DFT TELECOMMUNICATIONS RULES & REGULATIONS

MMR, POE, Manholes, Duct Bank Access and Installation Guidelines

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DFT Carrier Relations
CarrierRelations@DFT.com
Last Updated: 10/23/2012
1. General Guidelines

a) Carriers accessing DFT’s underground duct bank system and communication facilities must enter through Manholes, Handholes and POEs designated by DuPont Fabros Technology, L.P. and DF Property Management LLC (collectively, DFT).
b) Carriers must enter into a Mutual Non-Disclosure Agreement (MNDA) with DFT prior to any discussions taking place.
c) For the protection of all clients (tenants), and to help reduce connectivity loss, only ONE carrier/contractor will be allowed to work in the communications facilities at a time.
d) Concurrent access to multiple Points of Entry (POE) and/or Meet-Me-Rooms (MMR & MER) and Manholes or Handholes will NOT be allowed unless the installation requires it and approval has been obtained in advance. This will impact scheduling so please plan accordingly.
e) All Carrier heat generating equipment shall be installed within the client premises or in the MMR.
f) Carriers can access client areas via the interior communication pathway system as designated by DFT and approved by the client. Prior approval must be obtained by client for Carriers to access client space.
g) Clients requiring access to the common telecommunications rooms must submit the request to DFT as per the Access Request process defined in Section 2 below.
h) Carriers or clients are NOT allowed to take any photographs in the telecommunications rooms. Exceptions will be considered on a case by case basis.
i) Carriers shall conform with conduit and innerduct assignment and pathways as provided by DFT prior to the fiber installation.
j) Carriers shall submit ‘as-built’ plans along with pictures of installations in the manholes within fifteen (15) business days after work completion. The ‘as-built’ plans should be submitted in AutoCAD, Visio or PDF format, and the pictures should be submitted in JPG or PDF format.
k) All costs associated with the installation of fiber services to DFT facilities and/or DFT Clients, including legal fees, manhole oversight and inspection fees, shall be borne by the Carrier and/or Client requesting service. If additional communications delivery infrastructure is required the cost shall be borne by the Carrier or Client, depending on the scope and location of the work performed.
l) A Certificate of Insurance (COI) must be in place before work begins.
m) A one-time NRC and a recurring MRC charge will be assessed to anyone installing equipment in the MMR.
2. Access Requests

a) Telecommunications Rooms can be accessed Mon-Fri 8am-5pm local time. Outside of these times, access is available only for emergency situations.
b) Access must be scheduled at least forty-eight (48) hours prior to requested time.
c) Access must be reviewed and pre-approved by DFT Carrier Relations team.
d) Access requests must be created through the web site: http://fiberaccess.dft.com

e) Upon completion of the website forms, the site will generate a case number (case#) that will serve as the task reference point for the duration of the task lifecycle. Making a change to the case requires the password that was emailed to the addresses on file during case creation.
f) A case number will be created for each access request.
g) When creating the case, it’s imperative to input the same first and last name as written on the identification card into the roster field or else the security staff may reject access if they cannot achieve a positive match or obtain verbal authorization from another source. If the roster is unknown during case creation, use TBD initially and then update the case information later by clicking on the case in the calendar whenever the information is known.
h) Access is granted in 15 minute blocks for a maximum of 5 hour duration to ensure multiple efforts can be undertaken in one day. Providing there is availability in the schedule, extended work periods may be requested.
i) Only one entity is allowed to work in a telecommunications room at any given point in time.
j) DFT will do their best to accommodate emergency access request on a case by case basis.
k) Carriers/Clients are permitted to access only their own equipment in the MMR. An access request is still required to be submitted for escorted access.
l) If a Carrier or Client wishes to access equipment in the MMR/MER/FCR/POE owned by another Carrier they must provide a written authorization to DFT as per Section 3.
m) For customer POD access, Carrier must contact the customer directly to gain access.

