

Proficiency testing scheme for chemical analyses of water in Africa

Meryllinda Conradie¹, Michael Koch², Donald Masuku³

University of Stuttgart
Germany

¹NamWater, Windhoek, Namibia, Namibia

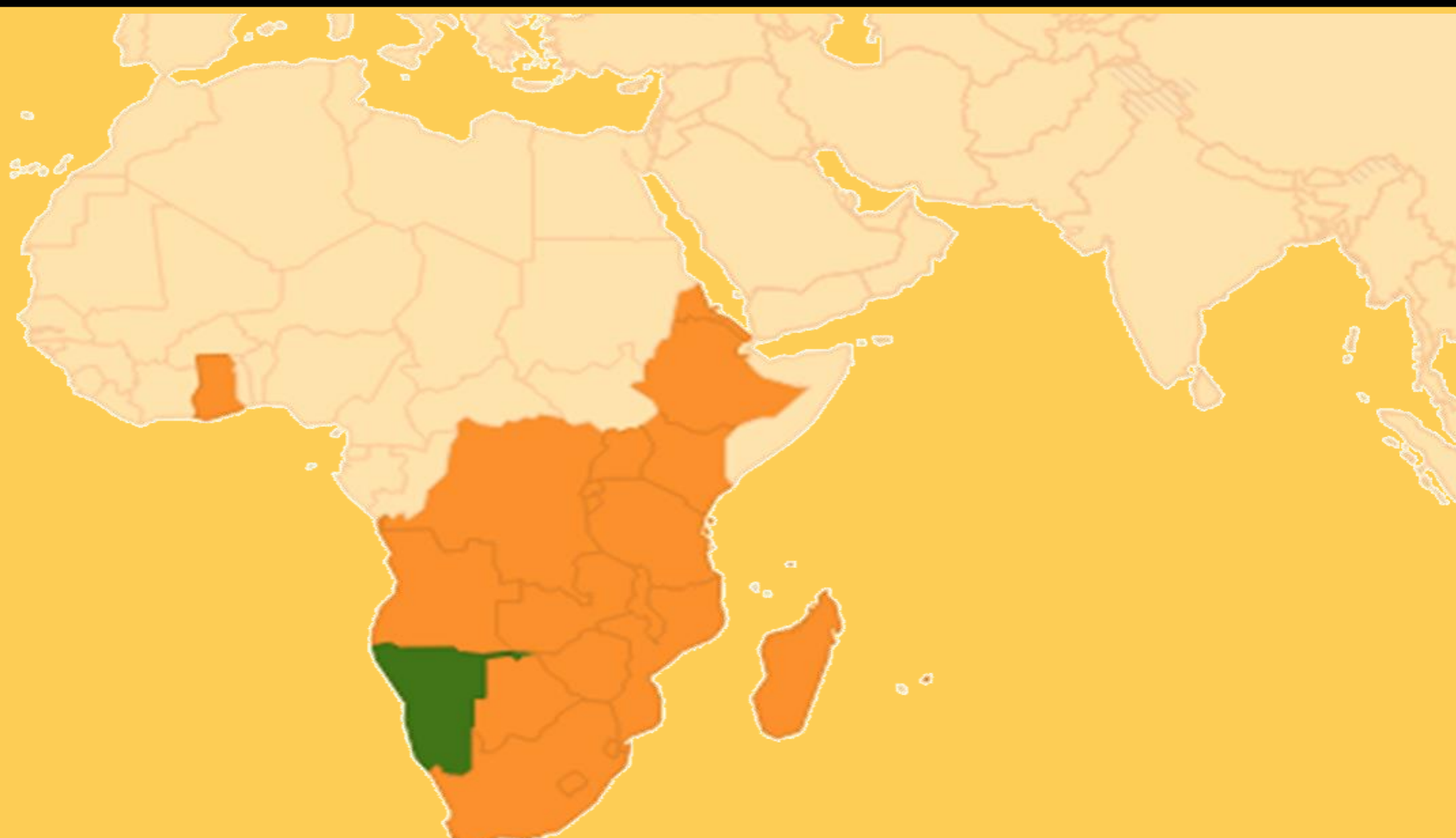
²University of Stuttgart, Stuttgart, Germany

³National Metrology Institute, SADC MET Regional Coordinator, Pretoria, South Africa

Introduction

The Southern African Development Community Association of Water Testing Laboratories (SADCWaterLab) was established in 2005 to carry out water Proficiency Testing (PT) and to facilitate collaboration among participating water testing laboratories.

