

# Program Directory for X.25 NCP Packet Switching Interface (X.25 NPSI)

Version 3 Release 9
Program Number 5688-035

for Use with VSE/ESA

Document Date: October 1998

GI10-6558-00

— I	Note

Before using this information and the product it supports, be sure to read the general information under "Notices" on page v.

This program directory, dated October 1998, applies to X.25 NCP Packet Switching Interface Version 3 Release 9 for VSE/ESA (X.25 NPSI V3R9 VSE), program number 5688-035 for the following:

CLC	Feature Numbers	System Name	
9E0	5427/5428/7559	VSE/ESA	

and to all subsequent releases and modifications until otherwise indicated in new editions.

A form for reader's comments appears at the back of this publication. When you send information to IBM, you grant IBM a nonexclusive right to use or distribute the information in any way it believes appropriate without incurring any obligation to you.

#### © Copyright International Business Machines Corporation 1981, 1998. All rights reserved.

Note to U.S. Government Users — Documentation related to restricted rights — Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

# Contents

Notice to Users of Online Versions of This Book         v           Trademarks         v           1.0 Introduction         1           2.0 Program Materials         3           2.1 Basic Machine-Readable Material         3           2.2 Optional Machine-Readable Material         4           2.3 Program Publications         4           2.3.1 Basic Program Publications         4           2.3.2 Optional Licensed Program Publications         4           2.3.3 Softcopy Publications         4           2.3.4 Publications Associated with X.25 NPSI V3R9 VSE         5           2.4 Program Source Materials         5           5 Publications Useful During Installation         5           3.0 Program Support         7           3.1 Preventive Service Planning         7           3.2 Statement of Support Procedures         7           4.0 Program and Service Level Information         5           4.1 Program Level Information         5           4.2 Service Level Information         5           4.3 Cumulative Service Tape         5           5.0 Installation Requirements and Considerations         11           5.1.1 Operating System Requirements         11           5.1.2 Machine Requirements         11	Notices	
1.0 Introduction       1         2.0 Program Materials       3         2.1 Basic Machine-Readable Material       4         2.2 Optional Machine-Readable Material       4         2.3 Program Publications       4         2.3.1 Basic Program Publications       4         2.3.2 Optional Licensed Program Publications       2         2.3.3 Softcopy Publications Associated with X.25 NPSI V3R9 VSE       5         2.4 Program Source Materials       5         2.5 Publications Useful During Installation       5         3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       11         5.1.2 Operating System Requirements       12         5.2.3 Programming Requirements       12     <		
2.0 Program Materials       3         2.1 Basic Machine-Readable Material       3         2.2 Optional Machine-Readable Material       4         2.3 Program Publications       2         2.3.1 Basic Program Publications       2         2.3.2 Optional Licensed Program Publications       2         2.3.3 Softcopy Publications       4         2.3.4 Publications Associated with X.25 NPSI V3R9 VSE       5         2.4 Program Source Materials       5         2.5 Publications Useful During Installation       5         3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       5         4.1 Program Level Information       5         4.2 Service Level Information       5         4.3 Cumulative Service Tape       5         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.2 Deprating System Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       12         5.2.1 Operating System Requirements       12         5.2.3 Programming Requirements       12	Trademarks	V
2.1 Basic Machine-Readable Material       2.2 Optional Machine-Readable Material         2.2 Optional Machine-Readable Material       2.3 Program Publications         2.3.1 Basic Program Publications       2.3.2 Optional Licensed Program Publications         2.3.2 Optional Licensed Program Publications       2.3.3 Softcopy Publications         2.3.3 Softcopy Publications Associated with X.25 NPSI V3R9 VSE       5.2.2 Program Source Materials         2.4 Program Source Materials       5.2.3 Publications Useful During Installation         3.0 Program Support       7.3.1 Preventive Service Planning         3.1 Preventive Service Planning       7.3.2 Statement of Support Procedures         4.0 Program and Service Level Information       9.4.2 Service Level Information         4.2 Service Level Information       9.5 Service Level Information         4.3 Cumulative Service Tape       9.5 Service Level Information         5.1 Target System Requirements       9.5 Service Level Information         5.1 Target System Requirements       1.1 Service Tape         5.1 Deprating System Requirements       1.1 Service Tape         5.2 Programming Requirements       1.2 Service Tape         5.2.3 Pr	1.0 Introduction	
