PRODUCTIVE CONNECTIVITY

Dear Reader,

Connectivity in the development process is not a modern buzzword, nor is it simply a fad. In times of increasing complexity caused by the integration of modern driver assistance systems and the necessary hybridisation and electrification of powertrains, it is becoming a vitally important part of vehicle development.

This was also clearly apparent at this year's ATZlive conference VPC.plus. This conference, which is the oldest ATZlive event, has until now dealt exclusively with questions and possibilities of simulation in powertrain development. In 2014, it was expanded for the first time to encompass the field of test rig testing, and for the first time in its 15-year history it had two parallel components. In the run-up to the conference, we were keen to see whether the representatives of the two disciplines would indeed interact with each other. To put it briefly: connectivity took place right from the start.

One issue that was the subject of intensive discussion was how simulation and testing can be better interconnected and what they can learn from one another. On the one hand, test rig testing is only as good as the performance specifications. On the other hand, simulation sometimes provides answers to questions that were never asked. What is more, changes to the application are sometimes made during test rig testing that were never examined in this way in the simulation process.

We can observe a fundamental convergence of the two disciplines, which have

found their natural congruity in virtual testing. Virtual testing is indispensable above all in the development of modern driver assistance systems in order to test the functioning and interaction of new applications in a simulated traffic environment and in this way to guarantee sufficient safety in real traffic before field tests are performed. It is true that virtual testing cannot replace costly and time-consuming test rig tests in the field of powertrain components. Nevertheless, it can significantly support their execution by improving their efficiency. As a result, stringent and productive results are possible within a shorter time. Against a background of increasingly shorter development cycles, that is certainly an important step.

Best regards,

DR. ALEXANDER HEINTZEL, Editor in Chief
Wiesbaden, 8 October 2014