

NNN		NNN	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	AAAAAAAAAA		CCCCCCCCCCCC	PPPPPPPPPPPP	
NNN		NNN	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	AAAAAAAAAA		CCCCCCCCCCCC	PPPPPPPPPPPP	
NNN		NNN	EEEEEEEEEEEEEEEE	TTTTTTTTTTTTTTTT	AAAAAAAAAA		CCCCCCCCCCCC	PPPPPPPPPPPP	
NNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNNNNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNNNNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNNNNN		NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCC	PPPPPPPPPPPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCC	PPPPPPPPPPPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEE	TTT	AAA	AAA	CCC	PPPPPPPPPPPP	PPP
NNN	NNNNNN	NNN	EEE	TTT	AAAAAAAAAAAAAAAA	AAA	CCC	PPP	PPP
NNN	NNNNNN	NNN	EEE	TTT	AAAAAAAAAAAAAAAA	AAA	CCC	PPP	PPP
NNN	NNNNNN	NNN	EEE	TTT	AAAAAAAAAAAAAAAA	AAA	CCC	PPP	PPP
NNN	NNN	NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN	NNN	NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN	NNN	NNN	EEE	TTT	AAA	AAA	CCC	PPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEEEEEE	TTT	AAA	AAA	CCCCCCCCCCCC	PPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEEEEEE	TTT	AAA	AAA	CCCCCCCCCCCC	PPP	PPP
NNN	NNN	NNN	EEEEEEEEEEEEEEEE	TTT	AAA	AAA	CCCCCCCCCCCC	PPP	PPP

- \$
 Ps
 --
 NE

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 \$R

```

PPPPPPPP      SSSSSSSS      IIIIII      UU      UU      SSSSSSSS      RRRRRRRR
PPPPPPPP      SSSSSSSS      IIIIII      UU      UU      SSSSSSSS      RRRRRRRR
PP      PP      SS      II      UU      UU      SS      RR      RR
PP      PP      SS      II      UU      UU      SS      RR      RR
PP      PP      SS      II      UU      UU      SS      RR      RR
PP      PP      SS      II      UU      UU      SS      RR      RR
PPPPPPPP      SSSSSS      II      UU      UU      SSSSSS      RRRRRRRR
PPPPPPPP      SSSSSS      II      UU      UU      SSSSSS      RRRRRRRR
PP      SS      II      UU      UU      SS      RR      RR
PP      SS      II      UU      UU      SS      RR      RR
PP      SS      II      UU      UU      SS      RR      RR
PP      SS      II      UU      UU      SS      RR      RR
PP      SSSSSSSS      IIIIII      UUUUUUUUU      SSSSSSSS      RR      RR
PP      SSSSSSSS      IIIIII      UUUUUUUUU      SSSSSSSS      RR      RR

```

```

SSSSSSSS      DDDDDDDD      LL
SSSSSSSS      DDDDDDDD      LL
SS      DD      DD      LL
SS      DD      DD      LL
SS      DD      DD      LL
SS      DD      DD      LL
SS      DD      DD      LL
SS      DD      DD      LL
SS      DD      DD      LL
SS      DD      DD      LL
SS      DD      DD      LL
SSSSSSSS      DDDDDDDD      LLLLLLLLLL
SSSSSSSS      DDDDDDDD      LLLLLLLLLL

```

{ Version: 'V04-000'

```

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{++

{ Facility:

VAX-11 PSI -- VMS

{ Abstract:

This file contains all definitions which must eventually be inserted in the VMS system libraries - SYSS\$LIBRARY:LIB and SYSS\$LIBRARY:STARLET. They should be collected in this file for the time being.

{ Environment:

SDL processing - BLISS/MACRO Libraries.

{ Author:

Richard J. Merewood, Date: 09-Sep-1980

Edit	Author	Date	Reason
----	-----	----	-----
01	AM Palka	09-Sep-80	Add symbols for QIO and Level 3.
02	AM Palka	26-Sep-80	Correct definition of PSI\$C_NCB...
03	AM Palka	29-Sep-80	Add more NCB definitions.
04	Barry Scott	7-Nov-80	Add DYN\$C_xxx symbols.
05	AM Palka	24-Nov-80	Add PSI sstatus codes.

{ 06	Barry A. Scott	25-Nov-80	Add DT\$_X25.
{ 07	Andrew Palka	25-Nov-80	Change spelling of some NCB items.
{ 08	R.J. Merewood	03-Dec-80	Clean up and add NFB defintions.
{ 09	Fiona Nicholson	09-Dec-80	Add X29 device type
{ 10	AM Palka	10-Dec-80	change PSISC_NCB values
{ 11	AM Palka	14-Jan-81	change SSS_CLEARED/RESET
{ 12	Andrew Palka	16-Jan-81	add more NCB definitions (for internal L3CS use), Remove PSISC_NCB_BUG
{ 13	R.J. Merewood	22-Jan-81	Add PSISC_NTD_... codes:
{ 14	Andrew Palka	22-Jan-81	Add PSISC_NCB_LOCFACR, Remove PSISC_NCB_ACCRC
{ 15	Andrew Palka	26-Jan-81	Add PSISK_SETREADPAD
{ 16	Andrew Palka	4-Feb-81	Remove PSISC_NCB_FRNFAC and PSISC_NCB_REMNET, Add PSISC_NCB_LOCNET
{ 17	Barry A. Scott	9-Feb-81	Add NFBSC_READRSP for XUT interface
{ 18	R.J. Merewood	20-Feb-81	Change values as required by VMS group
{ 19	Barry A. Scott	2-Mar-1981	Add NFBSC_ETTRASTA for trace.
{ 20	Andrew Palka	5-Mar-1981	Remove SSS_UNSOLICIT
{ 21	Andrew Palka	5-Mar-1981	ADD PSISC_ERR_BAD_PVCNAME
{ 22	Andrew Palka	9-Mar-1981	Replace SSS_UNSOLICIT (Not used, but space for it has been reserved)
{ 23	Andrew Palka	12-Mar-1981	Add PSISC_RESTART
{ 24	Barry A. Scott	6-Apr-1981	Add NFBSC_TESTLINE for the LOOP LINE function
{ 25	R.J. Merewood	13-Apr-81	Add new NFB codes.
{ 26	Fiona Nicholson	22-Feb-81	Remove temporary definitions, as they are in the system library now.
{ --			