2.2 Optional Machine-Readable Material       4.3 Program Publications         2.3.1 Basic Program Publications       4.3 Easic Program Publications         2.3.2 Optional Licensed Program Publications       4.3 Easic Program Publications         2.3.3 Softcopy Publications       4.2 Easic Program Source Materials         2.4 Program Source Materials       5.5 Publications Useful During Installation         3.0 Program Support       7.3 Easic Program Support         3.1 Preventive Service Planning       7.3 Easic Program and Service Level Information         4.0 Program and Service Level Information       9.4 Easic Program Easic Progr	2.0 Program Materials	
2.2 Optional Machine-Readable Material       4.3 Program Publications         2.3.1 Basic Program Publications       4.3 Easic Program Publications         2.3.2 Optional Licensed Program Publications       4.3 Easic Program Publications         2.3.3 Softcopy Publications       4.2 Easic Program Source Materials         2.4 Program Source Materials       5.5 Publications Useful During Installation         3.0 Program Support       7.3 Easic Program Support         3.1 Preventive Service Planning       7.3 Easic Program and Service Level Information         4.0 Program and Service Level Information       9.4 Easic Program Easic Progr	2.1 Basic Machine-Readable Material	
2.3 Program Publications       2.3.1 Basic Program Publications       2.3.2 Optional Licensed Program Publications         2.3.2 Optional Licensed Program Publications       2.3.3 Softcopy Publications       2.3.4 Publications Associated with X.25 NPSI V3R9 VSE       5.2.3.4 Publications Associated with X.25 NPSI V3R9 VSE       5.2.4 Program Source Materials       5.2.5 Publications Useful During Installation       5.2.3.4 Program Support       7.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2		
2.3.1 Basic Program Publications       4         2.3.2 Optional Licensed Program Publications       4         2.3.3 Softcopy Publications       4         2.3.4 Publications Associated with X.25 NPSI V3R9 VSE       5         2.4 Program Source Materials       5         2.5 Publications Useful During Installation       6         3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       5         4.1 Program Level Information       5         4.2 Service Level Information       5         4.3 Cumulative Service Tape       5         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requirements       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
2.3.3 Softcopy Publications       4         2.3.4 Publications Associated with X.25 NPSI V3R9 VSE       5         2.4 Program Source Materials       5         2.5 Publications Useful During Installation       6         3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1 Operating System Requirements       11         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requirements       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
2.3.3 Softcopy Publications       4         2.3.4 Publications Associated with X.25 NPSI V3R9 VSE       5         2.4 Program Source Materials       5         2.5 Publications Useful During Installation       6         3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1 Operating System Requirements       11         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requirements       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
2.3.4 Publications Associated with X.25 NPSI V3R9 VSE       5         2.4 Program Source Materials       5         2.5 Publications Useful During Installation       5         3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       1         5.1 Target System Requirements       1         5.1.1 Operating System Requirements       1         5.1.2 Machine Requirements       1         5.1.3 Programming Requirements       1         5.1.4 DASD Storage Requirements       1         5.2 Program Considerations       1         5.2.1 Operating System Requirements       1         5.2.2 Machine Requirements       1         5.2.3.2 Functional Requisites       1         5.2.3.3 Compatibility Requisites       1         5.2.4 System Considerations       1         5.2.4 System Considerations       1	·	
2.5 Publications Useful During Installation       6         3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       11         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
2.5 Publications Useful During Installation       5         3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       1         5.1 Target System Requirements       1         5.1.1 Operating System Requirements       1         5.1.2 Machine Requirements       1         5.1.3 Programming Requirements       1         5.1 ADSD Storage Requirements       1         5.2 Program Considerations       1         5.2.1 Operating System Requirements       1         5.2.2 Machine Requirements       1         5.2.3 Programming Requirements       1         5.2.3.1 Minimum Requisites       1         5.2.3.3 Compatibility Requisites       1         5.2.3.3.1 NPM       1         5.2.4 System Considerations       13	2.4 Program Source Materials	
