

IMPLEMENTATION AND INTERACTION BETWEEN CEN STANDARDS AND U.S. PROCEDURES

VALIDATION OF CEN TEST STANDARDS

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The work of achieving an agreement based on consensus of the different European countries has been quite a difficult one because each country had its own experiences and its own testing procedures. The result is a kind of blend of the different testing procedures and a kind of envelope of what has been done already.

Nevertheless, it is in many respects something new. Maybe not everything is new for everyone, but in general all testing procedures are rather new for everyone. It is believed that some assessment and validation of the testing procedures and of the acceptance as a rule is needed. And at the same time, an evaluation of a lot of this is needed, and when this standard is implemented, it must be together with at least a laboratory that can be authorized to do the testing.

Concerning the physical vehicular standard, there is some doubt about the required tolerances. In some respects, they are too large and will allow two different tests. On the other hand, they may be too narrow and difficult to meet.

But there is still another reason for CEN test calibration procedures; that is, to check to see if the result from different laboratories on normally equivalent tests are comparable, which is not granted from the beginning. And finally, another reason is to check if normally equivalent tests—tests made with normally equivalent data, which can be quite different and may be interpreted—could really lead to the same result, and at the same time, if tests with parameters that are the same are within the tolerances. Everyone has accepted the proposal of running an interlaboratory test program.

Another point is that Working Group 1 has discussed how to mandate this program and has related to Task Group I the mandate to prepare, supervise, and assess problems. Task Group I has been established by Working Group 1 and had a mandate to prepare part of the technical part of the proposal.

So at the beginning, one of the most critical issues of this would be the choice of the candidate laboratories and how that can be done. I believe that at the beginning the initial laboratories would donate funds to participate

in the test program. And looking at preliminary answers, an initial number of these from six to eight may be forecast, which is probably too much for a test program like that. But the number of the initial laboratories could contribute to the program some additional funds to the European Economic Community funding.

On the other hand, at the end of the project, this will demonstrate ability to produce a homogenous result, which will be very important. Only such laboratories will be at the end of this program and will be certified to be homogenous to each other and able to produce some results that are comparable. And possibly before starting the program, some preliminary check about the systems and the data acquisition, systems, and procedures of the laboratories should be assessed so as to start with a homogenous set of equipment and procedures.

Some standard testing and calibration procedures of the data acquisition system are needed. Maybe what the Federal Highway Administration has developed, a kind of black box used to calibrate the data ignition system. I believe that it is a good idea to start with this kind of problem already solved so that it will be known that all the laboratories are taking results that are comparable. The rest of the tests will be much easier and it will be known that money is not being wasted on running tests in which the end results are not comparable.

Procedures could be established to run a single test that would be exactly the same in all the laboratories--same vehicle, same barrier--and then the result could be checked to see if it is comparable. If not, the reason would be understood and corrective actions would be taken, and possibly some of the tests would be rerun.

After that, a number of wheeling tests could be performed in different labs. In this case, a particular vehicle could be chosen, and possibly this test could be performed near a different limit of the tolerance so that an evaluation could be made of what is the limit and what is the consequence, the consequences of the tolerance. This possibly could be the main program. It will be enough to make it with private vehicles; to make this with heavy vehicles is not needed. So the cost of using just the small cars and one or two types of barriers could be predicted. But this will be an object of discussion.