

# HAA ACTIVITIES IN ACCREDITATION OF CALIBRATION LABORATORIES

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**Abstract** – This paper contains information’s regarding results achieved in accreditation of calibration laboratories in following fields: temperature, pressure, electrical quantities, mass, force, density, length, volume and specific equipment needed for motor vehicle safety testing and construction material testing. It also contains information’s regarding the upcoming change in terminology from best measurement capability (BMC) to calibration and measurement capability (CMC).

**Keywords** (accreditation, calibration laboratory, measurement traceability, HRN EN ISO/IEC 17025).

## 1. INTRODUCTION

Croatian Accreditation Agency (HAA) is a public institution founded on the Law of Accreditation (National Gazette no. 158/03). Founder of HAA is the government of Republic of Croatia. HAA, as an independent accreditation body has been acting since 1<sup>st</sup> of July 2005. Until that date accreditation services were provided by the State Office for Standardization and Metrology (DZNM). Among other things, HAA is also responsible for accreditation of calibration laboratories according to the HRN EN ISO/IEC 17025 standard.

List of all accredited conformity assessment bodies with valid accreditation scopes can be found on HAA web site [www.akreditacija.hr](http://www.akreditacija.hr) [1].

Besides activities on accreditation of calibration laboratories, HAA personal is also involved in:

- monitoring and participation in international organization in the field of accreditation (EA),
- HAA Working group for interlaboratory comparisons,
- development of HAA regulations and instructions,
- coordination and monitoring of participation in interlaboratory testing programmes

## 2. CALIBRATION LABORATORIES

### 2.1 Structure of calibration laboratories

So far HAA accredited 19 calibration laboratories. Structure of calibration laboratories is shown in the Figure 1.

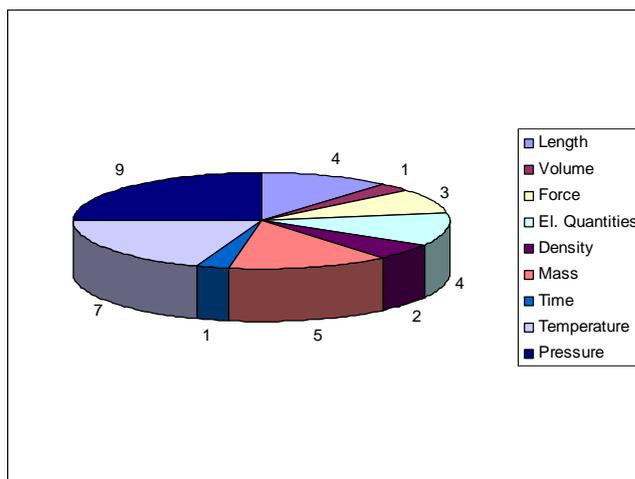


Figure 1: Structure of accredited calibration laboratories

### 2.2 Measurement traceability

Besides raising the level of competency of laboratories, accreditation of calibration laboratories is necessary in order to insure measurement traceability to SI unites. In evaluation and accreditation of conformity assessment bodies (CAB’s), HAA applies policies and principles set forth in the documents EA-4/07; Traceability of Measuring and Test Equipment to National Standards [2] and ILAC P10; ILAC Policy on Traceability of Measurement Results [3].

Measurement traceability is ensured by National Measurement Institutes (NMI's), signers of Mutual Recognition Agreement CIPM/BIPM MRA. Level of measurement uncertainty is shown in Calibration Measurement Capability – CMC tables in CIPM available on [www.bipm.org](http://www.bipm.org). Since HAA is a signatory of EA MLA since April 2010, calibration laboratories, holders of national measurement standards in Republic of Croatia, are accredited according to the EN ISO/IEC 17025 by accreditation bodies’ signer of the same treaty at the time that National laboratories applied for accreditation. Calibration laboratories accredited by HAA according to the requirements of HRN EN ISO/IEC 17025 ensure their traceability by calibrating their instruments/etalons in National laboratories – holders of national etalons. Testing laboratories accredited by HAA according to the regulations of HRN EN ISO/IEC 17025, depending on the characteristics of their equipment and method sensitivity, ensure their traceability by calibrating their instruments in accredited calibration laboratories or National laboratories – holders of national etalons (Figure 2) [4].

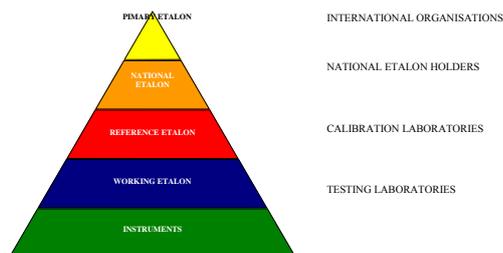


Figure 2: Measurement traceability

### 2.3 Terminology change from BMC to CMC

According to decisions of ILAC (International Laboratory Accreditation Cooperation) from 2009-08-20 and EA (European co-operation for Accreditation) from 2009-09-24, Croatian Accreditation Agency (HAA), as a member of both organizations was obligated to adjust its documentation and practice. By the end of 2010, HAA implemented terminology change and replaced „best measurement capability“(BMC) with „calibration and measurement capability“(CMC). This terminology change was conducted in order to harmonize terminology and improve understanding in the field of proving traceability of calibration/testing results. Implementation of term CMC was conducted mostly through surveillance visits and is visible in the Scope of the accreditation of each calibration laboratory.

## REFERENCES

- [1] Accreditation registry [www.akreditacija.hr](http://www.akreditacija.hr)
- [2] EA-4/07; Traceability of Measuring and Test Equipment to National Standards
- [3] ILAC P10; ILAC Policy on Traceability of Measurement Results
- [4] HAA-Up-1/3 Traceability of Measurement Results

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