Korean Construction Company Saves 10 Million US $ thanks to the Mutual Recognition Agreement

Quality Infrastructure

**METROLOGY**  STANDARDS  TESTING  CERTIFICATION  ACCREDITATION  QUALITY MANAGEMENT

**PROBLEM** Different traceabilities
Daewoo Shipbuilding and Marine Engineering Corporation (DSME) is one of the largest shipbuilder in the world with sales of approx. 4700 million US Dollar in 2005. In 2002 DSME received a contract from British Petroleum (BP) to build an offshore plant. BP required that the measuring instruments used for the construction are traceable to the National Institute of Standards and Technology of the United States (NIST). This meant a significant increase in costs for DSME.

**BACKGROUND** Each country has its own standards
The calibration laboratories of DSME are accredited and maintain traceability to the Korea Research Institute of Standards and Science (KRISS). In order to be traceable to NIST, DSME had to get their instruments calibrated by NIST. Aside from the high costs of transportation, the instruments had to be replaced by others for a period of at least 2 months. This would have cost DSME over 10 million US Dollar and a significant delay in the completion of the project.

**SOLUTION** Mutual Recognition Agreement
Both Korea and the United States are signatories to the Mutual Recognition Agreement of the CIPM (Comité International des Poids et Mesures). This means that the certificates of calibration and measurement from the National Institutes of Metrology of the signatories are mutually accepted. Thus, DSME did not need to calibrate their instruments at NIST and saved more than 10 million US Dollar and finished the project in time.

**IMPACT** Elimination of barriers to trade
The national quality infrastructure is essential to reduce Technical Barriers to Trade (TBTs) and the Mutual Recognition Agreement provides a basic tool to achieve this goal. It represents the key to a better integration of its signatories into the international system of trade. Beforehand, it is important that each signatory country has at least a minimal metrological infrastructure, which can rely on the support of its proper state. This way, all countries can participate in the advantages the globalization offers, while effectively protecting themselves from its risks.

**SOURCES**
The CIPM Mutual Recognition Arrangement (CIPM MRA) in the framework of the Bureau International des Poids et Mesures.
Luis Mussio (Executive Secretary of the JCRB – BIPM)
The answer to the global quality challenge: A national quality infrastructure. Clemens Sanetra, Rocío M. Marbán