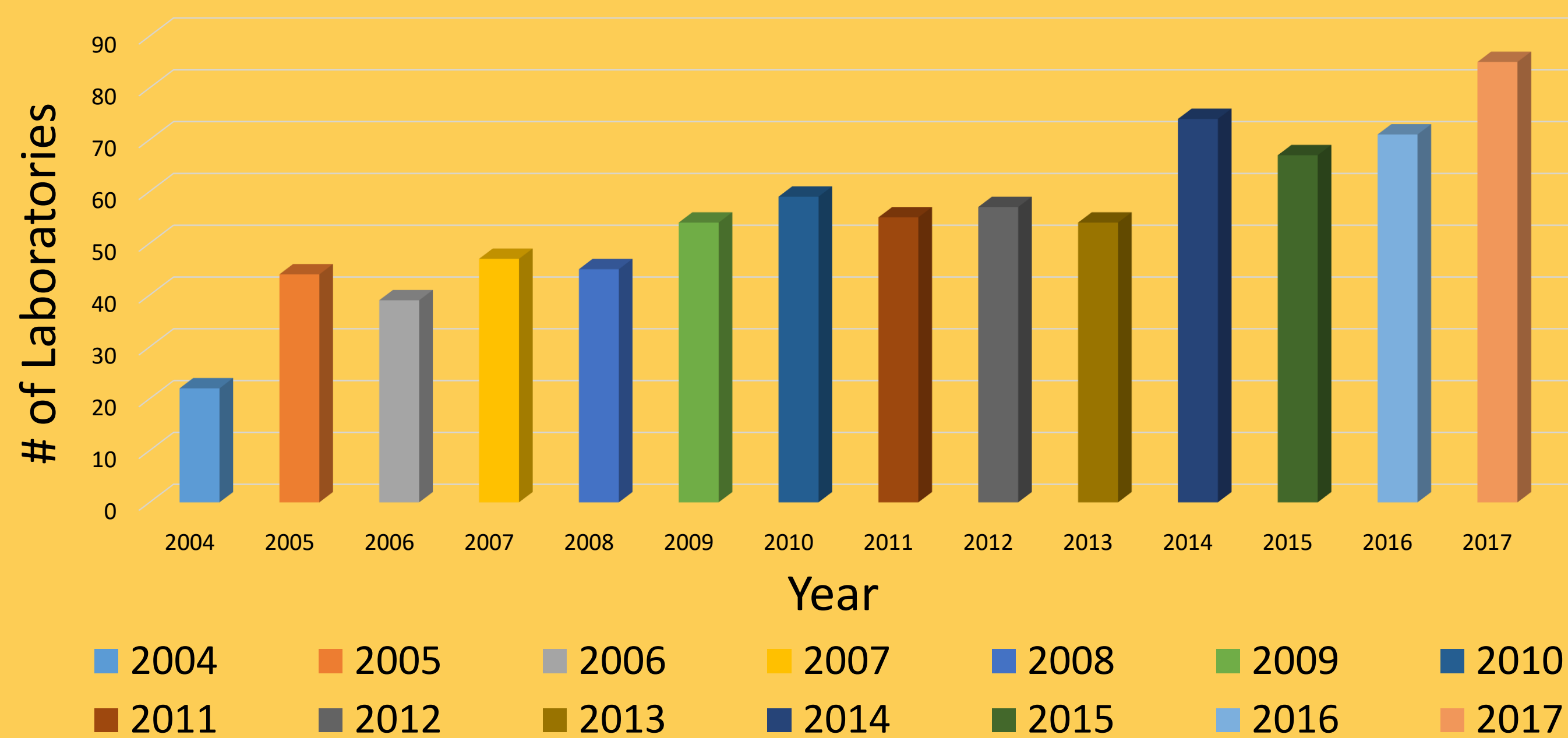
Participating Countries



Growth of the scheme

The number of participants increased from 22 in 2004 to 85 in 2017.

