

Usage of a common terminology as well as established techniques and methods – key success factors of Requirements Engineering

Stefan Sturm IREB GmbH

About me

Who am I?

Stefan Sturm, Managing Director of IREB GmbH

What is the IREB GmbH?

Operating company of the IREB e.V.

What is the IREB e.V.?

International Requirements Engineering Board (IREB) e. V.

Why do we need it?

Different implementation of Requirements Engineering

- At customers, suppliers, partners
- In distributed teams at different locations, offshore, near shore
- In different industrial sectors

Problems in communication due to

- different languages
- different cultures (ethnological and company specific)

Misunderstanding of “agile”

- Elicitation of requirements is underestimated
- Documentation and traceability of requirements is neglected

Customers, suppliers and development partners talk past each other when defining requirements

Consequences (incomplete)

- Incomplete Requirements
- Ambiguous Requirements
- Missing common understanding of Requirements
- Different prioritization of Requirements
- Conflicts between project partners
- Time and cost overruns
- Missing, wrong or „gold plated“ functionality

Common understanding of terms

- Within distributed teams
- Between customers, suppliers and development teams
- Over language and cultural boundaries

Elicitation, documentation and administration of Requirements

- Over release cycles
- In the context of agile development
- Within distributed teams

Know-How Transfer

- To new employees / with staff fluctuation
- Within distributed teams.....(see first point)

Different skill levels

- Many practitioners do not have an education in systems/software engineering

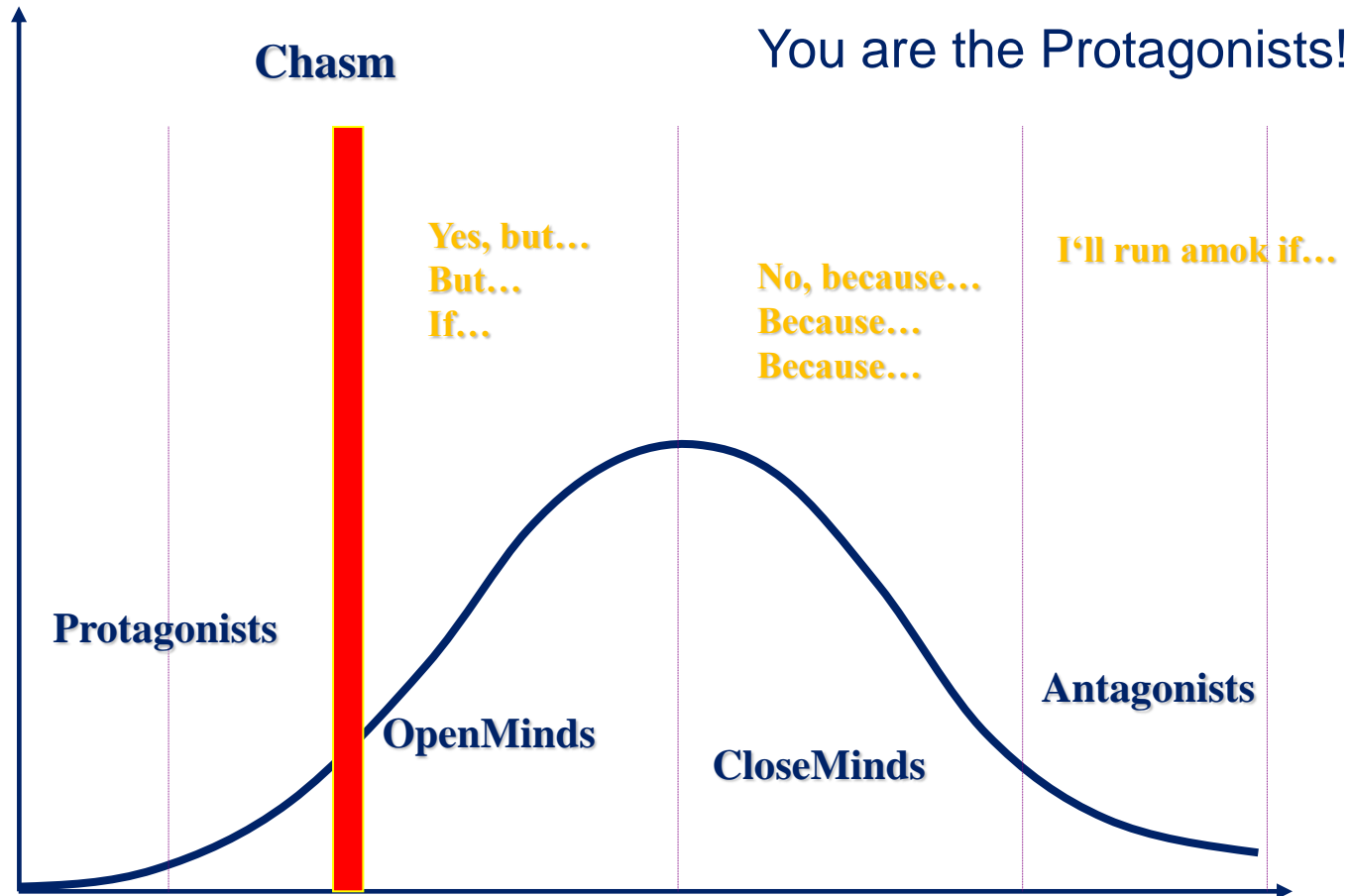
20th IEEE Requirements Engineering Conference – Chicago 2012

