INDEX OF NETWORK DESIGN-RELATED
DMS-100/200 DOCUMENTATION

Network Design

DMS-100/200 Documentation Review - GENERAL

I. DOCUMENTATION-GENERAL

A) SWBT-GHQ

Letter File Subject No.	Letter Signed by	Letter Addressed to:	Contents Summary
219.02 (8-1-86)	AVP-NCOE	State 5th levels Ntwk.-Sw. Svcs., Planning, Staff Opr. Svcs. and NCOO	Explains SWBT arrangement with NTI to send DMS-10 and 100/200 docum. issues to two special mailing lists. Attachments contain GHQ/State/Section department heads and division levels list and Engrg. Ref. library or equiv. list. Has ordering instr. and NTI docum. catalog also.
225.1002 (6-17-85)	Div. Staff Mgr.-Network Design	State Div. levels Ntwk.- Sw. Svcs., Engrg.	Comparison of DMS-100F and 5ESS real time processor utilization using sample office data.

B) NTI

Documentation Catalog (DMS 10&100 Family		March, 1986 & update dated July, 1986	Listing of NTI Mktg. Bulletins, Practices, Planning Letters, etc. with issue nos. Explains the types of letters, also.
Mktg. Bulletin D100-8627, iss #1		7-8-86	Listing of all currently available General Feature Descriptions (GFDs)

Letter File Subject No.	Letter Signed by	Letter Addressed to:	Contents Summary
C) BELLCORE			
Numerical Index- Division 241 General Trade Swg. System		2/86 Issue 4	Listing of Bellcore Practices for DMS-10 (241-100 series) and DMS-100/200 (241-200 series)

DMS-100
NETWORK DESIGN-RELATED
NORTHERN TELECOM PRACTICES/SPECS.

NTP 297-1001-001   Master Index of Practices

NTP 297-1001-100   System Description

NTP 297-1001-101   Central Control Complex

NTP 297-1001-103   Peripheral Modules

NTP 297-1001-104   Message System Description

NTP 297-1001-106   Call Processing System

NTP 297-1001-107   Maintenance & Administration Tools

NTP 297-1001-108   Software System

NTP 297-1001-114   Operational Measurements

NTP 297-1001-114   Supplement to OM's Practice

NTP 297-1001-320   Operational Measurements Reference Manual

NTP 297-1001-321   Traffic Separation Measurement System Ref. Manual

NTP 297-1001-450   Provisioning

NTP 297-1001-455   Office Parameters Reference Manual

NTP 297-2001-100   IBN System Description

NTP 297-2001-103   IBN Feature description

NTP 27-2001-450   IBN Data Engineering Guide

NTP 27-2271-450   TOPS Traffic Provisioning

NTP 297-2271-100   TOPS System General Description

GS0X01   Index of General Specifications

DMS-100
NETWORK DESIGN-RELATED
NORTHERN TELECOM PRACTICES/SPECS.

DMS-100   Technical Specifications

DMS-200   Technical Specifications

(Note: Tech. Specs. contain information on system capacity and performance, engineering
        description, feature description, call processing descriptions, administration,
        signalling, interfacing, transmission, power, etc.)

PAQS-100 User Guide   Provision and Quotation System (contains
                                           instructions on how to logon and use the system)
                                           Dated 2-21-86, 2.08 issue

During 1987, NTI expects to distribute its new mechanized ordering system called PROMPT,
Product Management and Provisioning Tool. Telcos have had and are supposed to have more
input to this program to make it usable and acceptable to us. This system will mechanize the
ordering process and, in the second phase, will replace PAQS, also. More on this will be
forthcoming in 1987, hopefully.

DMS-100   Feature Description Manual (laser print volume)

                                           - Descriptions of DMS-100 features in order of
                                             major feature package PEC number (NTX_____) &
                                             individual feature number.

DMS-100   Business Services Handbook, Volume 1

                                           - Contains descriptions of all Meridian Digital
                                             Centrex (IBN/ESN) features in alphabetical
                                             order as well as description of IBN, customer
                                             equipment, & software packages for IBN.
                                             DATAPATH also incl.

