OFFER FOR COLLOCATION 2004

TECHNICAL MANUAL
MDF ACCESS

Changes from previous version[1]

Added

Paragraph	Remarks	Issue[2]
3.9	Added par 3.9 Joint Enclosure Facility	

Changed

Paragraph	Remarks	Issue[2]
Voettekst	Changed version from 2.1 to 2.2	
Various	Colours to various definitions, services and documents	

Removed

Paragraph	Remarks	Issue[2]

[1] Grammatical changes have not been indicated.

[2] See “Reply issues RO2001 collocation 3rd phase.xls”

MDF ACCESS TECHNICAL MANUAL - CONTENTS

CHANGES FROM PREVIOUS VERSION[1] 2

1 INTRODUCTION 4

2 SCOPE 5

3 COLLOCATION FOR MDF ACCESS - SPECIFICATIONS 6

3.1 COLLOCATION CABINET FOOTPRINT 6
3.2 230 VAC UN-MONITORED POWER SUPPLY 6
3.3 230V AC MONITORED POWER SUPPLY 6
3.4 48V DC NO-BREAK POWER SUPPLY 6
3.5 SERVICE TAKER EQUIPMENT – HEAT PRODUCTION 7
3.6 ADJACENT COLLOCATION FACILITY- LOCKABLE CDF SHELTER 7
3.7 STREETCABINET 8
3.8 COLLOCATION DISTRIBUTION FRAME (CDF) 9
3.9 JOINT ENCLOSURE FACILITY 9

4 REFERENCES 11

1 Introduction

1.1.1 This Technical Manual describes the technical specifications only applicable to the service KPN Telecom Collocation for MDF Access.

1.1.2 The principles of this Technical Manual are:

I) specifications are as much as possible in conformance with international and national standards;

II) KPN specifications will be applicable in the absence of international and national standards and in instances where items are specific to KPN's access network;

III) the values of the parameters should be measurable by both parties and the method of measurement should be according to international standards.

1.1.3 Terms of which the first letter is capitalised are defined in Definitions.

1.1.4 This document presents the Technical Manual applicable to KPN Telecom Collocation for MDF Access provided by KPN to Service Taker, as used in the Framework Agreement, Individual Agreements, and supporting manuals and schedules.

1.1.5 Elements that apply for the entire KPN Telecom Collocation Services are presented in the General Technical Manual.

1.1.6 This document is an 'add-on' to the General Technical Manual and all other general documents.

2 Scope

2.1.1 This Technical Manual defines the technical specifications:

I) for KPN Telecom Collocation for MDF Access;

II) for Service Taker Equipment to be placed in the Physical Collocation Space and Streetcabinet Collocation Space and;

III) those relating to Facilities Links.

2.1.2 Specifications specific to individual Service Facilities and specific requests for collocation will be provided in the Site Report.

3 Collocation for MDF Access - Specifications

3.1 Collocation Cabinet Footprint

3.1.1 The Collocation Cabinet Footprint is provided in a full configuration and in a half configuration.

3.1.2 The full Collocation Cabinet Footprint provides floor space with a width of 2,4m and a depth of 0,8m. The full Collocation Cabinet Footprint has a maximum capacity of 4 Service Taker cabinets, each with a maximum width of 0,6m and a maximum depth of 0,8m and a CDF.

3.1.3 The half Collocation Cabinet Footprint provides floor space with a width of 1,2 m and a depth of 0,8 m. The half Collocation Cabinet Footprint has a maximum capacity of 2 Service Taker cabinets each with a maximum width of 0,6 m and a maximum depth of 0,8 m and a CDF.

3.2 230 VAC un-monitored power supply

3.2.1 The distribution cabinet is provided with a 25A main switch and a number of fuseholders.

3.2.2 In the distribution cabinet a maximum of 4 fuses of 10A each shall be used for a full Collocation Cabinet Footprint on and a maximum of 2 fuses of 10A each for a half Collocation Cabinet Footprint.

3.2.3 In the distribution cabinet fuses with a maximum value of 10 A shall be used.

3.3 230V AC monitored power supply

3.3.1 The distribution cabinet is provided with a 25A main switch and a number of fuseholders.

3.3.2 In the distribution cabinet a maximum of 4 fuses of 10A each shall be used for a full Collocation Cabinet Footprint and a maximum of 2 fuses of 10A each for a half Collocation Cabinet Footprint.

