

- 1 Speed indicator (Display element)
- 2 Brake pressure available indicator (Display element)
- 3 Brake pressure applied indicator (Display element)
- 4 Power selector lever (controllable)
- 5 Brake power selector lever (controllable)
- 6 Electronic timetable (without function)
- 7 Passenger information system (without function)
- 8 Vehicle information and diagnostic system (without function)
- 9 Train radio (without function)

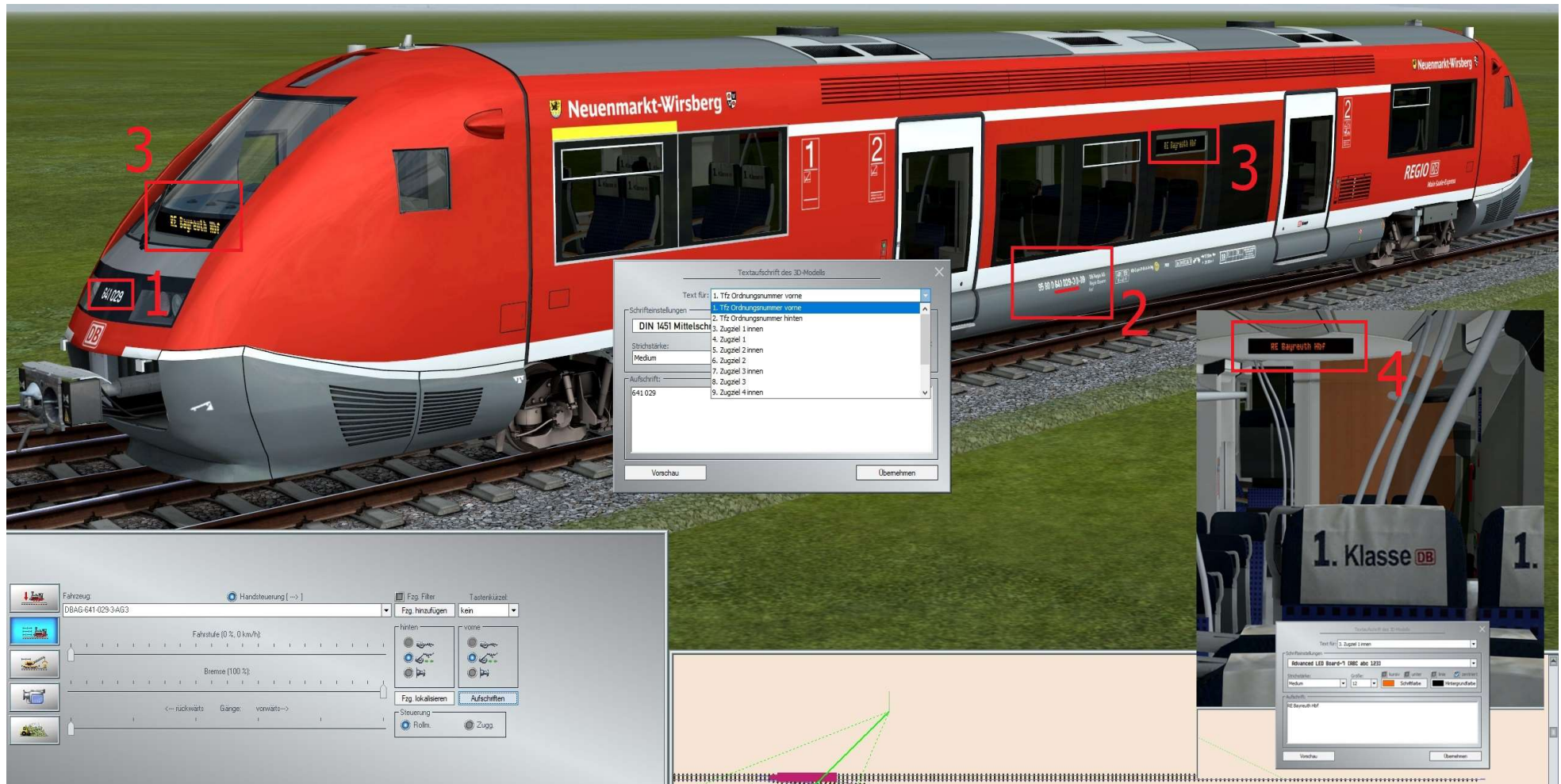
Welcome to your new workplace – the driver's cab of the DBAG Series 641

All of the control elements described in the diagram can be easily selected in the cab view (**accessed via key 8**) in EEP using the mouse pointer and moved by pressing the left mouse button. To reset the controls, the Shift key is used in addition to the left mouse button. All controls are also provided with a **tip text** in the cab view, so you can easily see which element you are currently controlling.



