```
-- File ProcessDefs.Mesa
-- Last edited by Johnsson; May 18, 1977  11:36 AM

DIRECTORY
  ControlDefs: FROM "controldefs",
  Mopcodes: FROM "mopcodes";

DEFINITIONS FROM ControlDefs;

ProcessDefs: DEFINITIONS =
BEGIN

-- Special op codes
BLOCK: MACHINE CODE = INLINE [Mopcodes.zBLOCK];

ProcessHandle: TYPE = POINTER TO ProcessObject;
ProcessNIL: ProcessHandle = LOOPHOLE[0];

ProcessObject: TYPE = PRIVATE RECORD [
        state: StateVector,
        pn: ProcessPriority
        ];

ProcessRegister: PRIVATE TYPE = WORD;
AP: PRIVATE POINTER TO ProcessRegister = LOOPHOLE[20B];
RP: PRIVATE POINTER TO ProcessRegister = LOOPHOLE[21B];
CPN: PRIVATE POINTER TO ProcessPriority = LOOPHOLE[22B];
WakeupsWaiting: PRIVATE POINTER TO WORD = LOOPHOLE[452B];
ActiveWord: PRIVATE POINTER TO WORD = LOOPHOLE[453B];

ProcessVector: PRIVATE TYPE = ARRAY ProcessPriority OF ProcessHandle;
PV: PRIVATE POINTER TO ProcessVector = LOOPHOLE[40B];

ProcessPriority: TYPE = [0..15];
HighestProcessPriority: ProcessPriority=0;
LowestProcessPriority: ProcessPriority=14;
Unscheduled: ProcessPriority=15;

PriorityNotAvailable: ERROR;
InvalidPriority: ERROR;
InvalidProcess: ERROR;
ProcessNotScheduled: ERROR;

CreateProcessFromFrame: PROCEDURE [FrameHandle, ProcessPriority] RETURNS [ProcessHandle];
CreateProcessFromProcedure: PROCEDURE [PROCEDURE, ProcessPriority] RETURNS [ProcessHandle];

SetProcessPriority: PROCEDURE [ProcessHandle, ProcessPriority];
GetProcessPriority: PROCEDURE [ProcessHandle] RETURNS [ProcessPriority];
GetCurrentProcess: PROCEDURE RETURNS [ProcessHandle];
GetCurrentPriority: PROCEDURE RETURNS [ProcessPriority];

EnumerateProcess: PROCEDURE
  [PROCEDURE [ProcessHandle] RETURNS [BOOLEAN]] RETURNS [ProcessHandle];

DestroyProcess, MakeProcessReady, ActivateProcess,
DeActivateProcess: PROCEDURE [ProcessHandle];

DisableInterrupts: MACHINE CODE = INLINE [Mopcodes.zIWDC];
EnableInterrupts: MACHINE CODE = INLINE [Mopcodes.zDWDC];
END.
```