

## ***European Metrology Research Programme EMRP - a major new EU initiative***

Europe has recognised that quality-assured measurement or “metrology” is instrumental in meeting the global "Grand Challenges" of today's society – from climate change to economic recession. The European Community has recently signed a General Agreement with EURAMET, the European Association of National Metrology Institutes, implementing a major new 400 M€ metrology research programme (EMRP)<sup>1</sup>, which engages over 20 countries throughout the region during the next 7 years, as one of the most integrated collaborations in the flagship European Research Area.

To have close and secure access to accurate measurements that are traceable to the International System of Units (SI) (metre, kilogram, second, etc.) is a prerequisite for a modern industrial society, whatever sector is considered. Business and society are making increasing demands on measurement complexity, combined with higher accuracy in response to the great challenges.



Signing of the general agreement between EURAMET and the European Community for the new Article 169 European Metrology Research Programme in Berlin on 27th November 2009 by EURAMET Chairperson left: Leslie Pendrill, SP (Sweden), right: then EMRP-Chair Luc Erard, LNE (France) together with Programme Manager Andy Henson (UK)

Examples can be found from the fields of space applications (including satellite), security, healthcare, semiconductor industry and climate change. Metrological traceability means that the results of measurements can be compared in an objective way. That in turns ensures that products and processes in a wide range of sectors can more efficiently work together. In addition, communication is improved so that products can be traded, ensuring their safety, and that they are kept within specifications. Measurement uncertainty for its part gives an indication of measurement quality, which is essential in assessing the real value and impact of a measurement result.

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<sup>1</sup> EMRP 2009 *Official Journal of the European Union*, L2009:257 Vol 52, pp 12 - 25  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:257:0012:0025:EN:PDF>

The scope of today's challenges can only be met by multinational cooperation – hence the timeliness of the new European Metrology Research Programme. Apart from joint research projects engaging the principal actors in European national metrology which make up most of the programme, EMRP also supports increased participation from the wider European scientific community through research grants and increase European metrology research capacity through researcher mobility grants.

Metrology for Energy is the theme of the first Call of the new Programme and a number of project proposals have completed the process of independent review and selection, are currently at the contract negotiation stage. This spring sees new EMRP Calls for Metrology in Industry and the Environment announced (open from 12<sup>th</sup> Feb to 28 March 2010). Everyone is welcome to suggest potential topics for research – see [www.euramet.org](http://www.euramet.org) !

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EURAMET ([www.euramet.org](http://www.euramet.org)) is an association of the national metrology institutes (NMI) from 34 European member countries, with a total of over 100 participating organizations, including associate members, and is charged with implementing the European Metrology Research Programme (EMRP) under Article 169 of the European Treaty.