

Date: 2019, June, 19<sup>th</sup>

This decision is with immediate application and valid until further notice.

1. Telemetry Systems working on public mobile phone network are allowed for Endurance Races longer than 3 hours. Technical Delegates will have access to the telemetry systems and data.
2. Any adjustment of Engine or Transmission Control Units by running engine is forbidden.
3. TCR BoP & Certified Cars: (Modifications in bold)

| <u>TCR Car Models</u>           | <u>Engine Power Level [%]</u> | <u>Target Racing Weight** [kg]</u> | <u>Compens. Weight* (CW)</u> | <u>BoP Ballast [kg]</u> | <u>Min. Racing Weight [kg]</u> | <u>Ride Height [mm]</u> |
|---------------------------------|-------------------------------|------------------------------------|------------------------------|-------------------------|--------------------------------|-------------------------|
| Alfa Romeo Giulietta RF TCR     | 100.0                         | 1265                               | -                            | -60                     | 1205+CW                        | 70                      |
| Alfa Romeo Giulietta Veloce TCR | 100.0                         | 1265                               | -                            | -20                     | 1245+CW                        | 80                      |
| Audi RS 3 LMS SEQ               | 100.0                         | 1265                               | -                            | -10                     | 1255+CW                        | 70                      |
| Audi RS 3 LMS DSG               | 102.5                         | 1230                               | -                            | 10                      | 1240+CW                        | 80                      |
| Cupra TCR SEQ                   | 100.0                         | 1265                               | -                            | -30                     | 1235+CW                        | 70                      |
| Cupra TCR DSG                   | 102.5                         | 1230                               | -                            | -10                     | 1220+CW                        | 70                      |
| Honda Civic FK7 TCR             | 100.0                         | 1265                               | -                            | 10                      | 1275+CW                        | 80                      |
| Honda Civic FK TCR              | 100.0                         | 1265                               | -                            | -20                     | 1245+CW                        | 70                      |
| Hyundai i30 N TCR               | 97.5                          | 1265                               | -                            | 10                      | 1275+CW                        | 90                      |
| Hyundai Veloster N TCR          | 97.5                          | 1265                               | -                            | <b>20</b>               | <b>1285+CW</b>                 | 90                      |
| KIA Cee'd TCR                   | 100.0                         | 1265                               | -                            | -40                     | 1225+CW                        | 70                      |
| Lada Vesta TCR                  | 100.0                         | 1265                               | -                            | -10                     | 1255+CW                        | 80                      |
| Lada Vesta Sport TCR            | 100.0                         | 1265                               | -                            | 20                      | 1285+CW                        | 80                      |
| Lynk&Co 03 TCR                  | 97.5                          | 1265                               | -                            | 30                      | 1295+CW                        | 80                      |
| Opel Astra TCR                  | 100.0                         | 1265                               | -                            | 0                       | 1265+CW                        | 70                      |
| Peugeot 308 TCR                 | 102.5                         | 1265                               | -                            | <b>-30</b>              | <b>1235+CW</b>                 | 70                      |
| Peugeot 308 Racing Cup TCR      | 102.5                         | 1225                               | -                            | -60                     | 1165+CW                        | 70                      |
| Renault Mégane RS TCR           | 100.0                         | 1265                               | -                            | -30                     | 1235+CW                        | 70                      |
| Subaru STI TCR                  | 102.5                         | 1265                               | -                            | -60                     | 1205+CW                        | 70                      |
| VW Golf GTI TCR SEQ C-ECU       | 100.0                         | 1265                               | -                            | <b>-30</b>              | <b>1235+CW</b>                 | 70                      |
| VW Golf GTI TCR SEQ             | 100.0                         | 1265                               | -                            | -30                     | 1235+CW                        | 70                      |
| VW Golf GTI TCR DSG             | 102.5                         | 1230                               | -                            | -10                     | 1220+CW                        | 70                      |

\* The Compensation Weight of 60kg applies at the 1<sup>st</sup> event of a model in a TCR Series and will be corrected during the season using the particular CW Automatic Formula. **For Single Endurance Events CW may be zero.**

\*\* For any TCR Series or class with a participation of DSG cars over the 40% of the total number of cars on grid, the Target Racing Weight of the SEQ cars may be increased by the Series Promoter from 10 to 40 kg maximum. Promoters are requested to inform WSC in written.