Example: TipText „Fahrstufe_H“ (Throttle_R)

2. Inscription function



- 1 Locomotive serial numbers at the front
- 2 Locomotive serial numbers on the sides
- 3 Train destinations exterior
- 4 Train destinations interior

The BR 641 features a lettering function/ inscription function. This allows you to "recreate" railcars on your layout with different, unique locomotive numbers **(1, 2)** and train destinations **(3, 4)**.

Important note:

The following fonts are used for the labeling function, which must be installed on your PC for the models to display correctly:

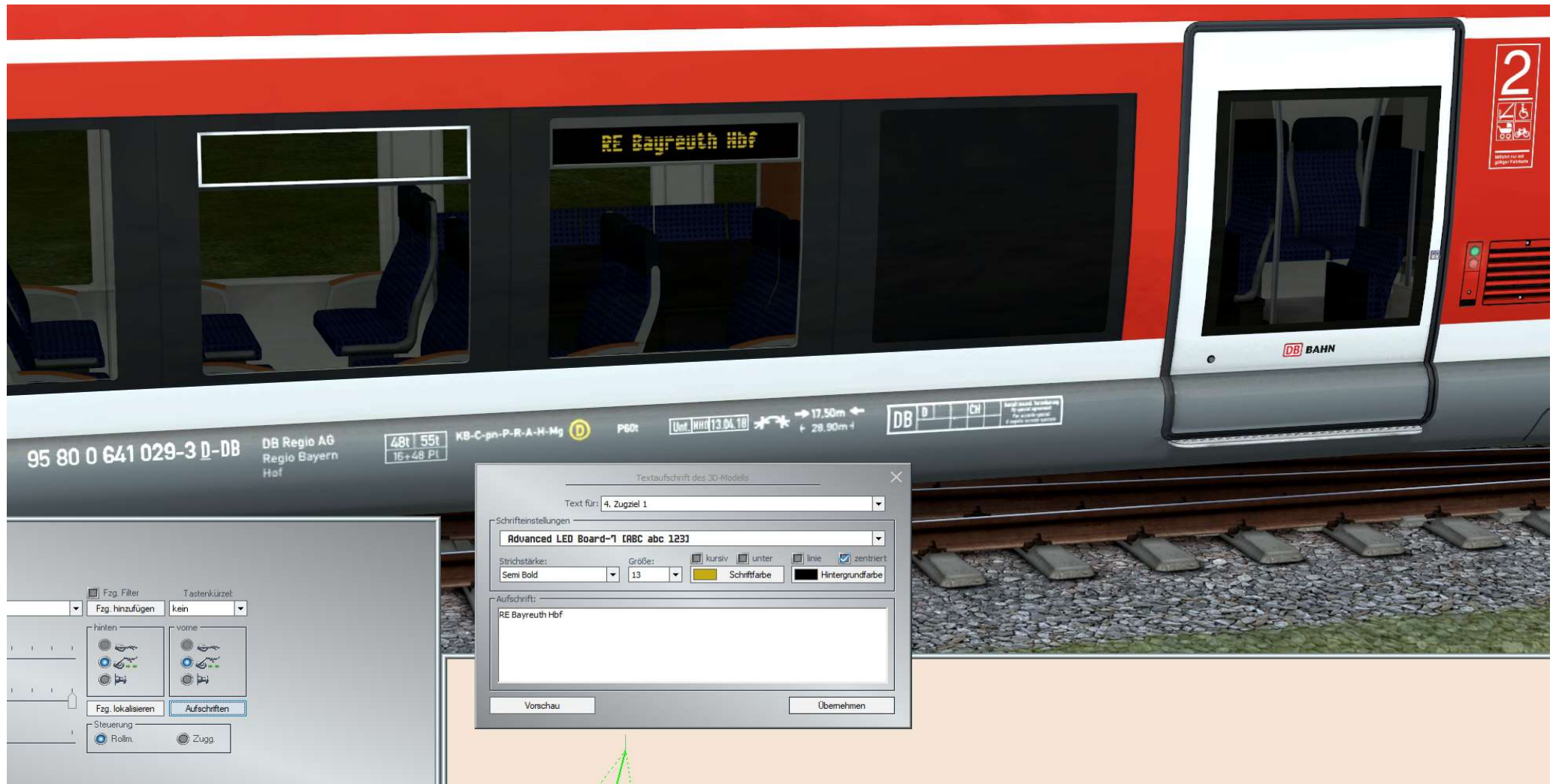
- **DIN 1451 Mittelschrift DB**
- **Advanced LED Board-7**

The fonts can be downloaded free of charge here:

<https://www.wfonts.com/font/din-1451-mittelschrift-db>

<https://www.cdnfonts.com/advanced-led-board-7.font>

3. Train destination displays



The BR 641 has 12 fields (6 for inside, 6 for outside) for train destinations, 10 of which can be written on using the labeling function.