3.0 Program Support       7         3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       12         5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       12         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       12         5.1.1 Operating System Requirements       12         5.1.2 Machine Requirements       12         5.1.3 Programming Requirements       12         5.1.4 DASD Storage Requirements       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	· · · · · · · · · · · · · · · · · · ·	
3.1 Preventive Service Planning       7         3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       11         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	3.0 Program Support	
3.2 Statement of Support Procedures       7         4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       12         5.1.1 Operating System Requirements       13         5.1.2 Machine Requirements       14         5.1.3 Programming Requirements       15         5.1.4 DASD Storage Requirements       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	• • • • • • • • • • • • • • • • • • • •	
4.0 Program and Service Level Information       9         4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       12         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       12         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.4 System Considerations       13		
4.1 Program Level Information       9         4.2 Service Level Information       9         4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       12         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.4 System Considerations       13	4.0 Program and Service Level Information	
4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       12         5.1.1 Operating System Requirements       13         5.1.2 Machine Requirements       14         5.1.3 Programming Requirements       15         5.1.4 DASD Storage Requirements       15         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
4.3 Cumulative Service Tape       9         5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       12         5.1.1 Operating System Requirements       13         5.1.2 Machine Requirements       14         5.1.3 Programming Requirements       15         5.1.4 DASD Storage Requirements       15         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	4.2 Service Level Information	
5.0 Installation Requirements and Considerations       11         5.1 Target System Requirements       11         5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       12         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
5.1 Target System Requirements       1         5.1.1 Operating System Requirements       1         5.1.2 Machine Requirements       1         5.1.3 Programming Requirements       1         5.1.4 DASD Storage Requirements       1         5.2 Program Considerations       1         5.2.1 Operating System Requirements       1         5.2.2 Machine Requirements       1         5.2.3 Programming Requirements       1         5.2.3.1 Minimum Requisites       1         5.2.3.2 Functional Requisites       1         5.2.3.3 Compatibility Requisites       1         5.2.3.3.1 NPM       1         5.2.4 System Considerations       13	•	
5.1 Target System Requirements       11         5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       12         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	5.0 Installation Requirements and Considerations	1 <sup>4</sup>
5.1.1 Operating System Requirements       11         5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       11         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
5.1.2 Machine Requirements       11         5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       11         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
5.1.3 Programming Requirements       11         5.1.4 DASD Storage Requirements       12         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
5.1.4 DASD Storage Requirements       11         5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
5.2 Program Considerations       12         5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
5.2.1 Operating System Requirements       12         5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	· · · · · · · · · · · · · · · · · · ·	
5.2.2 Machine Requirements       12         5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
5.2.3 Programming Requirements       12         5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	· · · · · · · · · · · · · · · · · · ·	
5.2.3.1 Minimum Requisites       12         5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	·	
5.2.3.2 Functional Requisites       12         5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13		
5.2.3.3 Compatibility Requisites       12         5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	· ·	
5.2.3.3.1 NPM       13         5.2.4 System Considerations       13	·	
5.2.4 System Considerations		
, , , , , , , , , , , , , , , , , , ,		
5.2.5 Special Considerations	·	

