**WaitingToStartHSM State Pseudo Code**

**Key:**

Capital Case used for variables and function names (Ed’s Convention)

/\* comments \*/

// place holder for code

Only code needed for lowest level state (During func)

Write Durings for everything, but comment out the function call if not needed

**Start WaitingToStartHSMS (CurrentEvent)**

 // Handle history or irregular entry here

If not history entry

 CurrentState = PoweringOn;

 End

 /\* Call ENTRY function for WaitingToStartHSMS \*/

 Run WaitingToStartHSMS(CurrentEvent)

End Start

**WaitingToStartHSMS\_t Run WaitingToStartHSMS (CurrentEvent)**

 Init MakeTransition, NextState, EntryEventKind, ReturnEvent

 /\* React differently based on the state you’re in \*/

Switch (CurrentState)

 Case PoweringOn:

 /\* Execute During to respond to event \*/

 CurrentEvent = During PoweringOn (CurrentEvent)

 /\* Handle all events relevant to PoweringOn \*/

 If ES\_NO\_EVENT does not == CurrentEvent

 Switch (CurrentEvent)

 Case EV\_JSR\_READY:

 // Any transition action here

 NextState = ReadyToPlay;

 MakeTransition = True;

 EntryEventKind = EV\_ENTRY;

 ReturnEvent = CurrentEvent;

 Break

 End switch

 End if

 Break

 Case ReadyToPlay:

 /\* Execute During to respond to event \*/

 CurrentEvent = DuringReadyToPlay (CurrentEvent);

 // Final state – no transitions

 Break;

 End switch

 /\* Handle transitions between states \*/

 If (MakeTransition)

 /\* Exit this state \*/

 CurrentEvent.EventType = EV\_EXIT;

 Run WaitingToStartHSMS(CurrentEvent)

/\* Enter next state \*/

CurrentState = NextState; // Change to next state

CurrentEvent.EventType = EventEntryKind;

Run WaitingToStartHSMS(CurrentEvent)

 End if

Return ReturnEvent

End Run

**WaitingToStartHSMS\_t Query WaitingToStartHSMS (CurrentEvent)**

 Return CurrentState;

End Query

**During PoweringOn (CurrentEvent)**

 Init ReturnEvent

 If (EV\_ENTRY == CurrentEvent)

 // Execute Entry actions here

 Post ES\_INIT

 /\* No lower level SM(s) \*/

 Else if (EV\_ExIt == CurrentEvent)

 /\* No lower level SM(s) \*/

 // Execute Exit actions here

 Else

 /\* No lower level SM(s) \*/

 // Execute any internal event response here

 End if

 return ReturnEvent

End During

**During ReadyToPlay (CurrentEvent)**

 Init ReturnEvent

 If (EV\_ENTRY == CurrentEvent)

 // Execute Entry actions here

 Read Game Mode pin and set game mode

 /\* No lower level SM(s) \*/

 Else if (EV\_ExIt == CurrentEvent)

 /\* No lower level SM(s) \*/

 // Execute Exit actions here

 Else

 /\* No lower level SM(s) \*/

 // Execute any internal event response here

 End if

 return ReturnEvent

End During