Andreas Bellu / WSC Technical Director

Annexe: Imposed parameter for accepted software

### Imposed parameters for Certified Software

| Model                       | Power level [%] | SW Name                             | SW ID or Checksum      | Check Method | Rev limiter | Max Boost Pressure [mbar] / engine revs |      |      |      |      |      |      | Correct. [mbar/°C] |   |
|-----------------------------|-----------------|-------------------------------------|------------------------|--------------|-------------|---|------|------|------|------|------|------|--------------------|---|
|                             |                 |                                     |                        |              |             | Revs                                    | 4600 | 5100 | 5600 | 6100 | 6600 | 7100 |                    |   |
| Alfa Romeo Giulietta RF TCR | 100             | 1.639_TCR2019_BOP_100 %             | 34882/10107            | CAN hi/lo    | 7100        | Revs                                    | 4600 | 5100 | 5600 | 6100 | 6600 | 7100 |                    | 1 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2500 | 2705 | 2700 | 2700 | 2680 | 2660 |                    |   |
| Alfa Romeo Veloce TCR       | 100             | 1.639_TCR2019_BOP_100 %             | 34882/10107            | CAN hi/lo    | 7100        | Revs                                    | 4600 | 5100 | 5600 | 6100 | 6600 | 7100 |                    | 1 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2500 | 2705 | 2700 | 2700 | 2680 | 2660 |                    |   |
| Audi RS 3 LMS SEQ           | 100             | 5F6906259AB                         | CVN                    | OBD          | 7000        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |                    | 5 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2200 | 2360 | 2470 | 2480 | 2430 | 2280 |                    |   |
| Audi RS 3 LMS DSG           | 102.5           | 5F6906259L                          | CVN                    | OBD          | 7000        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |                    | 5 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2450 | 2450 | 2630 | 2650 | 2580 | 2520 |                    |   |
| CUPRA SEQ                   | 100             | 5F6906259AB                         | CVN                    | OBD          | 7000        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |                    | 5 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2200 | 2360 | 2470 | 2480 | 2430 | 2280 |                    |   |
| CUPRA DSG                   | 102.5           | 5F6906259L                          | CVN                    | OBD          | 7000        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |                    | 5 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2450 | 2450 | 2630 | 2650 | 2580 | 2520 |                    |   |
| Honda Civic FK7 TCR         | 100             | TCR_H70_1.02.35                     | 100                    | ECAL         | 7500        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 | 7500               | 9 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2310 | 2370 | 2490 | 2490 | 2410 | 2290 | 2290               |   |
| Honda Civic FK TCR          | 100             | TCR-V2.7.98+7.5                     | 100                    | ECAL         | 7100        | Revs                                    | 4700 | 5200 | 5700 | 6200 | 6700 | 7100 |                    | 2 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2130 | 2275 | 2415 | 2550 | 2540 | 2370 |                    |   |
| Hyundai i30N TCR            | 97.5            | V1.639.X1_i30_TCR2019_975_v3        | 44078/2007             | CAN hi/lo    | 7000        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |                    | 2 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2200 | 2255 | 2320 | 2340 | 2340 | 2520 |                    |   |
| Hyundai Veloster            | 97.5            | V1.639.X1_i30_TCR2019_975_v3        | 44078/2007             | CAN hi/lo    | 7000        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 |                    | 2 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2200 | 2255 | 2320 | 2340 | 2340 | 2520 |                    |   |
| KIA Cee'd TCR               | 100             | 1502_KIA_TCR_100%_WS C_BoP_19_final | Firmware ID            | Motec tool   | 6900        | Revs                                    | 4400 | 4900 | 5400 | 5900 | 6400 | 6900 |                    | 1 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2430 | 2545 | 2570 | 2560 | 2550 | 2530 |                    |   |
| Lada Vesta Sport TCR        | 100             | SRG_MMGEN_14X8_12.1 0.4.3a          | 0x4A2D1916 /0x8E640174 | Marelli      | 6750        | Revs                                    | 4200 | 4700 | 5200 | 5700 | 6200 | 6750 |                    | 2 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2150 | 2340 | 2580 | 2780 | 2675 | 2540 |                    |   |
| Lada Vesta TCR              | 100             | SRG_MMGEN_14X_12.10.1.3             | 0xFC35A13A/ 0x2BEBC88A | Marelli      | 6750        | Revs                                    | 4200 | 4700 | 5200 | 5700 | 6200 | 6750 |                    | 2 |
|                             |                 |                                     |                        |              |             | Boost                                   | 2260 | 2270 | 2310 | 2400 | 2360 | 2200 |                    |   |