6.1 6.	Installation Instructions Installing X.25 NPSI V3R9 VSE  1.1 Step 1: Defining the VSE Product Library  1.2 Step 2: Install Production Sublibrary	. 15 . 15
	Installation Using the VSE Interactive Interface	
App	endix A. APARs Incorporated into this Program	17
Read	der's Comments	19
Fig	gures	
1.	Basic Material: Program Tapes	
2.	Program Tape: File Content	
3.	Basic Material: Unlicensed Publications	
4.	Optional Material: Licensed Publications	
5.	Softcopy Publications	
6.	Publications Associated with X.25 NPSI V3R9 VSE	
7.	Publications Useful During Installation	
8.	PSP Information	
9.	Component ID	
10.	Space Requirements	
11.	NPM APARs Required for Compatibility with X.25 NPSI	
12.	Sample JCL to Define a VSE Library	
13.	Sample JCL to Install Production Sublibrary	16

#### **Notices**

References in this document to IBM products, programs, or services do not imply that IBM intends to make these available in all countries in which IBM operates. Any reference to an IBM product, program, or service is not intended to state or imply that only IBM's product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe on any of IBM's intellectual property rights may be used instead of the IBM product, program, or service. Evaluation and verification of operation in conjunction with other products, except those expressly designated by IBM, is the user's responsibility.

APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always contact the IBM Customer Support Center.

IBM may have patents or pending patent applications covering subject matter in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to the following address:

International Business Machines Corporation IBM Director of Licensing 500 Columbus Avenue Thornwood, New York 10594 USA

License holders of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

Site Counsel
IBM Corporation
P.O. Box 12195
3039 Cornwallis
Research Triangle Park, NC 27709 2195
USA

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement.

This document is not intended for production use and is furnished as is without any warranty of any kind, and all warranties are hereby disclaimed including the warranties of merchantability and fitness for a particular purpose.

#### Notice to Users of Online Versions of This Book

For online versions of this book, you are authorized to:

- Copy, modify, and print the documentation contained on the media, for use within your enterprise, provided you reproduce the copyright notice, all warning statements, and other required statements on each copy or partial copy.
- Transfer the original unaltered copy of the documentation when you transfer the related IBM product (which may be either machines you own, or programs, if the program's license terms permit a transfer). You must, at the same time, destroy all other copies of the documentation.

You are responsible for payment of any taxes, including personal property taxes, resulting from this authorization.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Some jurisdictions do not allow the exclusion of implied warranties, so the above exclusion may not apply to you.

Your failure to comply with the terms above terminates this authorization. Upon termination, you must destroy your machine-readable documentation.

#### **Trademarks**

The following terms are trademarks of the IBM Corporation in the United States or other countries or both:

Bookmaster **NTuneMON CBIPO** OS/2 CBPDO **RETAIN** FunctionPac SystemPac VSE/ESA IBM NetView WAT//

Microsoft, Windows, Windows NT, and the Windows 95 logo are trademarks or registered trademarks of Microsoft Corporation.

Other company, product, or service names may be trademarks or service marks of others.

# 1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of X.25 NPSI V3R9 VSE. You should read all of this program directory before installing the program, and then keep it for future reference.

The program directory contains the following sections:

- 2.0, "Program Materials" on page 3 identifies the basic and optional program materials and documentation for X.25 NPSI V3R9 VSE.
- 3.0, "Program Support" on page 7 describes the IBM support available for X.25 NPSI V3R9 VSE.
- 4.0, "Program and Service Level Information" on page 9 lists the program and service level information incorporated into X.25 NPSI V3R9 VSE.
- 5.0, "Installation Requirements and Considerations" on page 11 identifies the resources and considerations for installing X.25 NPSI V3R9 VSE.
- 6.0, "Installation Instructions" on page 15 provides detailed installation instructions for X.25 NPSI V3R9 VSE.
- Appendix A, "APARs Incorporated into this Program" on page 17 provides a list of APARs incorporated into X.25 NPSI V3R9 VSE.

Usage tiers are included on the base tape for this release of X.25 NPSI V3R9 VSE. It is not necessary to install separate tapes for usage tiers.

There is no longer a separate generation sublibrary. The generation sublibrary is now contained in the production sublibrary.

Before installing X.25 NPSI V3R9 VSE, read 3.1, "Preventive Service Planning" on page 7. This section tells you how to find any updates to the information and procedures in this program directory.

At the end of this program directory you will find a Reader's Comment Form. Please take the time to complete this form and return it to the address shown on the form. Your suggestions and comments help to improve this program directory and make installation easier.

