

INCA-RDE V1.13 - What's new? Online RDE Evaluation

New features

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| 1 | New EU7 legislation implementation |
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Work-on features

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| 1 | Assignment of RDE specific input parameter with additional hardware devices (e. g. XETK) |
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1. New EU7 legislation implementation

The screenshot displays the 'RDE Analysis settings' window with several tabs: 'Commission Regulation settings', 'Vehicle settings', 'Customized settings', and 'Common settings'. The 'Commission Regulation settings' tab is active, showing a search bar and a list of settings. The 'LifETIME' setting is highlighted with a red box, showing a dropdown menu with two options: 'Main lifetime' (Up to 160 000 km or 8 years, whichever comes first) and 'Additional lifetime' (After main lifetime and up to 200 000 km or 10 years, whichever comes first). Below the settings, a table shows various requirements and their values. The 'Condition lifetime [main/additional]' field at the bottom is also highlighted in red and set to 'Main'.

Requirement	Value
Delta start/end altitude <= 100m [m]	0.00
Positive altitude difference RDE [m]	0.00
90 min <= RDE duration <= 120 [hh:mm:ss]	00:38:35
Cold start stop duration <= 90 [s]	0
Start idling duration <= 15 [s]	0
Maximum velocity [km/h]	0.00
Trip share <= 1 km/h [%]	19.44
Trip stop period <= 300 [s]	64.00
CO emission total mg/km	0.00
CO emission urban mg/km	0.00
NOx emission total mg/km	0.00
NOx emission urban mg/km	0.00
PN emission total #/km	0.00
PN emission urban #/km	0.00
Condition lifetime [main/additional]	Main

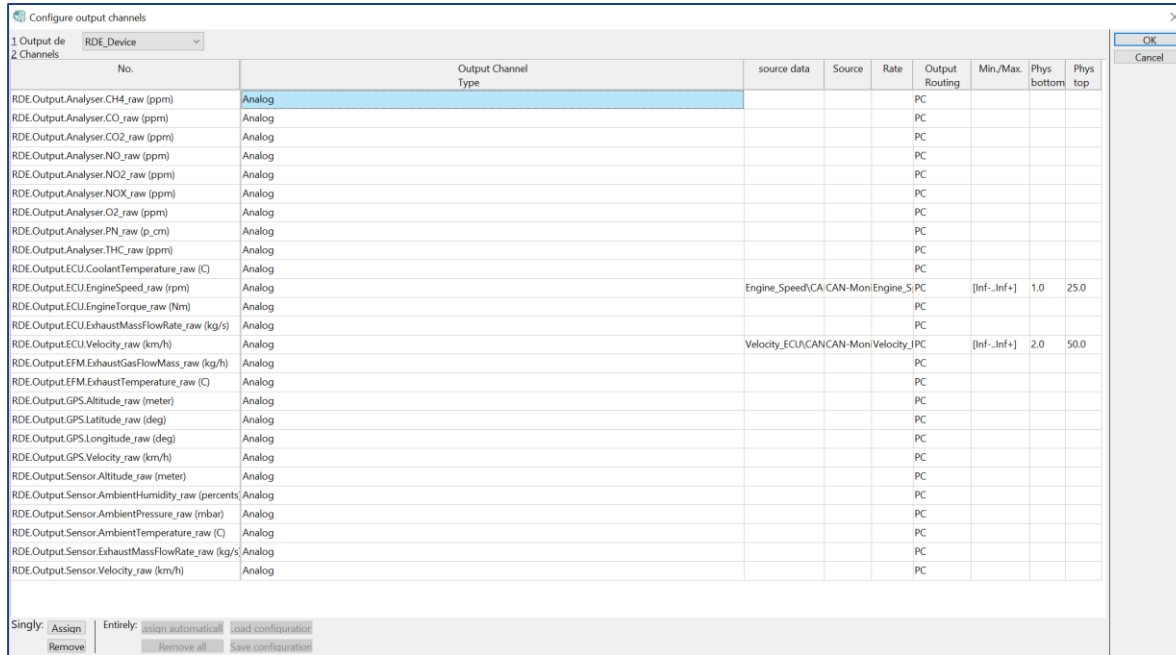
Motivation

- EU7 legislation has been officially released by the EU on May 28th, 2024.
- This legislation will be effective in law in 12/2026.

Solution

- Implementation of the EU7 related changes to the existing RDE legislation.
- Thresholds are identical to EU6e legislation except for an additional 200.000Km RDE test cycle:
 - Main lifetime up to 160.000 km or 8 years (whichever comes first).
 - Additional lifetime up to 200.000 km or 10 years (whichever comes first) allows 1.2 gaseous pollutants compared to the main lifetime threshold.

2. Assignment of RDE specific input parameter with additional hardware devices (e. g. XETK)



Motivation

- Using ECU or other measurement sources than PEMS for RDE measurements and evaluations
- Easy use of RDE legislation evaluation without PEMS system during the development phase
- Using INCA-RDE as a standard tool for calibration evaluation during development phase

Solution

- Offering RDE evaluation as own hardware device (Online device and simulation device)
- Measurement channel assignment for RDE will be shifted from RDE configurator to INCA experiment via INCA Experiment – *Configure Output Channels...* dialogue to RDE device

Please visit <https://www.etas.com/de/portfolio/inca-rde.php>

for more information

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