The inside and outside fields are switched synchronously (field 1 inside + field 1 outside, etc.).

The 6th position via the slider shows an empty train destination field for the stabling situation.

The fields "Train Destination 1" - "Train Destination 10" with the area numbers 3 - 12 can be written on using the Lua function `EEPRollingstockSetTextureText(Zugname, Flaechennummer, "Text")` or via the labeling window (see image).

The best way to switch between the individual train destinations and the empty display field is with the Lua function `EEPRollingstockSetAxis("Fahrzeugname", "Achsenname", Position)` – where the axle name is "TrainDestination" – or with EEP 18 via the Lua-function `EEPRollingstockSetAxisByNumber("Fahrzeugname", Achsnummer, Position)` – where the axle number is 40.

For the six positions of the 10 writable fields, the recommended positions are 0, 20, 40, 60, 80, and for the empty field, position 100.

The Lua code for this could be, for example, as follows:

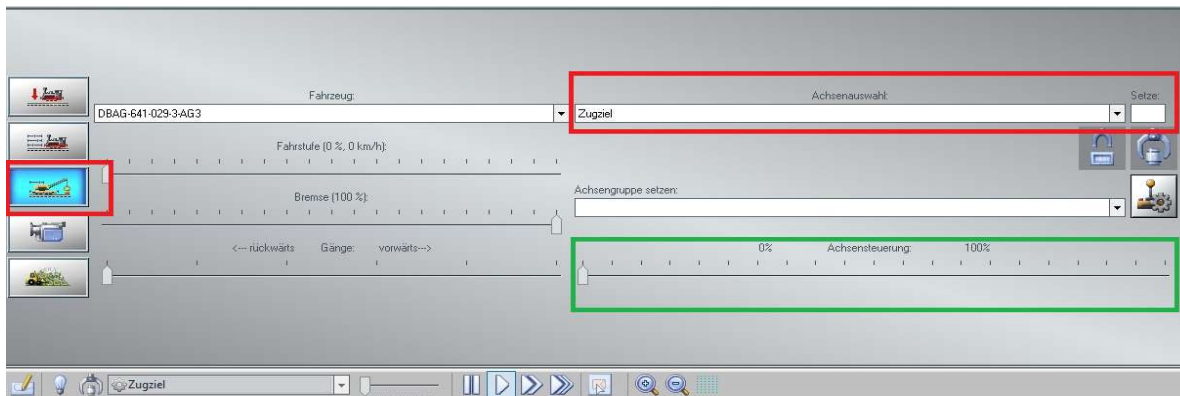
```
Lua

1 Zugziele = {
2   -- [Gleis-ID] = Achsstellung als Zahl
3   [2] = 0, -- "RE-18 Saarbrücken",
4   [6] = 20, -- "RE-18 Forbach",
5   [7] = 40, -- "RE-18 Metz Ville",
6   [97] = 60, -- "RE-19 Sarreguemine"
7   [98] = 80, -- "Nicht Einsteigen"
8   [99] = 100, -- (leer)
9 }
10
11 function Zugziel_aendern(_zugname, _gleisID)
12   EEPRollingstockSetAxis(EEPGetRollingstockItemName(_zugname, 0), "Zugziel", Zugziele[_gleisID])
13 end
```

Weniger anzeigen

The track ID of the CP (contact point) and the position of the respective axle are entered in the Train Destinations table. The `Change_Train_Destination` function is called in a CP without parentheses.

Without Lua, you can change the display in the control dialog using the train destination axis (see image).



3.1. Train Destination Indicator – Relabeling via Lua

The relabeling of the individual train destination squares (inside + outside) can also be performed automatically via Lua.