DMS-100 BELLCORE PRACTICES

BR 241-100-010   12-84   DMS-100 Swg. Systems Operations Plan

                                       - Describes overall DMS-100 switch, network
                                         engineering & administration responsibilities;
                                         does same for maintenance, billing, ntwk. mgmt.
                                         Also contains listing of other 1984 BELLCORE
                                         letters on many DMS-100 issues.

BR 241-220-080   9-85   Capacity Analysis-Network Administration DMS-100/200

                                       - Explains capacity determination and loading
                                         plan responsibilities of administration and
                                         design; has worksheets for number, network,
                                         LCM, svc. ckt., announcement capacity
                                         determination.

BR 241-220-011   4-85   Line and Number Assignment Overview - Network
                                       Administration

                                       - Outlines line and number considerations for
                                         balance, etc. Good for Ntwk. Design, too.

SWBT DMS-100 Practices

SW 235-060-900   Network Design
(issue A, September, 1984)   Order Preparation
                                      DMS-100/200

SW 241-060-900   Same practice as
(May, 1987)   above, but updated
                                      and number changed
                                      to include it in
                                      Gen. Trade Swg.
                                      System BSP's.

II.   Capacity/Design Documentation

A)   SWBT-GHQ Letters/Practices

File Subject	Addressed To:	Signed By:	Letter Date	Contents Summary
225.1001	State 5th lines-Ntwk. Engrg., Admin., Mtce.	AVP-NCOE AVP-NCOO	5-87	Recommends use of ACTIVITY and ANALYSIS reports and urges interdepartmental cooperation in securing these reports for Network Design use. Contains detailed description of the reports.
225.1001	State 5th lines-Ntwk. Engrg./Sw. Svcs.	AVP-NCOE AVP-NP	12-16-86	Urged Ntwk. Des. to study impact of 800 SSP, TICS, LEAS, etc. on machine capacity. Lists current docum. on same.
225.1001	State 5th lines-Ntwk. Engrg./Sw. Svcs.	AVP-NCOE	9-18-86	Recommended CPOCC loading guidelines and sample office CPOCC analysis. Transmits NTI SEB 86-06-001 on CPU capacity.
225.1001	State 5th lines-Ntwk. Engrg./Sw. Svcs.	AVP-NCOE	4-17-86	Transmitted updated process call timing values from NTI. Second letter with same date Second letter with emphasized CPU load recommended max for TOPS office and warned that Bellcore IL 86-030-019 on same subject was unofficial.
225.1001	State 5th lines-Ntwk. Engrg/Sw. Svcs.	AVP-NCOE	3-27-86	Announced meeting for state district levels w/GHQ to discuss real time capacity problems 4-23-86. Recommended max. loading of processor of 65% for non-TOPS office.

File Subject	Addressed To:	Signed By:	Letter Date	Contents Summary
225.1001	State Div. levels-Ntwk.	Div. Staff	2-26-86	Transmitted NTI PL's 84-03-001 and 85-08-002 on real time
225.1002	Engrg./Sw. Svcs.	Mgr-Ntwk., Design		capy. Prediction and Line Peripheral capy. Also, Bellcore's LG CALC100 and NETCALC100 capacity prediction programs. Since NTI's RTCALC program became available, BellCore has discontinued its programs.
225.1001	State 5th lines-Ntwk. Engrg./Sw. Svcs.	AVP-NCOE	2-27-86	Announced schedule for real time review by NTI and SWBT-GHQ reps. of states' capy. limiting machines. Real time input forms attached.

B) NTI - Letters/Practices

Letter	Date	Title & Contents Summary
		CPU Capacity Guidelines & Issues. Detailed Account CPU
SEB 86-06-001 (#1) (Swg. Engrg. Bulletin)	6-30-86	real time functions in call processing and in overhead.
MB-D100-8615 (#1) (Mktg. Bulletin)	6-20-86	DMS-100 Central CPU Capacity. Highlights capacity enhancements of 40-MHz clock, UTR, and deferred AMA formatting; and ECORE for 2nd half '88.
SEB86-05-003 (#1)	5-7-86	Data Gathering Method for CPU Real Time Verification. Method of procedure for accessing the switch to get OM's, TSMS, ACTIVITY, & ANALYSIS data.

