Dyno load setting –
time between warm up and coastdown
M. Bergmann, AUDI
Time between warm up and coastdown - current gtr text

8.1.2. **Coastdown**

The coastdown test on the chassis dynamometer shall be performed with the procedure given in paragraphs 4.3.1.3.1. and 4.3.1.3.2. of this Annex.

4.3.1.3.1. Following the vehicle warm-up procedure (paragraph 4.2.4. of this Annex), and immediately prior to each test measurement, the vehicle may be driven at the highest reference speed up to a maximum of one minute. The vehicle shall be accelerated to at least 5 km/h above the speed at which the coastdown time measurement begins $(v_i + \Delta v)$ and the coastdown shall be started immediately.

4.3.1.3.2. During coastdown, the transmission shall be in neutral, and the engine shall run at idling. Steering wheel movement shall be avoided as much as possible, and the vehicle brakes shall not be operated until the speed drops below $(v_i - \Delta v)$.

- Time between warm-up procedure and actual coastdown and inbetween individual coastdown runs is not defined
Proposal – number of coastdowns

- 2 consecutive coastdowns within the limits
- Adjustment of parameters after each coastdown
- \( \leq 120 \text{ s} \) ≤ 60 s

Time between warm up and coastdown to start automation system, dynamometer, autopilot (...) shall be as short as possible.
Draft text – time between warm up and coastdown

» concern:
  » The maximum time between vehicle warm up and start of the 1 minute run at the highest reference speed is not defined/limited.

» Proposed text
  » 8.1.2. Coastdown
    The coastdown test on the chassis dynamometer shall be performed with the procedure given in paragraphs 4.3.1.3.1. and 4.3.1.3.2. of this Annex and shall start at latest 120 s after completion of the warm up procedure. The time between consecutive coastdown runs shall not exceed 60 s. At the request of the manufacturer and with approval of the responsible authorities, the time between the warm up procedure and the coastdown can be extended to ensure a proper vehicle setting for the coastdown. The manufacturer has to give evidence to the responsible authorities, that the additional time does not affect the parameters for the chassis dynamometer load setting.

» Justification:
  » A certain time between warm up and coasting may be needed to set the dyno, automation system, coastdown mode and/or autopilot to load setting mode.