```
{+
{ DT:      These are new device types for PSI.
{-
```

```
module $DTTMPDEF;
```

```
constant(
    X25
    , X29
    , DUP_BOP
) equals 99 increment 1 prefix DT tag $;
/* Start at 99 BS006
/* X.25 Network Device
/* X.29 Device FN009
/* DUP-11 Bit-orientated protocol RM008
/*
```

```
end_module $DTTMPDEF;
```

```
module $NFBTMPDEF;
```

```
/*+
/* NFB:           These are new Network Function Block codes used by PSI.           RM008
/*-
```

```
constant(
    SETCCTSTA      /* Start at unused value after NFB$C_FC_MAX
    , GETCCTSTA    /* Set circuit state
    , GETCCTCTR    /* Get circuit state
    , CLRCCTCTR    /* Get circuit counters
    , SETMODSTA    /* Clear circuit counters
    , GETMODSTA    /* Set module state
    , GETMODCTR    /* Get module state
    , CLRMODCTR    /* Get module counters
    , READRSP      /* Clear module counters
    , SETTRASTA    /* Read response from ACPCONTROL BS017
    , GETTRASTA    /* set trace state BS019
    , TESTLINE     /* Get trace state BS019
    , SETOBJECT    /* Test line function BS024
    , SHOBJECT     /* Update object database RM025
    ) equals (37+1) increment 1 prefix NFB tag $C; /* Display object database RM025
```

```
end_module $NFBTMPDEF;
```

```
module $PSIDEF;
```

```

/**
/* PSI:
/* These are Network Connect Block codes and various status codes.
/*-

```

```

constant(
    NCB_NULL                /* Network connect null data type
    , NCB_REMDTE            /* Remote DTE address
    , NCB_REMSUBADR        /* Remote DTE sub-address
    , NCB_LOCDTE          /* Local DTE address
    , NCB_LOCSUBADR       /* Local DTE subaddress
    , NCB_USERDATA        /* Outgoing call data
    , NCB_RESPDATA        /* Response data field
    , NCB_OBJNAME         /* Process to handle call
    , NCB_ENDTOEND        /* Outgoing end to end acknowledgment
    , NCB_ENDTOENDR       /* Call requires end to end acknowledgment
    , NCB_GATEWAY         /* Gateway name
    , NCB_ICI             /* Incoming call identifier
    , NCB_REVCHG          /* Reverse charge for this call
    , NCB_LOCFACR         /* Facilities for call accept
    , NCB_FSEL            /* Fast select for outgoing call
    , NCB_FSEL_RES        /* Restricted response fast select
    , NCB_THRUCLS         /* Throughput class
    , NCB_CUG             /* Closed user group name
    , NCB_DIAGCODE        /* Clear 8 bit diagnostics code
    , NCB_CAUSE           /* Clear 8 bit cause code
    , NCB_REASON          /* Clear 8 bit reason code
    , NCB_PKTSIZE         /* Packet size-must be power of 2
    , NCB_WINSIZE         /* Window size
    , NCB_LOCFAC          /* Local facilities
    , NCB_PVCNAM          /* PVC name

```

```

/**
/* The following codes are mainly for internal use.
/* They may not normally be used by a user program
/* (require PHYSIO and SYSPRV privileges)
/*-

```

```

    , NCB_LINE            /* Line name
    , NCB_PVCSET          /* Set up PVC
    , NCB_LCN             /* Select LCN
    , NCB_CUGN           /* Closed user group number
    , NCB_CUGNB          /* Bilateral closed user group number
    , NCB_LOCNET         /* Local network name
) equals 0 increment 1 prefix PSI tag $C;

```

