



Customer Interface Publication: CIP0023

Technical Characteristics of the KCOM Group PLC Intelligent Network Customer Controlled Call Management service

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The information in this document is provided in accordance with the requirements of the Radio Equipment and Telecommunications Terminal Equipment Regulations 2000 (Statutory Instrument 2000 No. 730) to publish (in accordance with the EC Radio and Telecommunications Terminal Equipment Directive 99/05/EC) technical characteristics of interfaces to the public fixed telephone network.

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Contents

1. Scope	3
2. Outline Service Description	3
3. The Network Termination Point	4
4. Electrical and Transport Characteristics of the Interface	4
5. Safety & EMC Information	4
6. Terminal Equipment Specifications	5
7. Glossary	5
8. References	6

1. Scope

This document specifies the technical characteristics of the interfaces operated by KCOM Group PLC delivered to a customer of the KCOM Group PLC Customer Controlled Call Management service at the Network Terminating Point (NTP).

Changes to the network interfaces that affect the correct working of the service will be published by KCOM Group PLC in documents made available from the address below. If the changes impact on this document then it will be updated.

Enquiries relating to the technical content of this document and the availability of other publications should be directed to:

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2. Outline Service Description

The KCOM Group PLC Customer Controlled Call Management service enables Intelligent Network Number Translation Service (NTS) calls made to the customer Intelligent Network (IN) Number (s) to be directed to agreed destinations but controlled to their destination by logic provided in Customer Equipment. The service is delivered on a Cisco software platform that consists of the Network Applications Manager (NAM)^[1] and the customer specific Intelligent Contact Manager (ICM)^[1]. The outline system is shown in the following diagram.

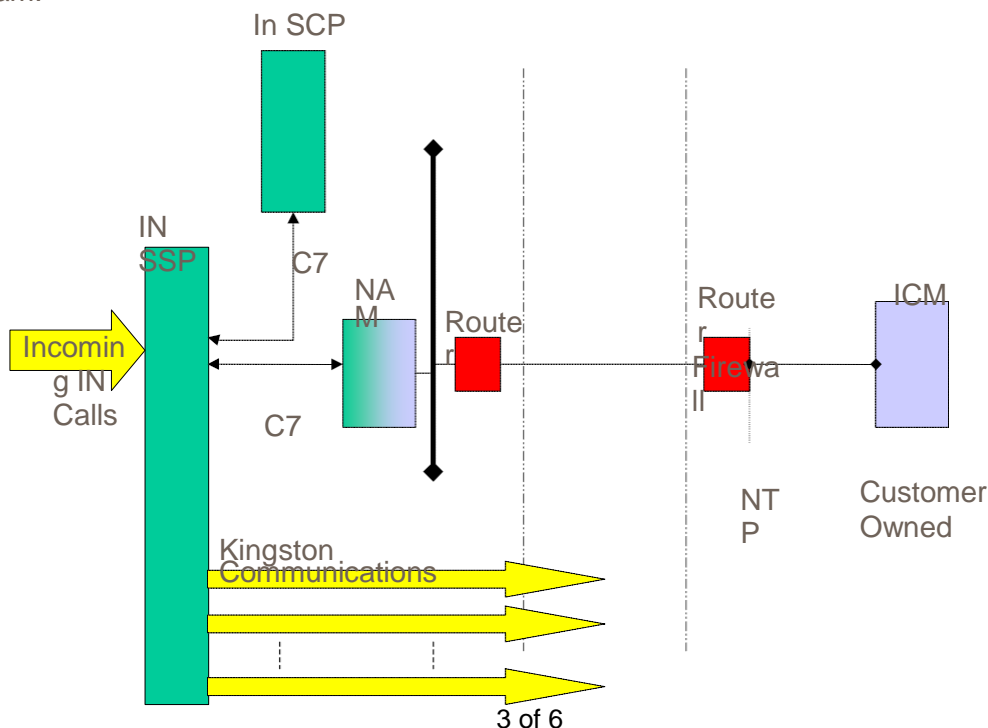


Figure 1. System Outline

IN NTS numbers are processed in the following manner. Call information is processed in the KCOM Group PLC IN Service Control Point (SCP) and identified as numbers allocated to the Customer. The C7 call data is referred by the SCP to the NAM and delivered over IP to the Customer ICM. The ICM provides final routing call parameters, which are returned via the NAM to the Service Switching Point (SSP) for final call completion. The NAM holds a schedule of allowable call activity and checks for valid call completion details before passing these by C7 to the SSP for the call to be routed to termination.