3. Cross Connects and LOA/CFA

a) If a Carrier wishes to access equipment of another Carrier, or if a Client wishes to access a Carrier’s equipment to extend a circuit, the Carrier whose equipment is being accessed must provide written approval to DFT.
b) This approval must be in the form of industry-standard LOA/CFA and must be sent to DFT through the website http://fiberaccess.dft.com for review and approval.
c) LOA-CFA typically refers to the document issued by a Telecommunications carrier to another carrier giving them permission to use a specified facility assignment for interconnection.
d) Upon review of the LOA/CFA, DFT Carrier Relations will provide appropriate instructions to the Security team to allow a Customer/Carrier to access another Carrier’s equipment in the MMR or in the POE.

e) The following Cross Connect Information MUST be furnished to DFT:

- **A location (starting point):** NAME | LOC  
  (e.g. customer name | cabinet or wall-mount location number)
- **Z location (ending point):** ___NAME | LOC  
  (e.g. carrier name | cabinet or wall-mount location number)
- If either A or Z location is a carrier location, a carrier-issued LOA/CFA must be sent with the request
- If both A and Z location are customer locations, both customers (A and Z) must be present to perform/oversee the Cross Connect

**Person performing the Cross Connect:**

- Name: ______________________
- Company: ____________________
- Title: ______________________
- Email: ______________________
- Phone: ______________________

### 4. Certificate of Insurance (COI)

a) Carriers and/or their contractor performing work in the DFT Telecommunications Conduit System must provide a Certificate of Insurance (COI) to DFT Property Management by sending an email to CarrierRelations@DFT.com before labor activities begin including site preparation.

b) DFT’s COI requirements, which are set forth in the License Agreement, can also be obtained by sending an email to CarrierRelations@DFT.com

### 5. Confined Space Documentation (CSD) Requirements

a) Carrier access to the manholes or handholes must follow the safety criteria below.

b) Work must be scheduled at least forty-eight (48) hours prior to requested time.

c) Vendors shall provide a copy of their written confined space entry program and training documentation with scheduled notice to DFT at CarrierRelations@DFT.com

d) Work will be supervised and inspected by a third party vendor to ensure correctness of the install and that safety requirements are met
e) The following confined space requirements must be met by the Carrier and 3rd party vendor ensuring the correctness of the install
   o Employees must be confined space trained/certified personnel
   o Comply with 29 CFR 1910.146 requirements as applicable to the situation
   o Observe all guidelines listed in National Fire Protection Association (NFPA) 70
   o Use personal protection equipment (PPE) and engineering controls to enable rescue procedures (e.g. tripod lift systems, etc.)
   o Use multi-gas detector and record pre entry atmospheric data at each location
   o Ventilate the manhole 20 minutes prior to entry
   o Use manhole guard rails to protect open manholes
   o Report any unsafe conditions and security risks or safety issue to DFT Security personnel

f) If the contractor needs to work in two manholes at the same time, they must use two sets of equipment

g) Entry permits (if required) must be reviewed and approved by DFT’s Property Manager, Environment, Health and Safety Manager, or local representative prior to any work being done in the manhole system.

h) Local DFT personnel reserve the right to decline entry or stop work if above requirements are not complied with or adhered to.

i) Air quality meters are required for all manhole access inside and outside the data center.

6. Cable, Conduit and Innerduct Requirements

a) All cables installed within the interior communication pathway system shall confirm with article 645 of the National Electric Code. This pathway is from the POE/MMR out to the Computer Rooms.

b) Any fiber cable pulled into the POEs and terminated into a non-heat generating fiber termination panel/cabinet provided by the Carrier must be approved by DFT.

c) All conduits used shall be populated with three (3) 1¼” multi-colored corrugated innerducts with integral drag line (500 lb pull strength) with footage markers prior to their initial use and unless otherwise noted.

d) Carriers, Clients and their contractors shall only use assigned manhole, conduit or routing pathways. Only one (1) innerduct may be used by the Carrier per assigned conduit.

e) Innerduct and Conduit assignments must be obtained and approved by DFT prior to scheduling the installation.