The Lua code for this could be, for example, as follows:

```
clearlog()

function EEPMain()
    return 1
end

ZielTexte = {
    [2] = "RE Bamberg Hbf",
    [6] = "RE Hof Hbf",
    [7] = "RE Bad Staffelstein"}

function Text_auslesen(_zugname)
    local ok, text1 = EEPRollingstockGetTextureText(EEPGetRollingstockItemName(_zugname, 0), 3)
    local ok, text2 = EEPRollingstockGetTextureText(EEPGetRollingstockItemName(_zugname, 0), 4)
    print(text1, " ", text2)
end

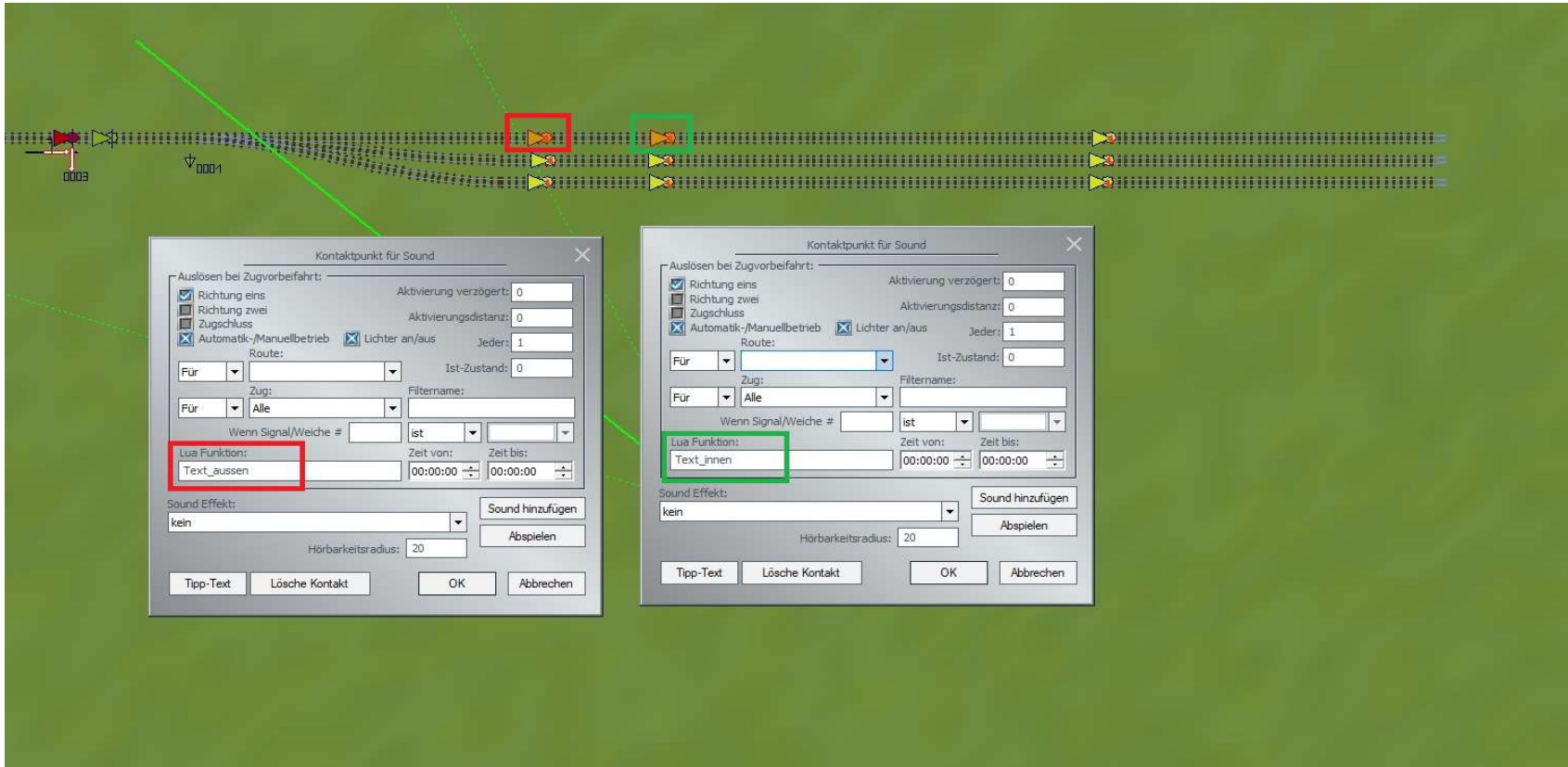
function Text_innen(_zugname, _gleisID)
    local ok = EEPRollingstockSetTextureText(EEPGetRollingstockItemName(_zugname, 0), 3, ZielTexte[_gleisID])
end

function Text_aussen(_zugname, _gleisID)
    local ok = EEPRollingstockSetTextureText(EEPGetRollingstockItemName(_zugname, 0), 4, ZielTexte[_gleisID])
end
```


Important note:

The Class 641 train destination indicators have **separate text fields for the inside and outside of the display**. To ensure error-free automated relabeling via Lua in EEP, it is important to create **separate contact points for the inside relabeling (function `Text_innen`) and for the outside relabeling (function `Text_aussen`)**

The following diagram provides an overview:



I hope you enjoy the models!

Yours, Alexander Geist (AG3)