.5.3 Mobile Mark – CVW-LTE

3. Agencies assume all risks and liabilities when using an unauthorized antenna. Any cost associated with troubleshooting or repair due to an unauthorized antenna will be the responsibility of the Agency.

**Spares**

1. The Department will retain sufficient spares for immediate replacement of Department-owned equipment requiring maintenance or repair.  
   1.1. Mobile Radios: 3% of allocated mobile radios  
   1.2. Portable Radios: 5% of allocated portable radios  
   1.3. Mobile Data Routers: 3% of allocated mobile data routers  
   1.4. Mobile Data Computers: 3% of allocated Mobile Data Computers  
   1.5. Pagers: Sufficient spares have already been given to Agencies

2. The Department encourages Agencies to retain sufficient spares for immediate replacement of Agency-owned equipment requiring maintenance or repair.

**Training**

Training will be provided on all Department-owned equipment to Agencies at no cost, upon request.

**Non-9-1-1 Agencies**

1. Agencies which provide services outside the 9-1-1 system and/or not for a municipal or county government entity, but are required by statute, law, rule or regulation to be able to communicate with the County’s Public Safety Answering Point, will be responsible for all costs associated with procuring equipment and software.

2. Agencies will be required to adhere to this policy and will be responsible for all costs associated with adherence.

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Robert J. Kagel  
Director

Policy 500-1 to 500-3  
Integrated Emerg Comm Sys Equip
Technical Support

Communications Equipment
Privately Owned Vehicles

Policy

It is the policy of the Department of Emergency Services to provide for the installation of IECS equipment in privately-owned vehicles of designated DES employees.

Definitions

All Definitions in Policy 500-1 are applicable in this policy.

Procedures

1. The Director of Emergency Services will approve, in writing, those DES employees authorized to have IECS equipment installed in their privately-owned vehicles.

2. All requests for installation and/or transfer of equipment shall be submitted through Enterprise Wizard (EW).

3. The Department shall pay for the installation, transfer, and maintenance of IECS equipment.

4. Employees shall take all reasonable actions to prevent loss or damage to Department-owned equipment.

5. Employees will return all Department-owned IECS equipment on their last day of employment with the Department. Failure to return all equipment shall result in the employee being invoiced for the equipment at current replacement cost. The Department will utilize the fullest extent of the law to retrieve equipment or restitution.

6. In the event an employee’s authorization to have IECS equipment installed in their privately-owned vehicle is revoked, the employee will return all Department-owned equipment within 30 days of the revocation. Failure to return all equipment shall result in the employee being invoiced for the equipment at current replacement cost. The Department will utilize the fullest extent of the law to retrieve equipment or restitution.

7. Employees will make their privately-owned vehicle available to Department staff for inspection, maintenance, or repair of Department-owned equipment within three business days of written notice.
8. The Department will conduct a physical inventory of all Department-owned equipment installed in employee's privately-owned vehicle no later than June 30 each year. Employees will make their privately-owned vehicle available to Department personnel for the purposes of this audit.

9. This policy will be reviewed in March by the Assistant Deputy Director for Technical Services in accordance with Policy 100-28.

Robert J. Kagel
Director
Technical Support

Distribution of Integrated Emergency Communications System Equipment

30 March 2018
(Rev from 4/30/16)

Policy

It is the policy of the Department of Emergency Services (DES) to provide Fire, Emergency Medical Services (EMS), and Police agencies with communications equipment and accessories to operate on the Integrated Emergency Communications System (IECS).

Definitions

All Definitions in Policy 500-1 are applicable in this policy.

Procedure

1. All IECS communications equipment will be distributed in accordance with the distribution plan detailed in Attachment 1.

2. In the event an agency removes a unit or officer which was entitled to IECS communications equipment, the IECS communications equipment will be returned to DES within 30 days of notifying DES or receipt of a “Request for Return of IECS Equipment” letter.

3. All “Request for Return of IECS Equipment” letters will be sent certified, return receipt requested via the United States Postal Service (USPS).

