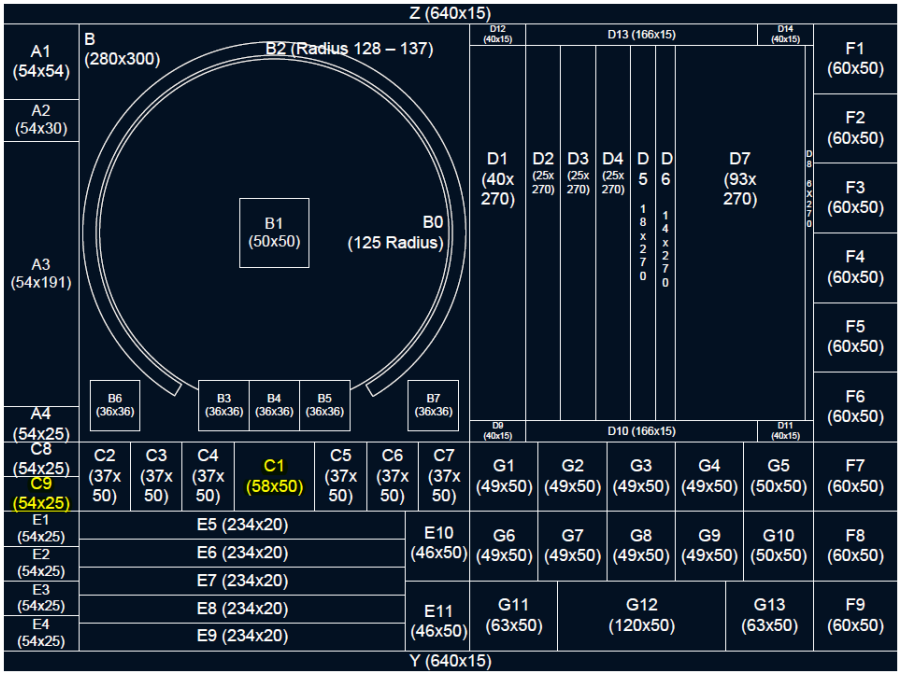
Sequence Diagrams for mode and level

INTRODUCTION

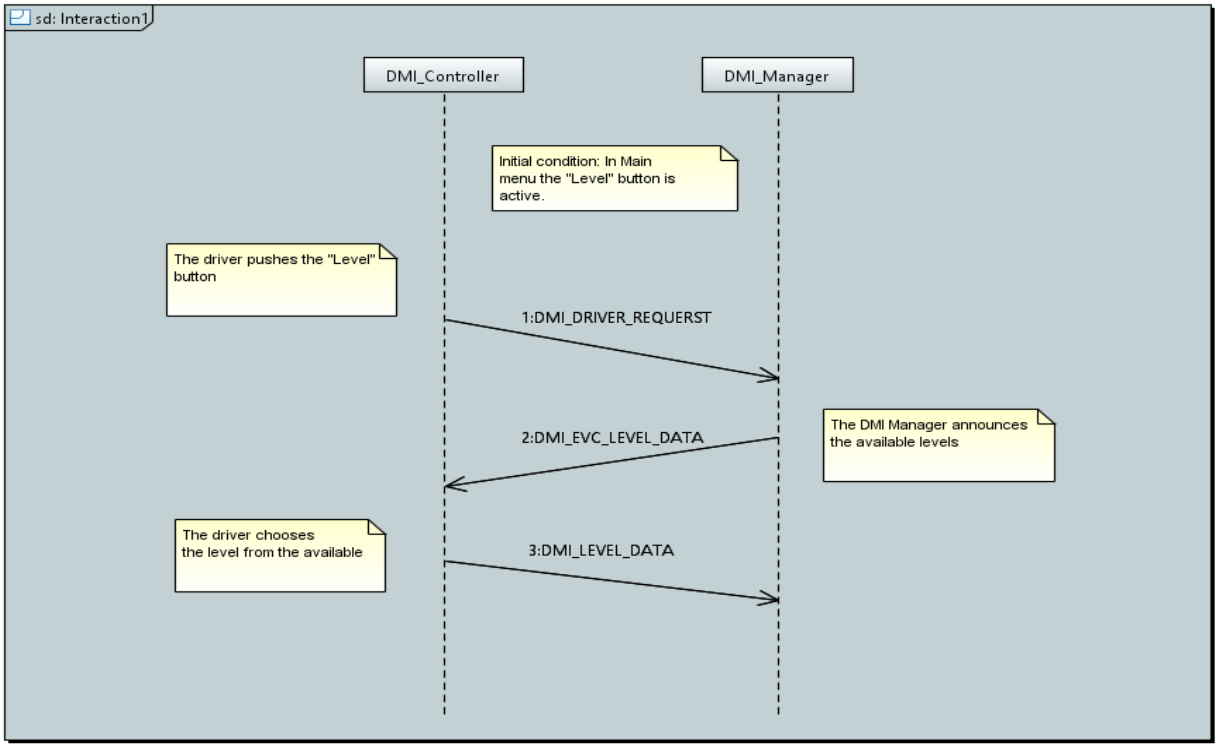
Acknowledgements by means of icons are requested via DMI_ICONS. The EVC fully controls the state of the C1 and C9 areas. Therefore, for icons to be acknowledged there, the EVC orders the display of the icon with a flashing frame and removes the icon and flashing frame once the related item has been acknowledged by the driver. When the drivers activates an area of the DMI showing an icon for which an acknowledgement is required (i.e. icon shown with flashing frame) the DMI sends DMI_ICON_ACK to EVC to inform it of the name of activated area and the name of the icon shown in the area at the precise time the area was activated. When the drivers activates an area of the DMI showing an icon or not and there was NO acknowledgement required (i.e. no icon shown or no flashing frame shown for icon) , the DMI ensures that no DMI_ICON_ACK is sent. Therefore, DMI_ICON_ACK is only sent when actually an activated area was showing an icon with a flashing frame. The DMI detects that an acknowledgement for an icon is required from the driver when it receives an order to display that icon with a flashing frame.
Only the following areas are considered by the DMI for the detection of an acknowledgement request and the sequential processing of that acknowledgement:

- C1
- C9

That means that even when an icon with a flashing frame is ordered in a different area as C1/C9, i.e. e.g. B3/4/5, the DMI will not recognize it as an acknowledgement request.



SELECTION OF LEVEL (FROM MAIN MENU)



Example: The driver select a NTC level (ATB) with NID = 1.

1. **DMI_Controller->DMI_Manager**:

   DMI_DRIVER_REQUEST{
   Valid = true;
   systemTime = 12121212;
   m_request = Level_entry_request;
   }

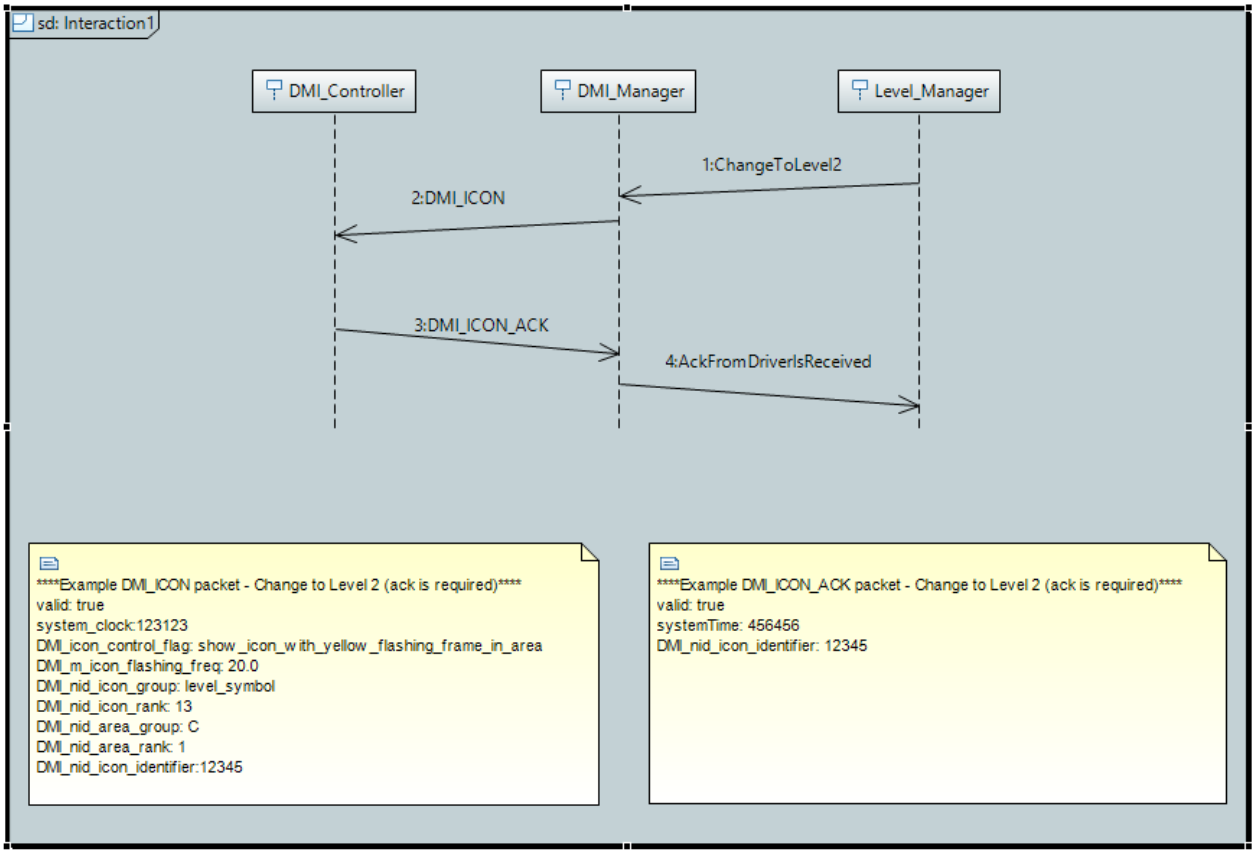
2. **DMI_Manager->DMI_Controller:**

   DMI_EVC_LEVEL_DATA{
   Valid = true;
   system_clock = 13131313
   n_iter = 4;
   levelList = [{M_LEVEL_Level_0, 0};
   { M_LEVEL_Level_1,0};
   { M_LEVEL_Level_2,0};
   { M_LEVEL_Level_ntc_specified_by_NID_NTC,1}]
   }

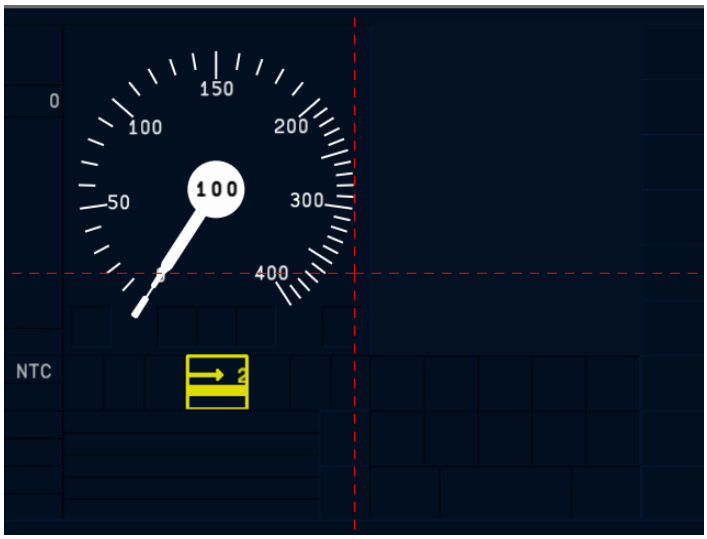
3. **DMI_Controller->DMI_Manager:**
   DMI_LEVEL_DATA{
   Valid = true;
   systemTime=14141414;
   DMI_m_level: { M_LEVEL_Level_ntc_specified_by_NID_NTC,1}
   }

CHANGE LEVEL (ACKNOWLEDGEMENT REQUIRED)