```

/**
/* Item List Codes for Network Process Declaration
/*-

```

RM013

```

constant(
    , NTD_ACCLVL          /* Start with 1 RM013
    , NTD_SALO            /* Access level (X.25 or X.29) RM013
                        /* DTE subaddress range low end RM013

```

```

, NTD_SAH1
, NTD_REMDTE
, NTD_USRGRP
, NTD_USRDATA
, NTD_DATMSK
) equals 1 increment 1 prefix PSI tag $C;

/*
/* Special function codes for IO$_NETCONTROL
/*-

constant INTERRUPT equals 1 prefix PSI tag $C; /* Interrupt NETCONTROL functn code
constant INTERRUPT equals 1 prefix PSI tag $K; /* Interrupt NETCONTROL funct code
constant INTACK equals 2 prefix PSI tag $C; /* Interrupt acknowledge NETCONTROL
constant INTACK equals 2 prefix PSI tag $K; /* Interrupt acknowledge NETCONTROL
constant RESET equals 3 prefix PSI tag $C; /* Reset NETCONTROL function Code
constant RESET equals 3 prefix PSI tag $K; /* Reset NETCONTROL function Code
constant SETPAD equals 4 prefix PSI tag $C; /* Set X.29 PAD parameters FN009
constant SETPAD equals 4 prefix PSI tag $K; /* Set X.29 PAD parameters FN009
constant READPAD equals 5 prefix PSI tag $C; /* Read X.29 PAD parameters FN009
constant READPAD equals 5 prefix PSI tag $K; /* Read X.29 PAD parameters FN009
constant SETREADPAD equals 6 prefix PSI tag $C; /* Set/Read X.29 PAD parameters AP015
constant SETREADPAD equals 6 prefix PSI tag $K; /* Set/Read X.29 PAD parameters AP015
constant RESTART equals 7 prefix PSI tag $C; /* Acknowledge Restart on PVC AP023
constant RESTART equals 7 prefix PSI tag $K; /* Acknowledge Restart on PVC AP023

/*
/* Clear/Reset/Restart Cause Codes from Level 3
/*-

constant(
, L3_LOCAL
, L3_NETWRK
, L3_NETERR
, L3_LOCERR
, L3_LNKRST
, L3_LNKDWN
, L3_LNKUP
, L3_LNKRRT
, L3_LOCMGT
, L3_CALCOL
, L3_NETTIM
) equals 1 increment 1 prefix PSI tag $C;

/* Start at 1 RM008
/* Host requested
/* Network initiated
/* Network protocol error
/* Local protocol error
/* Link reset
/* Link down
/* Link up
/* Link restarted
/* Network management function
/* Call collision
/* Timeout on network

/*
/* I/O Status Returns
/*-

aggregate PSIDEF union fill prefix PSI$;
PSIDEF BITS0 structure fill;
MOREDATA bitfield mask;
QUALIFIED bitfield mask;
end PSIDEF_BITS0;

/* More data follows (M-bit)
/* Qualified sub-channel (Q-bit)

```

```
PSIDEF BITS1 structure fill;
  STS_PVC bitfield mask; /* PVC setup MUST BE LOW ORDER BIT
  STS_LOCDTELNG bitfield mask; /* Local dte adress too long - truncated
  STS_REMDTELNG bitfield mask; /* Remote dte adress too long - truncated
  STS_USERLNG bitfield mask; /* Too much user data supplied - truncated
  STS_WINBAD bitfield mask; /* Invalid window size - nearest valid chosen
  STS_PKTBAD bitfield mask; /* Invalid packet size - nearest valid chosen
  STS_THRBAD bitfield mask; /* Invalid throughput class - nearest valid chosen
end PSIDEF_BITS1;

constant( /* Error codes start at 0 AP005
  ERR_UNKNOWN /* Unspecified internal error
  , ERR_FACLNG /* Facilities too long
  , ERR_INVITEM /* Invalid item code
  , ERR_CONFLICT /* Conflicting items specified
  , ERR_BADPARM /* Bad parameter specified
  , ERR_NOTRANS /* No translation for this name (e.g. unknown user group)
  , ERR_RECURLMT /* Recursion limit reached
  , ERR_INVNUM /* Invalid ASCII number
  , ERR_NOICI /* No internal call identifier specified
  , ERR_MANYICI /* More than one internal call identifier given
  , ERR_NOTIMP /* A feature that is not yet implemented was requested
  , ERR_NOLINES /* No line is available on which to make the call
  , ERR_NOSUCHLINE /* The specified line is not known
  , ERR_NOSUCHPVC /* The specified PVC is not known
  , ERR_NOSUCHNET /* The specified network is not known
  , ERR_NOLOCAL /* The ACP has run out of local workspace memory
  , ERR_NONONPAG /* There is insufficient free non-paged pool
  , ERR_NOL3 /* Internal error
  , ERR_BADNAME /* Bad counted string parameter
  , ERR_L3ERR /* Error returned from level 3
  , ERR_PVCALRACC /* PVC already accessed
  , ERR_BAD_PVCNAME /* Accessing PVC on wrong channel
) equals 0 increment 1 prefix PSI tag $C;

end PSIDEF;
end_module $PSIDEF;
```

