



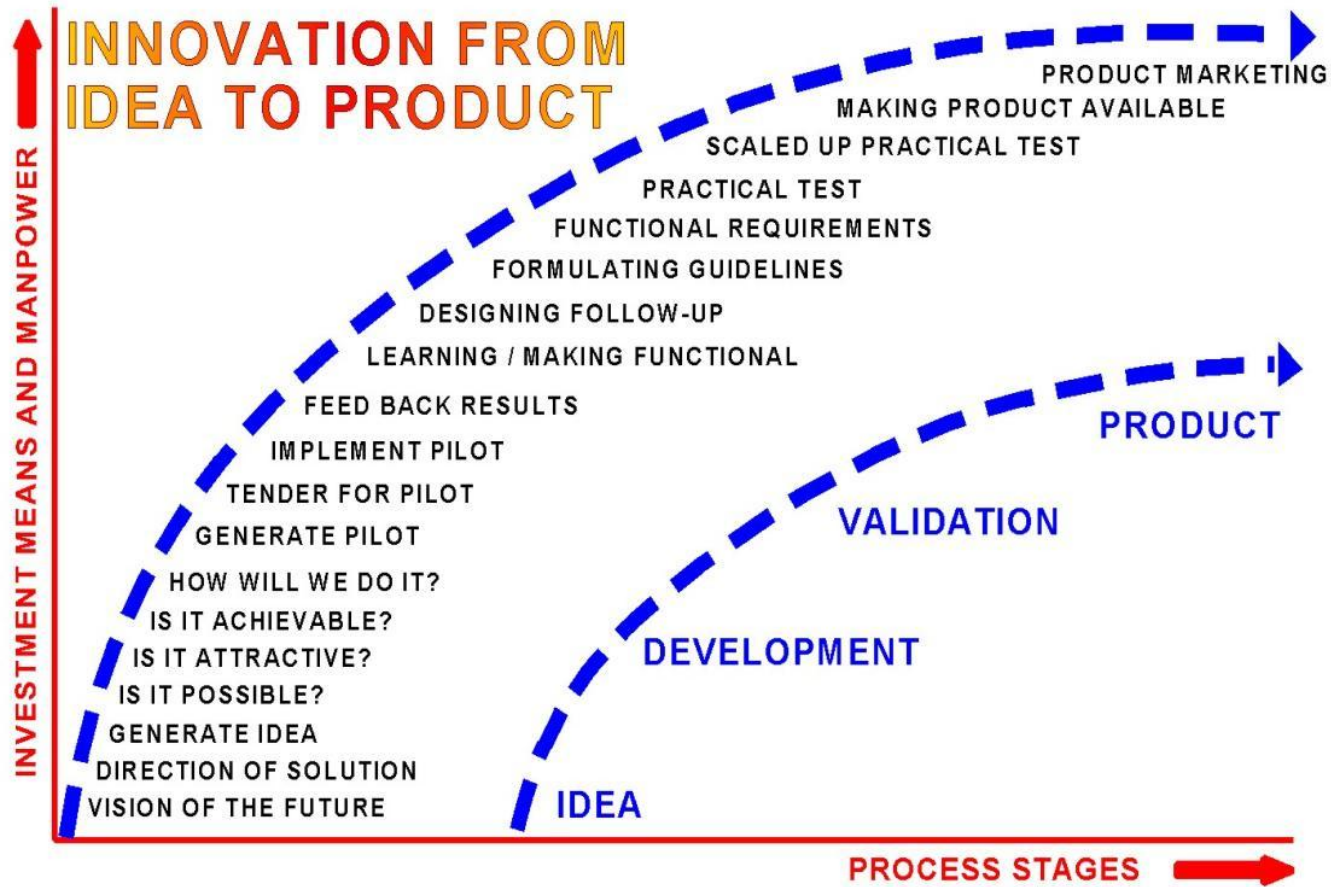
**XXIVth World
Road Congress
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Monitoring of Innovation

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Innovation Working Group



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Innovation Fact Sheet Example

Micro-surfacing in Greece

What:

Micro-surfacing (MS) is a 10mm approx. thick course constructed by slurry seal cold-laid asphalt mixture with very good surface characteristics. Micro-surfacing is a mixture of polymer-modified asphalt emulsion, aggregates for anti-skid courses, filler, and water and chemical additives, properly proportioned. In certain cases, a small quantity of fibres is also added to the cold asphalt mixture. In Greece micro-surfacing was introduced approximately in 1985 as slurry-seal and as micro-surfacing later years.

Why:

Initially in Greece micro-surfacing was applied to improve skid resistance for road sections with low skid resistance. More recently, micro-surfacing is used as a pavement preservation treatment to extend the life of existing pavements.

How:

The start of slurry surfacing and micro-surfacing in Greece was based on the availability of the technology and equipment from private companies. These companies wanted to introduce this innovation to Greece and public road agencies.

Plan, progress and success:

Initially, test sections were constructed by the Greek road agencies to investigate the behaviour with traffic and climate. Recently, micro-surfacing is more widely used in road sections with low skid resistance and for airport runways. Micro-surfacing is desirable because of the limited quantities of good quality aggregates (slag has been used in recent years), their rapid application and cost-effectiveness and finally because their low thickness does not require other shoulder and drainage improvements.

Lessons learned:

- A good choice for road agencies, if there are limited budgets to preserve the pavements.
- Agencies must carefully examine the road surface before the application of micro-surfacing because the presence of structural defects may require other more extensive rehabilitation.

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- Technical report on innovation has been completed and submitted to PIARC for publication
- Call for papers for the Congress resulted in 144 papers being reviewed
- Poster session being held on Friday
- 3 papers were selected for presentation during this session



Summary Paper Presentations

- Mike Winter, Transport Research Laboratory, U.K.
 - Road Foundation Construction Using Tyre Bales – A Lightweight, Low-Energy Alternative
- Anne Beeldens, Belgian Road Research Centre, Belgium
 - Photocatalytic applications in Belgium, Purifying the Air Through the Pavement
- M.J. Ishigaki, Nippo Corporation Research Institute, Japan
 - Seismic Retrofit of Asphalt Pavements using Confined-Reinforced Earth