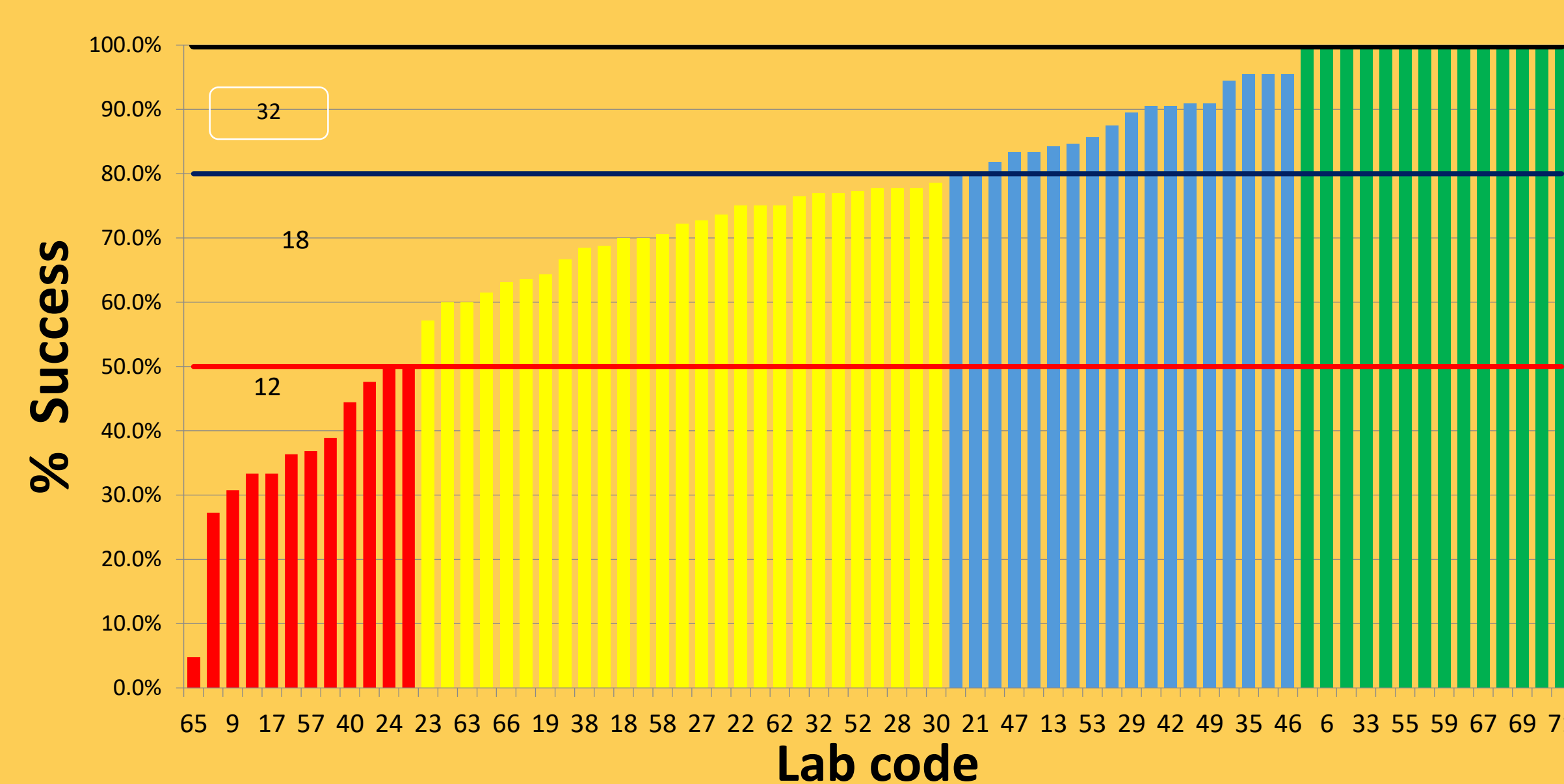
Growth of the PT scheme : 2004 - 2017



Overall performance

The overall performance is based on the number of successful parameters done.