II. Capacity/Design Documentation (cont'd)

B) NTI - Letters/Practices (cont'd)

Letter	Date	Title & Contents Summary
SAL 86-04-001 (#1) (System Application Letters)	4-14-86	REAL::TIME Capacity Information. Initially for NTI engineers use to validate/calculate figures for input to REAL::TIME capacity program. Explains basic traffic theory and guides you through the input worksheets with definitions, etc.
MB-D100-8608 & F1489 NTX291AA01 (Feature Description)	2-21-86 5-15-85	ACTIVITY Enhanced Real Time Indicator Describes ACTIVITY tool and commands needed to activate it.
MB D100-8608 (#1)	2-21-86	Deferred Bellcore AMA Formatting. Explains this real time saving feature.
SEB 86-11-002 (#1)	2-6-87	System Performance and Analysis. Discusses Maintenance Operational Measurements (OM) and logs, the "Lazy H" concept and how OM's fit into it, service criteria, and ACTIVITY Reports. Good OM reference.
SPL 84-03-001 (#2) (System Planning Letter)	11-5-85	DMS-100 Family Real Time Capacity Prediction. Worksheets, instructions, and call timings for manual CPU occupancy predictions. Earlier issue #1, dated 6-11-84 is basically the same with more call type description details.
SEA 86-09-002 (#1) (System Engrg. Alert)	9-23-86	Activity, Ntwk., Mgt. & MACHACT Measurement

B)   NTI - Letters/Practices (cont'd)

SEA 86-08-001 (#1)	8-21-86	ACT100 LOG OUTPUT
3212-RT-850901	10-85	REAL::TIME. The grey binder with instructions and diskettes for this CPU real time capacity program. Runs on LOTUS 1-2-3 and PC.
PL 85-05-002 (Planning Letters)	7-10-85	DMS-100 Family Distributed Processing Peripheral. Explains DPP module operation and software/hardware required. Real time capacity savings mentioned generally.

Peripheral Capacity Letters

SEB 86-05-001 (#1)	5-5-86	BCS-19 New Peripheral Capacity Guidelines. Written for NTI engineers, but can be used by telco to calculate peripheral controller capacity based on per call timings.
SEB 86-05-002 (LCM Capacity Guidelines)	5-6-86	
PL85-08-002 (#1)	8-30-85	New Line Peripheral-Feature Call Attempt Capacity. Engineering guidelines for BCS-17 LCM & LGC capacity determination and balancing. Particular emphasis on IBN-MADN line calculations and maximums per LGC and LCM. Worksheets included.
SWBT-GHQ 280.0610 and 225.1001 (Sgd. by Div. Stf. Mgr.- Swg. & Div. Stf. Mgr.- Ntwk. Design)	11-18-86	Sent to state division level engineering, Mtce. and Admin. Transmits assignment rules for MADN lines to LCM and LGC. These match the rules set forth in PL85-08-002.
SEA 86-08-002 (#1) (System Engrg. Alert)	8-21-86	Digital Trunk Controller/Call Attempt Capacity
SEA 86-10-002	10-20-86	LGC & Remote Cluster Controller (RCC) Call Processing Capacity

Peripheral Capacity Letters (cont'd)

SAL 85-10-001 (#1)   10-21-85   DMS-100F LGC Capacity Enhancement
                                  Overview and Guidelines. Intended
                                  for NTI engineers, Identifies
                                  existing design capacities of the LGC
                                  and projects LGC capacity increases
                                  associated with BCS-18 thru 20.
                                  Contains good explanation of the LGC
                                  processor real time model and
                                  worksheets for LGC capacity
                                  determination.