4. In the event an agency adds a unit or officer making the agency eligible for additional IECS equipment, DES will provide the appropriate IECS equipment, in accordance with the distribution plan detailed in Attachment 1, within 30 days of written notification.

5. The County of Chester will maintain and repair County-owned IECS equipment in accordance with DES Policy #500-1.

6. Agencies must adhere to DES Policy #500-1.

7. All questions, problems, or issues resulting from the Distribution Plan shall be forwarded, in writing, to the Director of Emergency Services or designee.

8. Requests to alter the Distribution Plan, should be sent to the appropriate discipline’s Association (Fire Chiefs, Police Chiefs, EMS Council, Fire Police).

9. This policy will be reviewed in March by the Assistant Deputy Director for Technical Services in accordance with DES Policy 100-28.

Robert J. Kagel
Director
Attachment 1

Integrated Emergency Communications System (IECS) Communications Equipment Distribution Plan

General

1. This plan details the number and type of Department-owned IECS communications equipment allowed per position and equipment. If an agency does not have a position or piece of equipment the agency is not entitled to that IECS communications equipment.
2. Allocations are based on information maintained in the Computer Aided Dispatch System.
3. The definitions in DES Policy #500-1 apply to this Equipment Distribution Plan.
4. No authorized responder will be issued more than one of each type of IECS equipment.
5. All non-MDC equipped vehicles will be equipped with a GPS-enabled mobile radio, except when a mobile radio is to be installed in a personal vehicle.

Fire/EMS

Fire Agency

<table>
<thead>
<tr>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pager</th>
</tr>
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**Officers (Up to five)**

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<td>1(2)</td>
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<td>Command Vehicle (Agency-owned only)</td>
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(1) Agency-owned vehicles will be equipped in lieu of personal vehicles
(2) Agency-owned or Agency-Leased Chief Officer vehicles may be equipped with Department Mobile Data Equipment from the station allotment in lieu of an approved unit

Apparatus

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<td>Containment (no trailers)</td>
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<tr>
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Number of pagers will be based on rostered members

Fire Agency (cont.)

Policy 500-1 to 500-3
Integrated Emerg Comm Sys Equip
<table>
<thead>
<tr>
<th></th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pagers</th>
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<tbody>
<tr>
<td>Hose Tender (no trailers)</td>
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<td>Ladder/Tower/Snorkel</td>
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<td>1(5)</td>
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<td>Rehab Trailer</td>
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<td>Traffic Control Trailer</td>
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</table>

(1) If a mobile radio will not fit properly on turntable, one additional portable may be given per Ladder/Tower/Snorkel apparatus.
(2) 2 Mobiles will be issued if the Rescue is used for a command post
(3) Up to four approved sets of Mobile Data Equipment per Fire Station

### Additional

<table>
<thead>
<tr>
<th></th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pagers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Police</td>
<td>0</td>
<td>0</td>
<td>2 per Station</td>
<td>0</td>
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</tr>
<tr>
<td>Safety Officer</td>
<td>0</td>
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<td>1 per Agency</td>
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Number of pagers will be based on rostered members.
Fire Agency with EMS

EMS defined as a Department of Health licensed EMS agency providing 9-1-1 service

<table>
<thead>
<tr>
<th></th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pager</th>
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</thead>
<tbody>
<tr>
<td>Station</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Officers (up to six)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Chief</td>
<td>0</td>
<td>1(^{(1)})</td>
<td>1</td>
<td>1(^{(2)(5)})</td>
<td></td>
</tr>
<tr>
<td>Deputy Fire Chief</td>
<td>0</td>
<td>1(^{(1)})</td>
<td>1</td>
<td>1(^{(2)})</td>
<td></td>
</tr>
<tr>
<td>Assistant Fire Chief</td>
<td>0</td>
<td>1(^{(1)})</td>
<td>1</td>
<td>1(^{(3)})</td>
<td></td>
</tr>
<tr>
<td>Battalion Fire Chief</td>
<td>0</td>
<td>1(^{(1)})</td>
<td>1</td>
<td>1(^{(2)})</td>
<td></td>
</tr>
<tr>
<td>Duty Officer Vehicle (Agency-owned only)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1(^{(2)(5)})</td>
<td></td>
</tr>
<tr>
<td>EMS Chief</td>
<td>0</td>
<td>1(^{(1)})</td>
<td>1</td>
<td>1(^{(3)(5)})</td>
<td></td>
</tr>
<tr>
<td>Command Vehicle</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(Agency-owned only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^{(1)}\) Agency-owned vehicles will be equipped in lieu of personal vehicles

