

EMRP Call 2010

Call Scope of TP Industry

The overall strategic aim of the **Targeted Programme (TP) “Industry”** is to develop metrological methods and techniques to improve the metrological infrastructure for industry. Thus it is aimed at the industry focused end of traceability.

The principal objectives of this Call are to support metrological research which:

- improves the competitiveness of European industry;
- generates knowledge to ensure industry’s transformation from a resource-intensive to a knowledge-intensive base;
- achieves fundamental optimizations within the European industries and facilitates further enhancement of efficiency and effectiveness by ‘smarter’ application of existing technologies;
- creates innovations and possibly step changes through research and implementing decisive knowledge for new applications at the crossroads between different technologies and disciplines.

This will be beneficial both for:

- new, high-tech industries;
- higher-value, knowledge based traditional industries.

Despite the growth of the tertiary sector, the industrial sector does not lose its importance. To remain competitive on the global scale, the European industry must not slacken in striving for better quality and high-technology application, for which metrology is a key support.

Metrology in the following areas relevant for industry will be covered in this Call:

- Dimensional metrology
- Temperature and related quantities metrology
- Electrical and magnetic metrology including time and frequency metrology
- Ionizing radiation metrology (excluding energy, environmental and health topics)
- Chemical metrology (excluding energy, environmental and health topics)
- Mass and related quantities and flow metrology
- Optical and acoustics metrology
- Metrology for manufacturing technologies and process control

Topics connected with nanotechnology, biotechnology and safety/security are planned for inclusion in the TP “New technologies” call scheduled for 2011. Topics connected with medical devices are planned for inclusion in the TP “Health” call scheduled for 2011.

Moreover, multi-disciplinary topics, where the combinations of technological disciplines lead to innovations, are encouraged.

The documentation of stakeholder needs, such as provided through the references given in the PRTs, will be of key importance. The description of the benefit for industry should refer to the following scheme of industrial branches:

1	Mechanical engineering and industry
2	Electrical engineering and industry
3	Metallurgical industry
4	Process engineering and production technologies
5	Communication technologies and industry
6	Automotive industry
7	Aerospace industry
8	Chemical industry
9	Pharmaceutical and medical industry
10	Mining industry
11	Energy industry
12	Food industry
13	Forest industry
14	Textile and leather industry
15	Glass industry
16	Building industry
17	Traffic
18	Safety engineering and testing

EURAMET wishes to focus on the most pressing challenges whilst exploiting the unique capabilities of its member national metrology institute (NMIs) and designated institutes (DIs). Thus EURAMET wishes to put a focus on the metrological support of the most progressive branches of high-technology to strengthen European position in global competition. However the target is not only to develop metrology basis for new and emerging technologies, but also for significant optimisation of current technologies.

TP Industry shall enable and promote collaborative research in the most demanding fields of industrial metrology going beyond the state of the art. It also should strengthen the mutual cooperation of European NMIs as well as their cooperation with European industry. The supported projects shall have large and long lasting impact in the field of industrial metrology.

This Call for Potential Research Topics refers to the 2008 edition of the European Metrology Research Programme – the “EMRP Outline 2008”.