# 2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for X.25 NPSI V3R9 VSE is 5688-035. Feature numbers associated with this release are provided in the following sections.

The program announcement material describes the features supported by X.25 NPSI V3R9 VSE. Ask your IBM marketing representative for this information if you have not already received a copy.

The following sections identify:

- · Basic and optional program materials available with this program
- Program publications
- · Program source materials
- Publications useful during installation

#### 2.1 Basic Machine-Readable Material

This section describes the basic machine-readable material for X.25 NPSI V3R9 VSE.

The distribution medium for this program is a track magnetic tape (written at 6250 BPI), a 3480 cartridge, or a 4-mm DAT. The tape or cartridge contains all the programs and data needed for installation. X.25 NPSI V3R9 VSE is installed using MSHP. See section 6.0, "Installation Instructions" on page 15 for more information about how to install the program.

Figure 1 describes the tape or cartridge.

Figure 1. Basic Material: Program Tapes

Medium	Feature Number	Physical Volume	External Label Identification
6250 tape	5427	1	NPSI V3R9 VSE
3480 cart.	5428	1	NPSI V3R9 VSE
4-mm cart.	7559	1	NPSI V3R9 VSE

Figure 2 describes the file content of the program tape or cartridge.

Figure 2. Program Tape: File Content

File	Name
1	Header
2	Product ID and history file
3	Product production library

## 2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for this program.

## 2.3 Program Publications

The following sections identify the basic and optional publications for X.25 NPSI V3R9 VSE.

## 2.3.1 Basic Program Publications

Figure 3 identifies the basic program publications for this program. One copy of each of these publications is included when you order the basic materials. For additional copies, contact your IBM representative.

Figure 3. Basic Material: Unlicensed Publications

Publication Title	Form Number
NCP Version 7 and X.25 NPSI Version 3 Planning and Installation	SC30-3470
X.25 NPSI Version 3 Host Programming	SC30-3502
X.25 NPSI Version 3 Release 9 Licensed Programming Specifications	GC30-9605
X.25 NPSI Version 3 General Information	GC30-3469

## 2.3.2 Optional Licensed Program Publications

Figure 4 identifies the optional licensed program publications for this program. The first copy is available at no charge to licensees of the basic material by ordering the 7xxx feature number. Order additional copies using the 8xxx feature number. A fee is charged for additional copies.

Figure 4. Optional Material: Licensed Publications

Publication Title	Form Number	Feature Number First Copy	Feature Number Additional Copy
NCP Version 7 and X.25 NPSI Version 3 Diagnosis, Customization and Tuning	LY30-5610	7040	8007
X.25 NPSI Version 3 Release 9 Data Areas	LY30-5627	7150	8150

## 2.3.3 Softcopy Publications

All X.25 NPSI V3R9 VSE manuals, licensed and unlicensed, except for *NPSI Licensed Program Specifications*, are offered in displayable softcopy form on the media listed in Figure 5.

Figure 5. Softcopy Publications

Title	Form	Feature Number	Feature Number
	Number	First Copy	Additional Copy
ACF/NCP, ACF/SSP, EP, NPSI, and NTuneMON Softcopy Collection Kit CD-ROM	LK2T-0414#	7160	8160

Note: Order this collection kit under the NCP product. (It is not orderable under NPSI.) A number sign symbol (#) beside the Form Number indicates it contains "Restricted Materials of IBM."

#### 2.3.4 Publications Associated with X.25 NPSI V3R9 VSE

Figure 6 lists publications that may be helpful when you use this program. To order copies, contact your IBM representative. A fee is charged for each publication.

Figure 6. Publications Associated with X.25 NPSI V3R9 VSE

Publication Title	Form Number
Planning for NetView, NCP, and VTAM	SC31-8063
Planning for Integrated Networks	SC31-8062

## 2.4 Program Source Materials

No program source materials or viewable program listings are provided for X.25 NPSI V3R9 VSE.