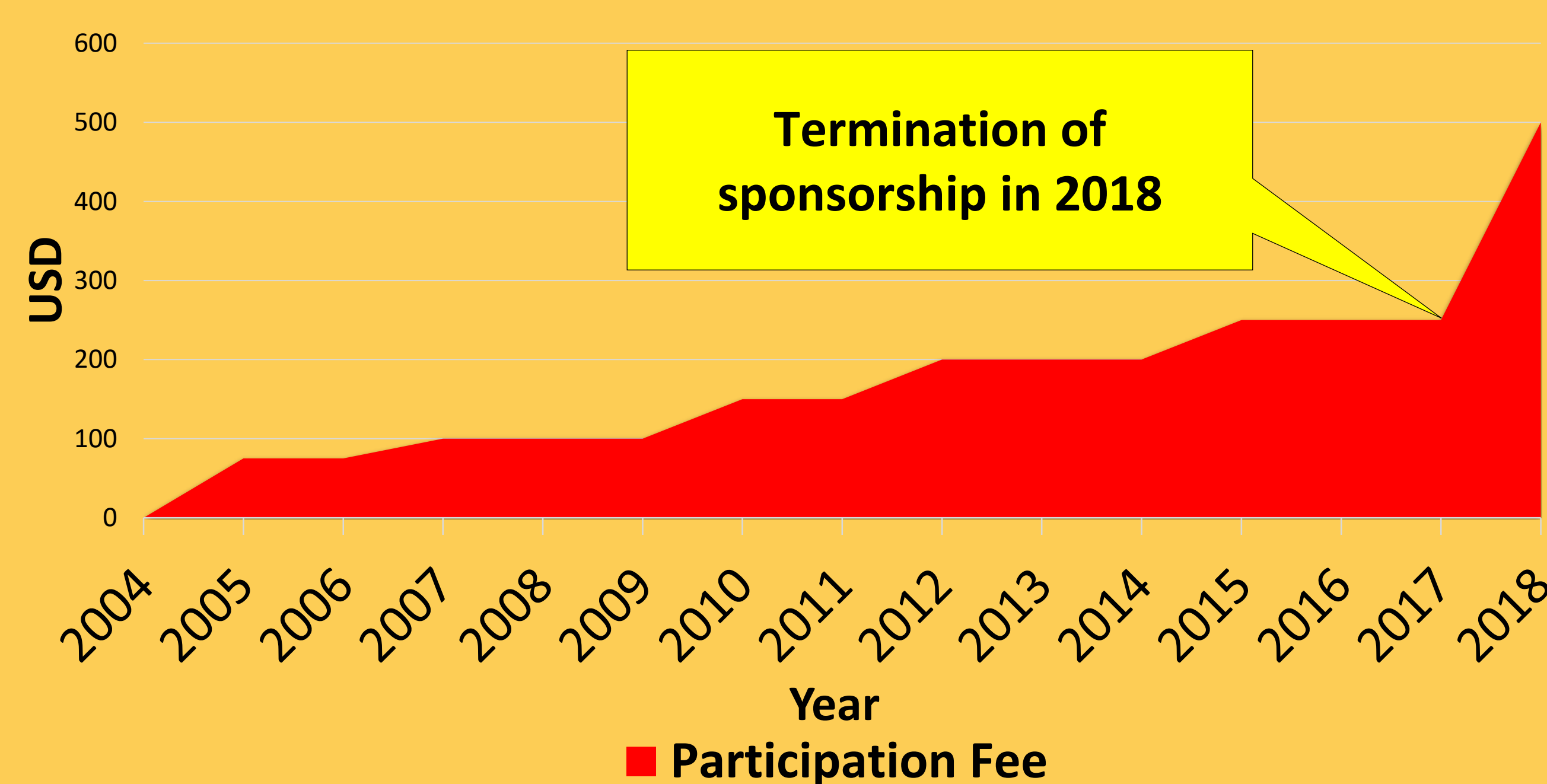
Overall % Performance in 2016



Fees

The fees covering the participation and sample transport gradually increased over the years. Due to the termination of the PTB financial support in 2018, the fees will rise at least 450 USD. This may reduce the participation to the PT programme.

Participation fees: 2004 - 2017



Improvement of scheme

- Local coordinators were appointed in the SADC countries to facilitate and promote the scheme and to act as local focal points.
- The laboratory association (SADCWaterLab) forms a strong basis for the support of the scheme.
- The SADC MET website provides dedicated space for SADCWaterLab for networking and communication.
- Working groups were established to facilitate harmonisation of methods and to address problems.
- Training on quality management topics took place during the annual workshops.
- A programme "Training of trainers on Quality Assurance in Analytical Chemistry" (ToT) was organised by SADCWaterLab in 2010.

Future Challenges

- Future challenges of the PT scheme are:
- To convince all the participating laboratories to implement international methods and to apply corrective actions.
 - To obtain accreditation for the scheme.
 - To obtain funding for the accreditation of the PT scheme is a challenge and it will result in an increase of participation fees.
 - Increase of fees may reduce the participation to the PT program
 - Annual workshop are held to outline problems and aspects of proficiency testing, but is costly for the participants as well as for the provider.