3.3.3 In the distribution cabinet fuses with a maximum value of 10 A shall be used.

3.4 48V DC no-break power supply

3.4.1 The switch- and distribution cabinet is provided with at least 5 fuseholders.

3.4.2 Each power cable for the 48V DC power supply shall be fused with a maximum total value of 130A for a full Collocation Cabinet Footprint and with a maximum of 65A for a half Collocation Cabinet Footprint.

3.4.3 In the switch- and distribution cabinet fuses with a minimum value of 10A and a maximum value of 63A shall be used.

3.5 Service Taker Equipment – heat production

3.5.1 Heat production is the total heat, regardless of the form in which it is produced or emitted. The total heat production of the Service Taker Equipment shall be less then 800W per cabinet.

3.6 Adjacent Collocation Facility- Lockable CDF Shelter

3.6.1 The Lockable CDF Shelter is designed for outdoor environments and is made of synthetic material.

3.6.2 The Lockable CDF Shelter has a capacity of 1200 one-to-one through connections of wire-pairs.

3.6.3 The Lockable CDF Shelter will be equipped with LSA-plus NT connection blocks.

3.6.4 Each LSA-plus NT connection block has a capacity of 100 one-to-one through connections of wire-pairs. The Lockable CDF Shelter can accommodate up to 12 Copper Facilities Links and 12 Tie Cables of up to 100 wire-pairs each terminating on up to 12 LSA-plus NT connection blocks.

3.6.5 Each Copper Facilities Link and each Tie Cable will be entered into the Lockable CDF Shelter from below through separate holes with an inner diameter of 26 mm.

3.6.6 The Lockable CDF Shelter is equipped with an earthing bar that KPN will terminate to ground. Resistance to earth will be a maximum of 10 Ohms. Service Taker shall connect the metallic sheath or the ground wire of its Copper Facilities Link to the Lockable Shelter earth bar.

3.6.7 KPN will provide the Lockable CDF Shelter without any locks. Service Taker is responsible for the locks. Locks can be purchased at the company "Isolectra" as "Lock for a K1200 cabinet for MDF Access".

3.6.8 The Lockable CDF Shelter will be provided without power supply and without lighting.

3.6.9 Installation of Service Taker Equipment in the Lockable CDF Shelter is not allowed.

3.7 Streetcabinet

3.7.1 Streetcabinet Collocation can only be used in conjunction with Adjacent Collocation.

3.7.2 MDF Backhaul Service is optional with Streetcabinet Collocation.

3.7.3 A concrete slab will be provided by KPN as a foundation for the Service Taker Streetcabinet. This concrete slab has the following maximum dimensions: 2,0m width, 2,0 height and 0,14m depth.

3.7.4 The concrete slab will be placed on a bed of sand.

3.7.5 The Service Taker Streetcabinet for Streetcabinet Collocation has a maximum width of 3,0m, a maximum height of 1,8m and a maximum depth of 0,8m.

3.7.6 The Streetcabinet shall comply with fire and security regulations. Service Taker is responsible for installing these measures.

3.7.7 If the Streetcabinet is placed within 5 meters of a KPN Building, the Streetcabinet shall comply with additional KPN fire and security regulations. Service Taker is responsible for installing these measures.

3.7.8 If the Streetcabinet is placed outside fences of the Service Facility, but still within the Service Facility, fences shall be secured against unauthorised access via the Streetcabinet. Service Taker is responsible for the costs regarding these security measures.

3.7.9 The Streetcabinet Collocation Space is provided with an earthing bar that KPN will terminate to ground. Resistance to earth will be a maximum of 10 Ohms. Service Taker shall connect the metallic sheath or the ground wire to the earth bar.

3.7.10 The Streetcabinet Collocation Space will be provided without power supply and without lighting. Service Taker is responsible for installation of its power supply.

3.7.11 The Streetcabinet is to be placed in the center of the Streetcabinet Collocation Space, as described in art 3.7.3, under the directions of KPN.

3.7.12 KPN provides tie cables (BS-cable 4*100” Norm 92 BB 50x4x0,5). Optional DS-cables and BS-cables can be provided on request of Service Taker.