SEB 86-10-002 (#1)   2-13-87   LGC Capacity Study. Specific
                                  analysis of Southern Bell Miami
                                  Airport projected LGC capacity.

SEB 87-02-005 (#1)   2-27-87   BCS21 New Peripheral Processor
                                  Occupancy and Per Call Timing Tables.

SEB 86-10-004 (#1)   3-13-87   New Peripheral Real Time-PRTCALC1
                                  Users Guide Explanation of peripheral
                                  real time program and instructions
                                  for inputs, etc.

C) BELLCORE Capacity Letters

IL-86/04-072   4-30-86   Digital Swg. Notes-Articles on DMS-
                                  100F peripheral and LGC load testing
                                  and capy. prediction.

DMS 100 Family

Subject - Related Documents

for Network Design Reference

Meridian Digital Centrex

(IBN) - MADN

NTI PL84-02-002 (#1)	2-21-84	IBN overall system Description
NTI MB-85-12-01 (#1) (Mktg. Bulletin)	12-9-85	IBN Business Set Application Guide. Section 3 explains MADN feature and its operation.
NTI PPL83-12-002	12-19-83	IBN Business Set-Description
SWBT Letter 280.0610/225.1001 (Sgd. by Div. Stf. Mgr.- Swg. & Div. Stf. Mgr.- Ntwk. Design) (to state Ntwk. type Div. levels)	11-18-86	Transmits MADN assignment guidelines emphasizing impact of MADN on LGC capacity and importance of balancing MADN groups and members.
NTI SAE 86-09-001 (#1) (System Engrg. Alert)	9-10-86	IBN-MADN (Multiple Access Directory Number) Provisioning
PL 84-02-001 (#1)	2-8-84	DATAPATH Feature Release Program. Explains how this digital data transport system works, hardware, and software requirements
PL 86-05-005 (#1)	11-21-86	Large Business Remote Explains this new remote for Meridian Digital Centrex (formerly IBN), SS#7, Fiber, and ISDN services for single or multi-tenant arrangements. Provisioning, hardware and software requirements included.
Bellcore IL-84/07-041	7-20-84	Comparison of DMS-100 IBN and 1AESS Centrex station features.
NTI PL 84-02-003 (#1)	2-27-84	IBN Operational Measurements Explains IBN registers and data, when each is pegged, etc.
NTI PL 86-07-002 (#1)	11-7-86	Automatic Call Distribution (ACD). A feature of Meridian Digital centrex which offers centrex customers with large volumes of incoming calls the ability to have a cluster of individuals answer those calls as an ACD group. Functional description document.
NTI SEA 87-03-002 (#1)	3-3-87	DMS100F Real Time Impact of Hunt Groups. BCS21 improvement in CPU real time from 5.5 ms additive in BCS20 and lower to 2.5 ms additive in 21.

DMS 100 Family

Subject - Related Documents

for Network Design Reference

TOPS   (Traffic Operator Position System)

NTI SPL 84-01-001 (#1) (1-26-84)	DMS-200 operator Services Planning Letter	Contains specific description of TOPS and how it works with DMS-200. Engineering and provisioning info. included.
NTI 83-10-003 (#2) (11-4-83)	DMS-200 TOPS Operator Centralization (OC)	Contains description of OC remote arrangement with DMS-200. Engineering and provisioning info. included.
NTI MB-D100-8541 (#2) (7-3-86)	TOPS Multipurpose Position	Announces MP position and the different issues and availability dates of those issues. General description only.
NTI PPL 84-06-002 (#1) (7-27-84)	Verification in TOPS Host and Remote OC offices	Explains how verification process works in TOPS environment.
NTI PPL 84-04-001 (#1) (5-21-84)	Mechanized Calling Card Service	Explains this feature in TOPS environment. Fairly detailed.
Bellcore IL 85/12-049	Comparison of TOPS Features with OSSGR	Feature-by-feature code indication as to whether feature is defined in OSSGR, planned by NTI, etc.
Bellcore AR-TSY-000263 (5/86, issue 1)	TOPS & BCS19 Technical Analysis Report	Results of feature Testing. Restricted.
Bellcore IL-86/06-032	Field Testing of TOPS & BCS18	Results of feature testing. Restricted.
Bellcore IL-86/03-019	DMS-200 TOPS Real Time Capacity Guidelines	Recommends loading less than or equal to 58% of total CPU capacity (70% of CP capacity) for initial TOPS office. Recommends use of ACTIVITY data to verify actuals.
NTI SEA87-03-001 (#1) dated 3-3-87	TOPS Multipurpose Position.	NTI System Engineering Alert which maintains no real time impact over current TOPS IV positions.

