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THE DEVELOPMENT OF STANDARDS FOR ROAD AND RUNWAY FRICTION TESTING

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ABSTRACT

The use of Continuous Friction Measuring Equipment (CFME) to measure both roads and airport runways began forty years ago. Quite early in this period, the International Civil Aviation Organisation (ICAO) formulated guidelines and procedures for runway friction testing: these have been regularly updated and now form the basis of national policies of all countries which have signed the Convention on International Civil Aviation.

In contrast, there are no international guidelines for road friction testing. Since roads are used in more diverse ways than runways, setting standards for road skid resistance is more complicated than setting such standards for runways. Also, ICAO has rather more authority than the World Highways Association (formerly PIARC/ AIRCP).

The 1992 PIARC Experiment (see reference 1) was intended to create an International Friction Index (IFI) which would allow readings taken by different types of CFME to be reported in a standard international "language". However, for a variety of reasons, the IFI is still very rarely used and this tends to discourage developing countries from applying road friction standards.

However, CEN is now revisiting the PIARC Experiment with a view to creating a practical European Friction Index (EFI): from this, perhaps, a real Esperanto for CFMEs will evolve. In the meantime, Highway Authorities can still reduce wet skidding accidents by applying appropriate skid resistance standards.

KEY WORDS: CFME, skid resistance, surface friction, SCRIM, GripTester, IFI, EFI