3.7.13 KPN provides cable ducts within the Service Facility. Tie Cables will be placed in one cable duct.

3.7.14 Tie cables will be provided with an extra length of 1,5m on the side of the Adjacent Collocation Facility and an extra length of 4m on the side of the Streetcabinet.

3.7.15 KPN will supply cable ducts within Service Facility for power supply. Service Taker must provide power supply cable and installation of power supply cable.

3.7.16 Service Taker must provide the Fibre Facility Link. Cable Duct and Cable Tube (HDPE 40mm) for the Fibre Facility Link is provided by KPN.

3.7.17 KPN provides the Fibre Facility Link if Streetcabinet Collocation is combined with MDF Backhaul.

3.7.18 Service Taker is responsible for access to and locking of Streetcabinet Facility.

3.8 Collocation Distribution Frame (CDF)

3.8.1.1 The Collocation Distribution Frame (CDF) is a standard industrial cabinet with dimensions as defined in ETS 300 119. The height of the cabinet depends on the height of the Collocation Space.

3.8.1.2 The Collocation Distribution Frame has a capacity of 1300, 1100 or 900 one-to-one through connections of wire-pairs depending on the height of the Collocation Space.

3.8.1.3 The Collocation Distribution Frame will be equipped with LSA-plus panels. Each panel will be provided with two LSA-plus NT 10x10DA cassettes with separation strips.

3.8.1.4 Each panel has a capacity of 100 one-to-one through connections of wire-pairs.

3.9 Joint Enclosure Facility

3.9.1 The size of the Lockable CDF Shelter has the following maximum inside measures: width of XXXXX (TBD)m, a maximum height of XXXXX (TBD)m and a maximum depth of XXXXX (TBD)m.

3.9.2 The Joint Enclosure Facility shall comply with fire and security regulations. Service Taker is responsible for compliance to these regulations.

3.9.3 The Lockable CDF Shelter is provided with an earthing bar that KPN will terminate to ground. Resistance to earth will be a maximum of 10 Ohms. Service Taker shall connect the metallic sheath or the ground wire to the earth bar.

3.9.4 The Lockable CDF Shelter will be provided with standard 230V AC unmonitored power supply and with a single lighting point. Service Taker can request optional 48V DC No Break power supply

3.9.5 KPN provides tie cables (BJ-cable (XXXXXX SPECS TBD)). Optional DJ-cables and BJ-cables can be provided on request of Service Taker.

3.9.6 KPN provides cable ducts to the Joint Enclosure Facility. Tie Cables will be placed in one cable gully.

3.9.7 Tie cables will be provided with an extra length of XXXXXX (TBD) m on the side of the CDF and an extra length of XXXXX (TBD) m on the side of the Service Taker in the Joint Enclosure Facility.

3.9.8 KPN will supply cable ducts within the Joint Enclosure Facility for power supply. Service Taker must provide the power supply cable and install the power supply cable to Service Taker Equipment.

3.9.9 Service Taker must provide the Fibre Facility Link. Cable Duct and Cable Tube (HDPE 40mm) for the Fibre Facility Link will be provided by KPN to the nearest manhole. If the manhole is not within 5 m of the Lockable CDF Shelter, Service Taker shall be responsible for the provisioning of this manhole.

3.9.10 KPN provides the Fibre Facility Link for Backhaul in the Joint Enclosure.

3.9.11 Service Taker is responsible for access to and locking of the Lockable CDF Shelter.

4 References

ETS 300 019-1-3	Environmental conditions and environmental tests for telecommunications equipment
ETS 300 119	European telecommunication standard for equipment practice, parts 1 to 4 inclusive
ETS 300 132-2	Power supply interface at the input to telecommunications equipment; Part 2: operated by direct current (dc)
ETS 300 253	Earthing and bonding of telecommunications equipment in telecommunications centres
ETS 300 386-1	Public telecommunication network equipment; Electro Magnetic Compatibility (EMC) requirements. Part 1: Product family overview, compliance criteria and test levels
EN 55022	Limits and methods of measurement of radio interference characteristics of information technology equipment
ICNIRP	International Commission on Non-Ionising Radiation Protection
NEN 1010	Safety stipulations for low-voltage installations.
NEN 3140	Low-voltage installations; provisions for carrying out work, inspection and maintenance safely
SI-212219010	General safety and environmental requirements for equipment and materials, issue 5, dated 931229; published by KPN. See Appendix I.

- End of Technical Manual-