3. The Network Termination Point

The network termination point shall be presented as an RJ45 connector socket on the KCOM Group PLC Router- Firewall, on the Customer Premises

Pin Number	Signal
1	Transmit +
2	Transmit -
3	Receive +
4	Unused
5	Unused
6	Receive -
7	Unused
8	Unused

4. Electrical and Transport Characteristics of the Interface

The physical interface is a 10Mbit/s and 100Mbit/s digital interface delivered in accordance with IEEE 802.3^[2] ("Ethernet").

The communication protocol between the NAM and ICM is the proprietary Cisco Intelligent Network Call Routing Protocol (INCRP) protocol over TCP/IP. Information on Cisco's products can be found in the relevant Cisco Product Documentation^[1].

The Customer ICM software is required to operate at the same application software revision as the KCOM Group PLC NAM. KCOM Group PLC will provide the NAM software revision information upon request.

5. Safety & EMC Information

Safety

The normal working voltages of the 10/100Mbps line interfaces are defined in IEEE 802.3^[2]. The interface presented to the customer is classified as unexposed as defined in CENELEC Report/ETSI Guide ROBT-002/EG 201 212^[3].

The network equipment and network terminating equipment related to the provision of the interface comply with the current EMC regulations.

Whilst predominantly intended to be installed in commercial and light industrial environments, this does not preclude the interface being installed in other environments e.g. industrial.

6. Terminal Equipment Specifications

There are no recommended terminal equipment performance specifications available. The manufacturer is referred to the service definition specified in IEEE 802.3^[2] for the compliance of equipment connected to the NTP.

The minimum recommended terminal equipment EMC specifications are listed in the Official Journal of the European Communities for use under the Electromagnetic Compatibility Directive (89/336). The lists are updated regularly and the terminal manufacturer is recommended to comply with the listed standards applicable to their equipment and the target electromagnetic environment.

The minimum recommended terminal equipment electrical safety specifications are listed in the Official Journal of the European Communities for use under the Low Voltage Directive (73/23/EEC). The lists are updated regularly and the terminal manufacturer is recommended to comply with the listed standards applicable to their equipment.

7. Glossary

BSI	British Standards Institute
EMC	Electromagnetic Compatibility
IEEE	Institute of Electrical and Electronic Engineers
ICM	Intelligent Contact Manager*
IN	Intelligent Network
INCRP	Intelligent Network Call Routing Protocol*
NAM	Network Applications Manager*
NTP	Network Terminating Point
NTS	Number Translation Service (IN)
NTTA	Network Terminating and Test Apparatus
SCP	Service Control Point (IN)
SSP	Service Switching Point (IN)
TCP/IP	Transport Control Protocol/Internet Protocol

*Cisco Product Terminology

8. References

Ref	Standard/Docum	Title	Date
[1]		Cisco ICM Hosted Product documentation	
[2]	IEEE 802.3 : 1998	Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks—Specific requirements--Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications	1998
[3]	R0BT-002/EG 201 212	Electrical Safety ; Classification of interfaces for equipment to be connected to telecommunications networks	1998

Cisco documents [1] may be available from:

Cisco Systems, Customer Contact Business Unit
Address: 1414 Massachusetts Avenue, Boxborough, MA 01719, USA
Telephone: +1 978 936 0001

The above documents [2] and [3] may be obtained from:

British Standards Institution
Customer Services, Sales Department
389 Chiswick High Road,
London W4 4AL
Telephone : 0208 996 9001

Facsimile : 0209 996 7001

8. History

Date	Issue	Comments	Author
May 2004	Issue 1.0		M. D. Crowther
October	Issue 2.0	Minor text changes	M. D. Crowther
August 2007	Issue 2.1	Change of company name to KCOM Group PLC.	M. D. Crowther
April 2016	Issue 2.2	Change of company name to KCOM and document formatting changes	Amanda Woodard