

## IUPAC Project Progress Report

**Date:** July 2007

**Task Group Leader:** Dr Ales Fajgelj

**Project number:** 2005-019-2-500

**Project Title:** Selection and Use of Proficiency Testing Schemes for a Limited Number of Participants (Chemical Analytical Laboratories)

**Report:**

1. Current status of project:  
There is the second year of the project development.

2. Progress relative to 'milestones':

Experience of proficiency testing providers for the case of a limited number of participants is analyzed. Basic principles of the guide to be prepared (including mathematical/statistical, metrological and chemical analytical ones) are formulated.

The position paper on the topic "Implementation of proficiency testing schemes for a limited number of participants" is published in ACQUAL 2007 on-line. An additional paper "Comparability and compatibility of proficiency testing results in schemes with a limited number of participants" is sent to ACQUAL recently.

The principles are discussed at the International Workshop "Combining and Reporting Analytical Results. The Role of (metrological) Traceability and (measurement) Uncertainty for Comparing Analytical Results", Rome, Italy, 2006; at the International Congress of Analytical Sciences, Moscow, Russia, 2006; and at the 3<sup>rd</sup> International Conference on Metrology. Trends and applications in Calibration and Testing Laboratories, Tel Aviv, Israel, 2006.

The project was reported also at the 21<sup>st</sup> CITAC Members Meeting, Moscow, Russia, 2006, where the decision accepted was to support the guide development by involving more CITAC members in the discussion.

Examples for the guide are under consideration.

3. Difficulties encountered (or concerns): Harmonization of approaches to proficiency testing at the mathematical limitations caused by a small size of a statistical sample formed from results of analytical laboratories taking part in such a proficiency testing.

4. Projected completion date (documents ready for external review): December 2007.

5. Please list all of the intended outputs and the dissemination plan for this project (viz. articles, CD, conference presentations; etc.). These may have been expanded since project approval:

The project will be presented at the 22<sup>nd</sup> CITAC Members Meeting in conjunction with the IV International Congress on Chemical measurement Traceability and Quality Assurance, Sao Paulo, Brazil, July 2007; at the 1<sup>st</sup> International Proficiency Testing Conference, Sinaia, Romania, October 2007; and at the 11<sup>th</sup> International Symposium on Biological and Environmental Reference Materials (BERM 11), Tsukuba, Japan, October-November 2007.

A guide and corresponding report for publication in *Pure and Applied Chemistry* will be prepared.

6. If your project is within 6 months of completion, how do you plan to utilise any remaining budget for this project?

To pay (partially) expenses for a team member participation in BERM 11 for presentation of the project.

7. Work on this project may have identified new problems, issues, challenges, emerging topics, opportunities for related projects, etc. Please indicate these here so that the Division can follow up on them:

An additional year (2008) is necessary for preparation of the guide and its wide discussion by chemical analytical and metrological communities (EURACHEM, EUROMET, NORDTEST and other organizations). Only after such a discussion a report for publication in *Pure and Applied Chemistry* would be desirable.