## 2.5 Publications Useful During Installation

The publications listed in Figure 7 may be useful during the installation of this program. To order copies, contact your IBM representative. A fee is charged for each publication.

Figure 7. Publications Useful During Installation

Publication Title	Form Number
VSE/ESA V2R2 Planning	SC33-6603
VSE/ESA V2R3 Planning	SC33-6603
VSE/ESA V2R1 Installation	SC33-6604
VSE/ESA V2R1 Administration	SC33-6605
VSE/ESA V2R1 Operation	SC33-6606
VSE/ESA V2R1 System Control Statements	SC33-6613
VSE/ESA POWER V6R1 Administration and Operation	SC33-6633
VSE/ICCF V6R1 User's Guide	SC33-6639

## 3.0 Program Support

This chapter describes the IBM support available for X.25 NPSI V3R9 VSE.

## 3.1 Preventive Service Planning

Before installing X.25 NPSI V3R9 VSE, check with your IBM Support Center or use either Information/Access or SoftwareXcel Extended to see whether there is additional Preventive Service Planning (PSP) information. To obtain this information, specify the following UPGRADE and SUBSET values:

Figure 8. PSP Information

UPGRADE	SUBSET	RETAIN Release
NPSI390	9E0	9E0

If you received X.25 NPSI V3R9 VSE only from IBM Software Distribution, then before installing X.25 NPSI V3R9 VSE, you should also check with your IBM Support Center or use either Information/Access or SoftwareXcel Extended to see if there is additional PSP information.

## 3.2 Statement of Support Procedures

For help with problem determination and problem source identification, refer to *NCP Version 7 and NPSI Version 3 X.25 Diagnosis, Customization, and Tuning*. Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 9 identifies the component ID (COMPID) and the RETAIN Release for X.25 NPSI V3R9 VSE.

Figure 9. Component ID

COMP ID	Component Name	REL
568803501	X.25 NSPI V3R9 (VSE)	9E0

© Copyright IBM Corp. 1981, 1998

# 4.0 Program and Service Level Information

This section identifies the program and service level of X.25 NPSI V3R9 VSE. The program level refers to the APAR fixes incorporated into this program. The service level refers to the PTFs integrated into this program. Information about the cumulative service tape is also provided.

#### 4.1 Program Level Information

See Appendix A, "APARs Incorporated into this Program" on page 17 for a list of APAR fixes against previous releases incorporated into this release.

#### 4.2 Service Level Information

No PTFs against this release of NPSI have been incorporated into the product tape.

## 4.3 Cumulative Service Tape

A cumulative service tape, containing PTFs not incorporated into this release, may be included with this program.

# 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing X.25 NPSI V3R9 VSE. The following terminology is used:

- The system used to install the program (driving system)
   (There is no driving system in an X.25 NPSI V3R9 VSE environment.)
- 2. The system on which the program is installed (target system).

#### **5.1 Target System Requirements**

This section describes the environment of the target system required to install X.25 NPSI V3R9 VSE.

## 5.1.1 Operating System Requirements

The operating system requirements for X.25 NPSI V3R9 VSE are defined by SSP V4R7 VSE, licensed program number 5868-064.

#### **5.1.2 Machine Requirements**

The target system can run in any hardware environment that supports the required software.

## 5.1.3 Programming Requirements

A platform-dependent BookManager product is required to display softcopy publications on CD-ROM. Limited function DOS, Windows, and OS/2 versions of these products are available on your CD-ROM. For more information or to order full-function releases of these products, or VM or MVS versions, refer to the IBM BookManager home page at http://booksrv2.raleigh.ibm.com.

## 5.1.4 DASD Storage Requirements

Figure 10 provides space requirements for installing this program. Space requirements are larger than needed for installation to allow for PTF service that may be applied at a later date.

Figure 10. Space Requirements

Device		
Туре	Tracks	Blocks
3380	80	N/A
3390	75	N/A
FBA	N/A	4 960

#### 5.2 Program Considerations

This following sections list the programming considerations for installing X.25 NPSI V3R9 VSE.