\(^{(2)}\) Agency-owned or Agency-Leased Chief Officer vehicles may be equipped with Department Mobile Data Equipment from the station allotment in lieu of an approved unit

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ambulance</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ATV</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Boat (Agency-owned only)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Brush</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Containment (no trailers)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Deluge (no trailers)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Dive Rescue</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Engines/Squirt/Telecuirt</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1(^{(5)})</td>
</tr>
<tr>
<td>Foam Unit (no trailers)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Hose Tender (no trailers)</td>
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<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Intermediate ALS (Responder unit)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Intermediate ALS (Transport-capable)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ladder/Tower/Snorkel</td>
<td>0</td>
<td>1</td>
<td>2(^{(3)})</td>
<td>1(^{(5)})</td>
</tr>
<tr>
<td>Mass Casualty (no trailers)</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Medic (Responder unit)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MICU</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pumper Tanker</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1(^{(5)})</td>
</tr>
<tr>
<td>QRS (Agency-owned vehicle)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1(^{(6)})</td>
</tr>
<tr>
<td>Rehab Trailer</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Policy 500-1 to 500-3
Integrated Emerg Commr Sys Equip

Page 15 of 20
<table>
<thead>
<tr>
<th>Fire Agency with EMS (cont.)</th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pagers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rescue</td>
<td>0</td>
<td>1&lt;sup&gt;(4)&lt;/sup&gt;</td>
<td>2</td>
<td>1&lt;sup&gt;(5)&lt;/sup&gt;</td>
<td>Number of pagers will be based on rostered members</td>
</tr>
<tr>
<td>Squad</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Tae</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Tanker</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1&lt;sup&gt;(5)&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Traffic</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Traffic Sign Board</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Traffic Control Trailer</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Utility (no trailers)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<sup>(3)</sup> If a mobile radio will not fit properly on turntable, one additional portable may be given per Ladder/Tower/Snorkel apparatus.

<sup>(4)</sup> 2 Mobiles will be issued if the Rescue is used for a command post

<sup>(5)</sup> Up to four approved sets of Mobile Data Equipment per Fire Station

<sup>(6)</sup> Up to one approved set of Mobile Data Equipment per QRS-licensed Agency

### Additional

<table>
<thead>
<tr>
<th>EMS Officers (in addition to EMS Chief listed under Officers)</th>
<th>0</th>
<th>0</th>
<th>3 per Agency</th>
<th>0</th>
<th>Number of pagers will be based on rostered members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Police</td>
<td>0</td>
<td>0</td>
<td>2 per Station</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Safety Officer</td>
<td>0</td>
<td>0</td>
<td>1 per Agency</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
EMS Only Agency

EMS defined as a Department of Health licensed EMS agency providing 9-1-1 service

<table>
<thead>
<tr>
<th></th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Officers (up to five)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS Chief</td>
<td>0</td>
<td>1(1)</td>
<td>1</td>
<td>1(2)</td>
<td></td>
</tr>
<tr>
<td>EMS Officers (up to three)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Duty Officer Vehicle (Agency-owned only)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1(2)</td>
<td>Number of pagers will be based on rostered members</td>
</tr>
<tr>
<td>Command Vehicle (Agency-owned only)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

(1) Agency-owned vehicles will be equipped in lieu of personal vehicles
(2) Agency-owned or Agency-Leased Chief Officer vehicles may be equipped with Mobile Data Equipment from the Agency allotment in lieu of an approved unit

**Apparatus**

<table>
<thead>
<tr>
<th></th>
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<th>1</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulance</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ATV</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intermediate ALS (Responder unit)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Intermediate ALS (Transport-capable)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Mass Casualty (no trailers)</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Medic (Responder unit)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MICU</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>QRS (Agency-owned vehicle)</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1(3)</td>
</tr>
<tr>
<td>Rehab Trailer</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Squad</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Utility (no trailers)</td>
<td>0</td>
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<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

(3) Up to one approved set of Mobile Data Equipment per QRS-licensed Agency

**Out of County Fire/EMS Stations**

1. Agencies with primary territory (as defined in a Resolution passed by a Chester County municipality) will receive a full allocation as if they were located in Chester County.