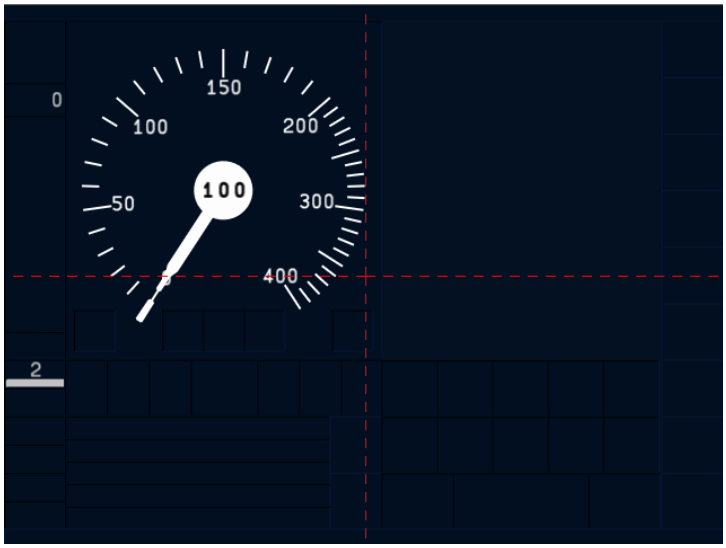
*Please note: The packet names between DMI_Manager and LevelMode_Manager are indicative only.



After receiving the DMI_ICON packet, the the DMI will appear as follow:

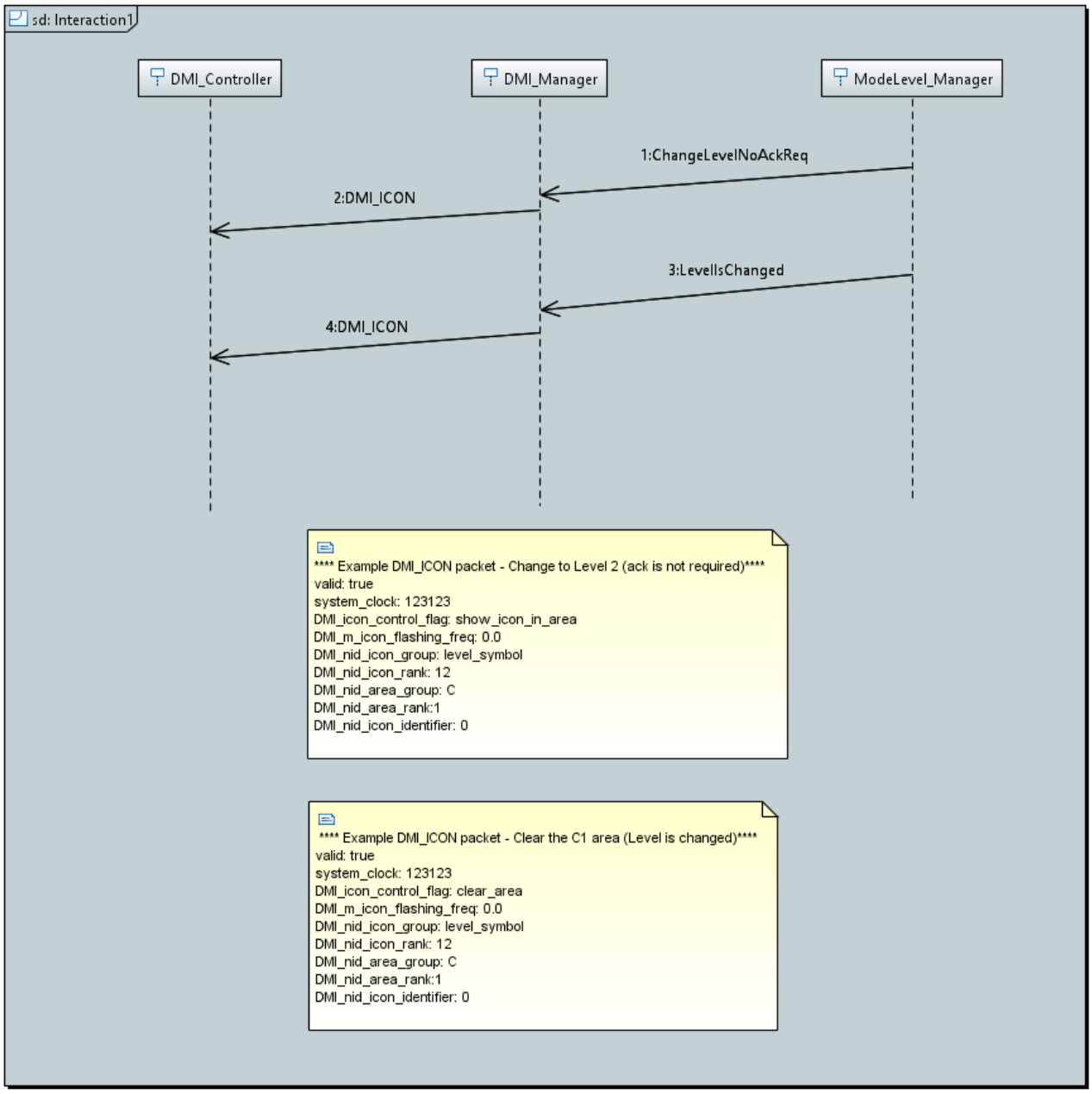


When the Driver acknowledges the announcement of the new level the DMI will appear as follow:

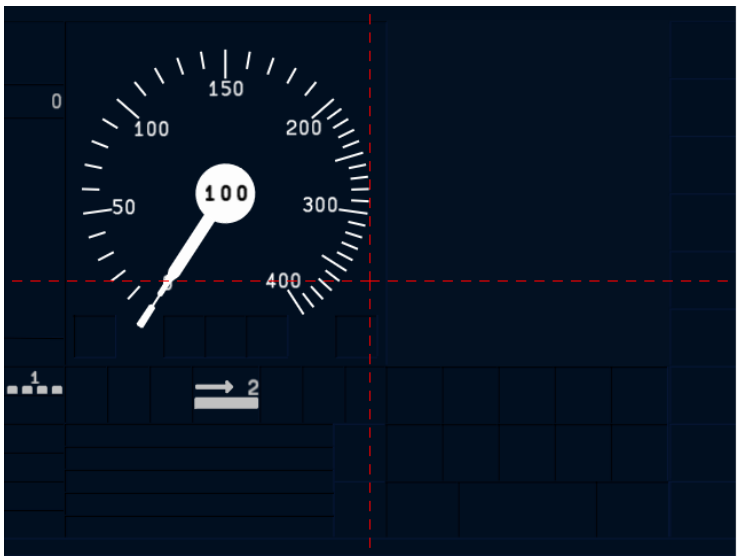


CHANGE LEVEL (ACKNOWLEDGEMENT NOT REQUIRED)

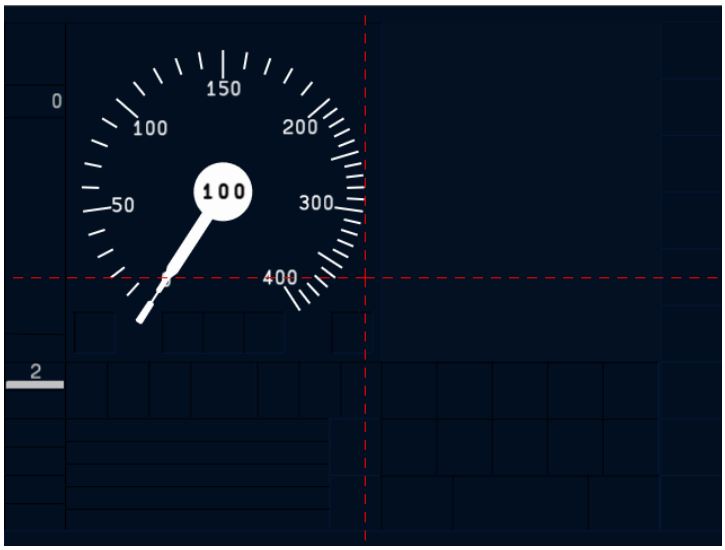
*Please note: The packet names between DMI_Manager and LevelMode_Manager are indicative only.



After receiving the first DMI_ICON packet, the the DMI will appear as follow:



After receiving the second DMI_ICON packet, the DMI will appear as follow:



CHANGE MODE

*Please note: The packet names between DMI_Manager and LevelMode_Manager are indicative only.