## 5.2.1 Operating System Requirements

The operating system requirements for this program are defined by ACF/SSP V4R7 VSE, program number 5686-064.

#### 5.2.2 Machine Requirements

This program is designed to operate on a IBM 3745 Communication Controller, either channel-attached to a host processor or remotely connected through a high-level data link control (HDLC) link through another controller to a host processor.

To support the 3746 Model 900 using X.25 protocol on the communication line adapters with X.25 NPSI V3R8 or later, microcode engineering change level D22512 or higher is required.

#### 5.2.3 Programming Requirements

#### 5.2.3.1 Minimum Requisites:

A minimum requisite is defined as one of the following:

- Installation Requisite: A product that is required at installation time. i.e. this product will not install successfully unless this requisite is met.
- Run Time Requisite: A product that is not required for the successful installation of this product, but is needed at run time in order for this product to work.

SSP V4R7 is required to generate X.25 NPSI V3R9 VSE.

NCP V7R7 is required to operate X.25 NPSI V3R9 VSE.

#### 5.2.3.2 Functional Requisites:

There are no functional requisites for X.25 NPSI V3R9 VSE.

#### 5.2.3.3 Compatibility Requisites:

The following section contains system considerations for NPM.

#### 5.2.3.3.1 NPM:

The NPM APARs listed in Figure 11 on page 13 are required for compatibility with X.25 NPSI on 3746 Model 900 support.

Figure 11. NPM APARs Required for Compatibility with X.25 NPSI

Product Name	APAR
NPM V2R1 MVS	OW10583
NPM V2R2 MVS	OW10583

## 5.2.4 System Considerations

There are no system considerations for X.25 NPSI V3R9 VSE.

## 5.2.5 Special Considerations

There are no special considerations for X.25 NPSI V3R9 VSE.

## 6.0 Installation Instructions

This program is installed in a VSE/ESA operating system. It is supplied as a copy of the production library, which includes modules and macros belonging to this program. In addition, a history file containing installation records for this program is supplied. Installation restores the production sublibrary and updates the VSE system history file.

Because VSE/ESA supports multiple releases of the same product, it is not necessary to delete earlier levels of the NPSI program already installed on your system.

#### 6.1 Installing X.25 NPSI V3R9 VSE

Complete the following steps to install this product:

- 1. Define the VSE product library.
- 2. Install the production sublibrary.

## 6.1.1 Step 1: Defining the VSE Product Library

This step is unnecessary if you want to install this program into an existing VSE library. Run the JCL sample shown in Figure 12 if you want to define a new library for this program. Labels and library names in the following JCL are arbitrary.

```
// JOB DEFINE A VSE PRODUCT LIBRARY
// DLBL vvvv,'vse.npsi.lib',2099/365,SD
// EXTENT ,xxxxxx,1,0,yyyy,zzzz
// EXEC LIBR
    DEFINE LIB=vvvv
/*
/&
    xxxxxx = VOLID OF LIBRARY PACK
yyyy = STARTING TRACK OF LIBRARY
zzzz = SIZE OF THE LIBRARY IN TRACKS
vvvv = VSE PRODUCT LIBRARY
```

Figure 12. Sample JCL to Define a VSE Library

## 6.1.2 Step 2: Install Production Sublibrary

The target library must be online during installation procedures, and label information must be available in the label area. Installation of the production sublibrary is required.

Figure 13 provides sample JCL to install the production sublibrary using MSHP.

```
// JOB INSTALL PRODUCT
// OPTION CATAL
// ASSGN SYS006, cuu
// MTC REW, SYS006
// EXEC MSHP
   INSTALL PRODUCT FROMTAPE PRODUCTION INTO=vvvv.ssss
/*
/&
cuu
       = INPUT TAPE ADDRESS
       = PRODUCTION SUBLIBRARY
SSSS
VVVV
      = PRODUCT LIBRARY
```

Figure 13. Sample JCL to Install Production Sublibrary

If an earlier level of NPSI is already installed, the following message is displayed:

M231D INSTALLATION WILL SUPERSEDE PRODUCT xxxxxx.