2. Agencies who routinely provide mutual aid to Chester County agencies will receive two portable radios.
**Hospitals**

Department of Health: Licensed Emergency Departments / Medical Command Facilities will receive one control station per licensed facility.

**Law Enforcement**

<table>
<thead>
<tr>
<th></th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station</td>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Command Staff (up to five)**

<table>
<thead>
<tr>
<th>Role</th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief/Superintendent</td>
<td>0</td>
<td>1&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>1</td>
<td>Case-by-case</td>
<td>0</td>
</tr>
<tr>
<td>Captain</td>
<td>0</td>
<td>1&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>1</td>
<td>Case-by-case</td>
<td>0</td>
</tr>
<tr>
<td>Lieutenant (up to 3)</td>
<td>0</td>
<td>1&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>1</td>
<td>Case-by-case</td>
<td>0</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Agency-owned vehicles will be equipped in lieu of personal vehicles

**Vehicles**

<table>
<thead>
<tr>
<th>Role</th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marked Patrol</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Unmarked Patrol</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Specialty Vehicle</td>
<td>0</td>
<td>Case-by-case</td>
<td>Case-by-case</td>
<td>Case-by-case</td>
<td>0</td>
</tr>
</tbody>
</table>

**Sworn Officers**

<table>
<thead>
<tr>
<th>Role</th>
<th>Control Station</th>
<th>Mobile</th>
<th>Portable</th>
<th>Mobile Data</th>
<th>Fire/EMS Pager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time</td>
<td>0</td>
<td></td>
<td>1&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Part-Time (3 or less)</td>
<td>0</td>
<td>0</td>
<td>1&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Part-Time (4 or more)</td>
<td>0</td>
<td>0</td>
<td>1 per two officers&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>0</td>
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</tr>
</tbody>
</table>

<sup>(2)</sup> All portables will be GPS-enabled.
Policy Revisions

500-1  Communications Equipment Field User Maintenance, Replacement and Organizational Expansion
1. 1999
2. 2005
3. 2010
4. 2011
5. 2012
6. 2015
7. 2016
8. 2018

500-2  Communications Equipment Privately Owned Vehicles
1. 2000
2. 2010
3. 2012
4. 2016
5. 2018

500-3  Distribution of Integrated Emergency Systems Communications Equipment
1. 2004
2. 2005
3. 2010
4. 2015
5. 2016
6. 2018
Appendix

MDC Required Minimum Requirements
- Ruggedized IBM PC compatible
- i3-2350M processor or greater (Not ARM)
- 4GB of RAM or greater
- 80 GB hard drive or greater (solid state recommended)
- 1024X768 resolution display
- Network connection
- 64-bit Windows 7 or Windows 8.1 OS
- County approved Cyber Security software and local firewall enabled.
- Touch Screen is recommended

Required Router
- Sierra Wireless oMG model 2000 operating on either the AT&T or Verizon network.

Pager Programming Best Practices
- All pagers to be programmed to monitor the dispatch frequency 160.185.
- All pagers to be programmed in narrowband mode.
- Four position selector knob programming.
  - A – Selective call F1; Tone / Vibrate or Tone
  - B – Monitor F1; Tone / Vibrate or Tone (this position can be used for On/Off Duty)
  - C – Priority Scan F1; Tone / Vibrate or Tone
  - D – Selective call F1; Vibrate
  - Automatic reset SHOULD NOT BE USED. In areas of marginal coverage or if County
    dispatch switches to manual paging, the pager will receive the tones then reset causing
    the pager not to activate with voice.
- When using priority scan F1, priority channel takes priority. Do not place the zone channel in
  selector “A”