| Model                  | Power level [%] | SW Name   | SW ID or Checksum | Check Method | Rev limiter | Max Boost Pressure [mbar] / engine revs |      |      |      |      |      |      | Correct. [mbar/°C] |
|------------------------|-----------------|---|-------------------|--------------|-------------|---|------|------|------|------|------|------|--------------------|
|                        |                 |   |                   |              |             | Revs                                    | 4700 | 5200 | 5700 | 6200 | 6700 | 7200 |                    |
| LynK&Co 03 TCR         | 97.5            | LynKCo 03 TCR Engine Custom ECU 97.5% FINAL 2   | Firmware ID       | Motec tool   | 7200        | Revs                                    | 4700 | 5200 | 5700 | 6200 | 6700 | 7200 | 1                  |
|                        |                 |   |                   |              |             | Boost                                   | 2260 | 2280 | 2370 | 2360 | 2370 | 2370 |                    |
| Opel Astra TCR         | 100             | 12.7.3.32_BOP_2019_100prozent_final             | 0x3F50CDF0        | CAN hi       | 6900        | Revs                                    | 4400 | 4900 | 5400 | 5900 | 6400 | 6900 | 2                  |
|                        |                 |   |                   |              |             | Boost                                   | 2200 | 2365 | 2520 | 2510 | 2420 | 2160 |                    |
| Peugeot 308 TCR        | 102.5           | TCR_121030_VSCC_100_BOP_2019                    | 0x87752a77        | MapSel 1     | 7300        | Revs                                    | 4800 | 5300 | 5800 | 6300 | 6800 | 7300 | 1                  |
|                        |                 |   |                   |              |             | Boost                                   | 2530 | 2630 | 2750 | 2810 | 2810 | 2800 |                    |
| Peugeot 308 Racing cup | 102.5           | TCR_121030_VSCC_100_BOP_2019                    | 0x2d56713d        | MapSel 2     | 7100        | Revs                                    | 4600 | 5100 | 5600 | 6100 | 6600 | 7100 | 1                  |
|                        |                 |   |                   |              |             | Boost                                   | 2630 | 2650 | 2670 | 2760 | 2780 | 2670 |                    |
| Renault Mégane TCR*    | 100             | 059_Megane TCR VMTCR_6900 rpm_100%              | BOP_26-04-19_100  | A2L          | 6900        | Revs                                    | 4400 | 4900 | 5400 | 5900 | 6400 | 6900 | 1                  |
|                        |                 |   |                   |              |             | Boost                                   | 2630 | 2630 | 2660 | 2660 | 2660 | 2660 |                    |
| Subaru STI TCR         | 102.5           | Subaru_STI_TCR_2019_BoP_102                     | Firmware ID       | Motec tool   | 7200        | Revs                                    | 4700 | 5200 | 5700 | 6200 | 6700 | 7200 | 2                  |
|                        |                 |   |                   |              |             | Boost                                   | 2345 | 2450 | 2750 | 2700 | 2500 | 2400 |                    |
| VW Golf GTI TCR SEQ    | 100             | 5F6906259AB                                     | CVN               | OBD          | 7000        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 | 5                  |
|                        |                 |   |                   |              |             | Boost                                   | 2200 | 2360 | 2470 | 2480 | 2430 | 2280 |                    |
| VW Golf GTI TCR DSG    | 102.5           | 5F6906259L                                      | CVN               | OBD          | 7000        | Revs                                    | 4500 | 5000 | 5500 | 6000 | 6500 | 7000 | 5                  |
|                        |                 |   |                   |              |             | Boost                                   | 2450 | 2450 | 2630 | 2650 | 2580 | 2520 |                    |
| VW Golf GTI TCR C-ECU* | 100             | SRG140_VAG_12.11.1.9_BO P_100%_2019_Final_2.clx | A4846272          | Marelli      | 7200        | Revs                                    | 4700 | 5200 | 5700 | 6200 | 6700 | 7200 | 3                  |
|                        |                 |   |                   |              |             | Boost                                   | 2510 | 2510 | 2485 | 2440 | 2340 | 1380 |                    |

Boost pressure will be monitored and interpreted according to the TCR Technical Bulletin no. 4 / 2019 **by moving car**. Values between reference points are piece wise cubic interpolated. The given values are referenced to scrutineering data channel Tmanifold at 40°C.

It is not allowed in any circumstances to exceed the highest listed boost pressure values.

The boost pressure below the 2500rpm monitored area is limited to the value at the lowest rpm of the reference window.

Accepted limit violation:

- 0,3% of the total valid data points with the highest values in regard to the low over boost limits (30mbar < p Boost < 100mbar relative to the corresponding Max Boost Pressure)
- 0,1% of the total valid data points with the highest values in regard to the high over boost limits (p Boost ≥ 100mbar relative to the corresponding Max Boost Pressure)