Respond by entering KEEP if you want to keep the old version or DELETE if you want to delete it.

#### 6.2 Installation Using the VSE Interactive Interface

This product can also be installed using the VSE/ICCF installation dialogues. From the VSE FUNCTION SELECTION panel, select menu item 1, INSTALLATION. From the INSTALLATION panel, select menu item 1 to access the INSTALL PROGRAMS panel. You will be prompted for information required by the dialogues to create the product installation job. Note that the default target sublibrary is PRD2.PROD and the default history file is the VSE System History file.

If you wish to modify the default installation parameters, it is necessary to change these values in the appropriate panels, as well as in the JCL generated by the JOB DISPOSITION panel. The installation job may be executed immediately or saved in an ICCF library for verification and later execution.

# Appendix A. APARs Incorporated into this Program

The following NPSI V3R8 APARs are incorporated into this program:

IR31944	IR35059	IR35088
IR32026	IR35060	IR35089
IR32271	IR35061	IR35094
IR32406	IR35062	IR35095
IR32441	IR35063	IR35266
IR32993	IR35064	IR35362
IR33353	IR35065	IR35515
IR33800	IR35066	IR35587
IR33994	IR35067	IR35598
IR34016	IR35068	IR35802
IR34175	IR35069	IR36086
IR34209	IR35070	IR36340
IR34289	IR35071	IR36462
IR34323	IR35072	IR36635
IR34335	IR35074	IR36636
IR34345	IR35077	IR37335
IR34390	IR35078	IR37504
IR34506	IR35079	IR37463
IR34490	IR35081	IR37797
IR34510	IR35082	IR37825
IR34834	IR35083	IR37827
IR35055	IR35084	IR37864
IR35056	IR35085	IR38103
IR35057	IR35086	IR38105
IR35058	IR35087	

© Copyright IBM Corp. 1981, 1998

# **Reader's Comments**

#### Program Directory for X.25 NCP Packet Switching Interface Version 3 Release 9 for VSE/ESA

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

For each of the topics below please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

RATING SCALE									
very satisfied	<=====	=======	:====>	very dissatisfied	not applicable				
1	2	3	4	5	N				

	Satisfaction						
Ease of product installation	1	2	3	4	5	N	
Contents of program directory	1	2	3	4	5	Ν	
Installation Verification Programs	1	2	3	4	5	Ν	
Time to install the product	1	2	3	4	5	Ν	
Readability and organization of program directory tasks	1	2	3	4	5	Ν	
Necessity of all installation tasks	1	2	3	4	5	Ν	
Accuracy of the definition of the installation tasks	1	2	3	4	5	Ν	
Technical level of the installation tasks	1	2	3	4	5	Ν	
Ease of getting the system into production after installation	1	2	3	4	5	N	

Did you	u order t	nis product as an independent product or as part of a package?
_	Indepe Packag	
If this p	oroduct v	was ordered as part of a package, what type of package was ordered?
	Custom	Pac
	_	FunctionPac SystemPac
	System	Delivery Offering (SDO)
	Other -	Please specify type:
Is this t		ime your organization has installed this product?
	Vac	

	No	
Were	e the people who did the installation experienced with the installation of the Yes No	ese products?
If yes	s, how many years?	
	u have any comments to make about your ratings above, or any other asp nem below:	ect of the product installation, please
Plea	se provide the following contact information:	
1	Name and Job Title	
(	Organization	
A	Address	
٦	elephone	

Thank you for your participation.

Please send the completed form to (or give it to your IBM representative who will forward it to the X.25 NCP Packet Switching Interface Version 3 Release 9 for VSE/ESA Development group):

Design & Information Development Dept. CGF/Bldg. 656 International Business Machines Corporation PO Box 12195 RESEARCH TRIANGLE PARK NC 27709-9990

# IBW.

Program Number: 5688-035 7559

5427 5428

Printed in U.S.A.