TOPS Interlata Carrier Svc. (TICS)

1) PL 86-09-003
dated 10-24-86

NTI's Planning Letter
detailing the TICS feature,
memory requirements, and
Real Time impact.

2) SEA 86-11-001
dated 11-10-86

NTI's System Engineering
Alert on call timings for
TICS-by call type.

3) GFX 714AA01
dated 9-26-86
Release 01.01 DRAFT

NTI's General Feature description
draft explaining the TICS feature
in detail. Includes routing
scenarios, etc.

EADAS

NTI MB-D100-8653 (#1) (11-7-86)	Interface to EADAS/ DC and EADAS/NM In-Service Announcement	References EADAS interface working in Springfield, Illinois and general availability with BCS 20.
NTI PL 86-06-003 (#1) (11-19-86)	EADAS-NM & DMS-100	Explains how the two will interface and the software/ hardware requirements.
NTI PL 85-05-002 (#1)	EADAS-DC & DMS-100	Explains how the two will interface and the software/ hardware requirements.

ISDN

NTI PL 86-01-001 (#1) (1-27-86)	DMS-100 ISDN Architecture PL	Describes ISDN and how it will work in DMS-100. Provisioning info. included.
NTI PL 86-01-001 (#2) (3-6-87)	DMS-100 ISDN Implementation	An update of issue #1.

800-SSP

1) PL 86-01-004   NTI's Planning Letter on 800
    dated 2-3-87   Service. Includes call timing,
                                      software, and hardware information.

2) SEA 86-08-003   NTI's System Engineering alert
    dated 8-21-86   on 800 Service call timings.

3) SEA 87-01-002, issue #1   NTI's System Engineering
    dated 1-13-87   alert on using RTCALC program for
                                      determining impact of 800 service
                                      calls on processor real time.

4) PL 86-10-001, issue #1   NTI's Planning Letter on SS7
    dated 2-3-87   Trunk Signaling. Includes software
                                      and hardware provisioning
                                      information.

Lata Equal Access Sys.   (LEAS)

1)MB D100-8604   NTI's Marketing Bulletin
dated 7-1-86   announcing the LEAS feature package.

2)   NTI Letter, signed by LEAS processor call timings.
                                 John Mayton, District Sales No planning letters issued yet
                                 Mgr. (dated 8-8-86) and to confirm these call timings.
                                 included in joint AVP-Ntwk.
                                 Plng./AVP-Ntwk. COE letter,
                                 file subject 220.26, date
                                 11-20-86.

3)   GFX710AA01, Release 01.01 NTI's General Feature Descrip-
                                 dated 8-4-86 (draft only) tion, distributed at 8-14-86
                                 and other draft feature NTI presentation in St. Louis
                                 descriptions, product specs. on LEAS. Does not contain
                                 Also included in joint AVP specifics on Real Time (call
                                 letter referenced in item 2. timings) but does have some memory
                                 requirements listed.

Enhanced Core (ECORE)

    PL 86-09-002   NTI's Planning Letter
    dated 10-31-86   describing ECORE, including
                                                 provisioning information.

Line Information Database (LIDB)
and Exchange/Exchange Access Alternate
Billing Service (ABS)

Only preliminary documents - GFD drafts and copies of visual slides - provided by NTI at the October 14, 1986 NTI Presentation on these items in St. Louis. The TICS feature is required for these items, but no planning or engineering specific information is yet available from NTI on the Real Time or memory impact of these items.