f) Each facet pulled through shall be photographed and pictures submitted to DFT after completion of work as part of the as-built documents within fifteen (15) business days.
7. Workmanship Guidelines

a) All installations and work performed by Client, Carrier and/or its contractors shall adhere to workmanship quality consistent with first-class data center facilities as well as all of the applicable EIA, IIA & NEC standards or codes.
b) For cable installations, all cables shall be labeled, laced or tie-wrapped, bundled and routed in a workmanlike manner.
c) All cables within a manhole shall be racked to the sides of the manhole such that cables do not interfere with manhole entry or the installation of future cables.
d) The placement of slack coils (in Manholes, POEs, MER, MMR, etc.) must be pre-approved by Carrier Relations and Site Operations as determined by the Site Survey.
e) In no instance shall cables protrude beyond the rear of any cabinet frame and in no instance shall cables obstruct air flow or access to power connections for equipment within the MMR.
f) Carrier or it’s contractor will be required to restore any firestop materials for sleeves or penetrations through fire rated walls.
g) Carrier or it’s contractor shall be responsible for any required floor tile cuts required as part of their work in areas with raised flooring. Cuts shall be made in the tile cutting room provided by DFT.
h) Floor tile cuts must be sealed to prevent air leakage.
i) In the event that Landlord, in its reasonable discretion, determines that any of Carrier’s installations, work within the manholes, POE’s or MMR do not comply with the above provisions, Carrier agrees to reasonably cooperate with Landlord to rectify such non-compliance, at Carrier’s sole cost.

8. MMR Cabinet Specifications

a) There are charges associated with deployment of equipment in the MMR.
b) Carriers or Clients requiring space in the MMR must place an order for the required space by sending an email to CarrierRelations@DFT.com.
c) Carriers must procure DFT standard cabinets of the following specifications:
o **Manufacturer:** Chatsworth  
o **Model:** F-Series TeraFrame cabinet  
o **Part number:** FF2A-112A-C42  
d) Perforated metal front door and a single perforated metal rear door. Can hold 19" wide or 23" wide equipment, with adjustable rails.  
e) If you require assistance with finding retailers who stock these cabinets please contact DFT at CarrierRelations@DFT.com  
f) DFT Carrier Relations shall provide the Client/Customer the location of their assigned space in the MMR.

**9. MMR Power Specifications**

a) DFT provides power circuits in various configurations in the MMR.  
b) AC power is provided in the MMR and it is fully backed up by UPS systems and diesel generators.  
c) There is no need for batteries to be deployed with any DC power plants. Batteries associated with standalone power backup units are not permitted in the MMR.  
d) The standard power configurations offered in the MMR are:

<table>
<thead>
<tr>
<th>Volts</th>
<th>Amps</th>
<th>NEMA Type</th>
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<tbody>
<tr>
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<td>L5-20R</td>
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<tr>
<td>208</td>
<td>60</td>
<td>Hubbell CS8364</td>
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e) Any request for power circuits should be sent to DFT Carrier Relations at CarrierRelations@DFT.com  
f) Carriers should purchase multiple circuits for redundancy and ensure that their equipment has dual power supplies to take advantage of the redundant circuits  
g) An MMR Order Form must be executed for placing an order for power in the MMR.  
h) The lead time for provisioning power in the MMR is 2 weeks from the time the power order is received by DFT.  
i) All costs related to the provisioning of the power circuits including but not be limited to, material, labor, engineering, testing, as-built drawings, permitting and inspection fees, applicable taxes are included in the one-time NRC charges.  
j) There is Monthly Recurring Charge (MRC) that covers the cost of the power.
10. Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>POE</td>
<td>Passive room for fiber entrance into the data center; no power available in this room.</td>
</tr>
<tr>
<td>MMR</td>
<td>Redundant power and cabinet space assigned to Carriers to deploy their lit equipment; Some DFT sites have 2-level MMR. The lower level, referred to as MER is used for termination of Copper services only and the upper level, referred to as MMR is used for termination of Fiber services and for carriers to deploy their equipment.</td>
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<tr>
<td>FCR</td>
<td>Term used at DFT’s ACC4 building to describe the equivalent of a Meet-Me-Room.</td>
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<tr>
<td>NRC</td>
<td>One-time charge associated with installation of space/power in the MMR.</td>
</tr>
<tr>
<td>MRC</td>
<td>Monthly charge associated with the use of space/power in the MMR.</td>
</tr>
<tr>
<td>LOA/CFA</td>
<td>LOA-CFA typically refers to the document issued by a Telecommunications carrier to another carrier giving them permission to use a specified facility assignment for interconnection.</td>
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