19th REFSQ conference 2013

12th ReConf 2013 in Munich with over 400 participants

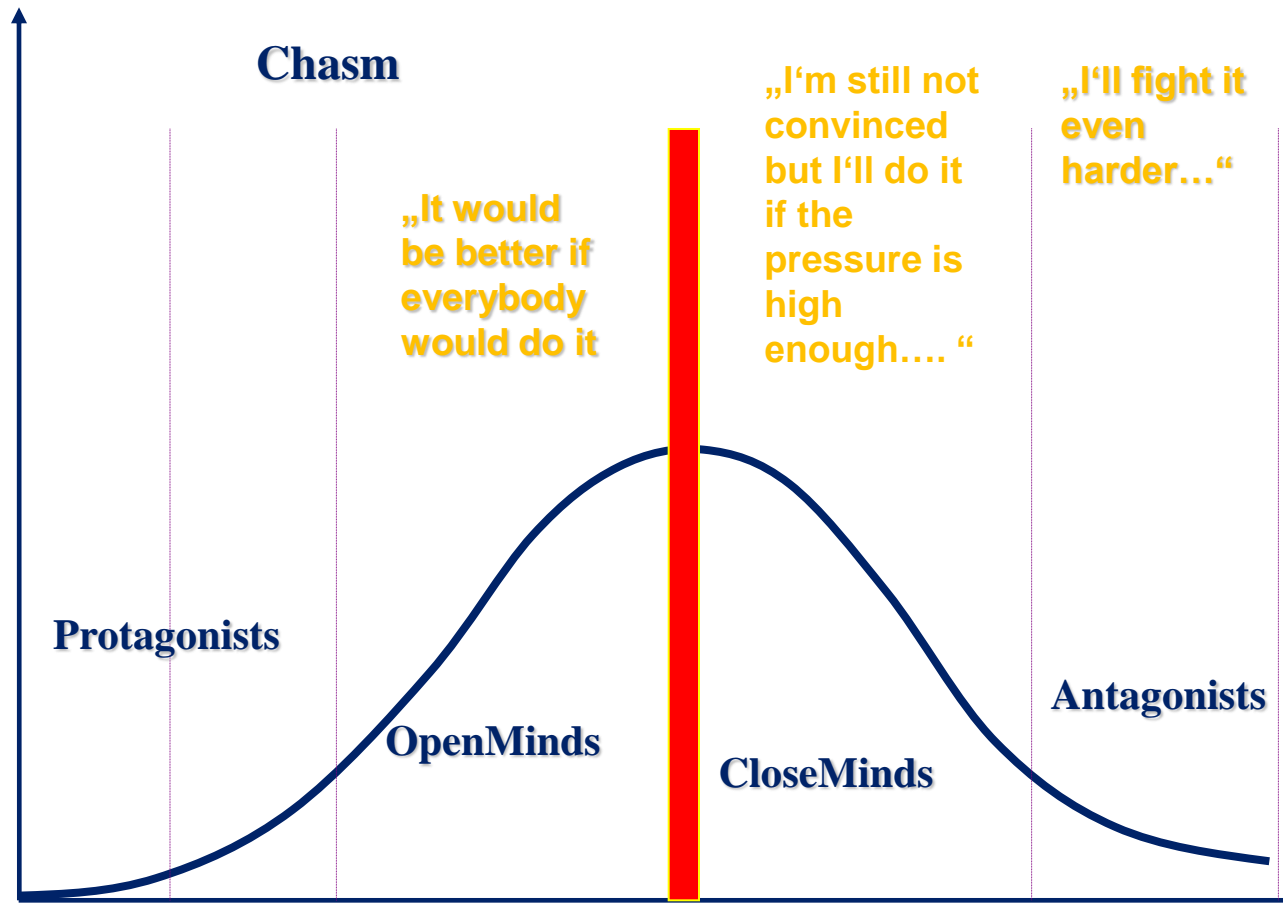
But....

Is it really well established?



Source: Prof. Dr. Gunter Dueck, ReConf 2013 dueck@omnisophie.com www.omnisophie.com

And there is a second chasm!



Source: Prof. Dr. Gunter Dueck, ReConf 2013 dueck@omnisophie.com www.omnisophie.com

Certification – How does it help?

Why not “just” Training?

Training

- Provides the fundament for Know-How acquisition
- Is a recognized form of qualification
- Is part of employee motivation

Certification

- Provides an international recognized fundament for training
- Motivates professionals to improve their skills
- Motivates companies to invest in training
- Offers a possibility to companies to demonstrate their expertise

The IREB

International Requirements Engineering Board (IREB)

■ Members of the board

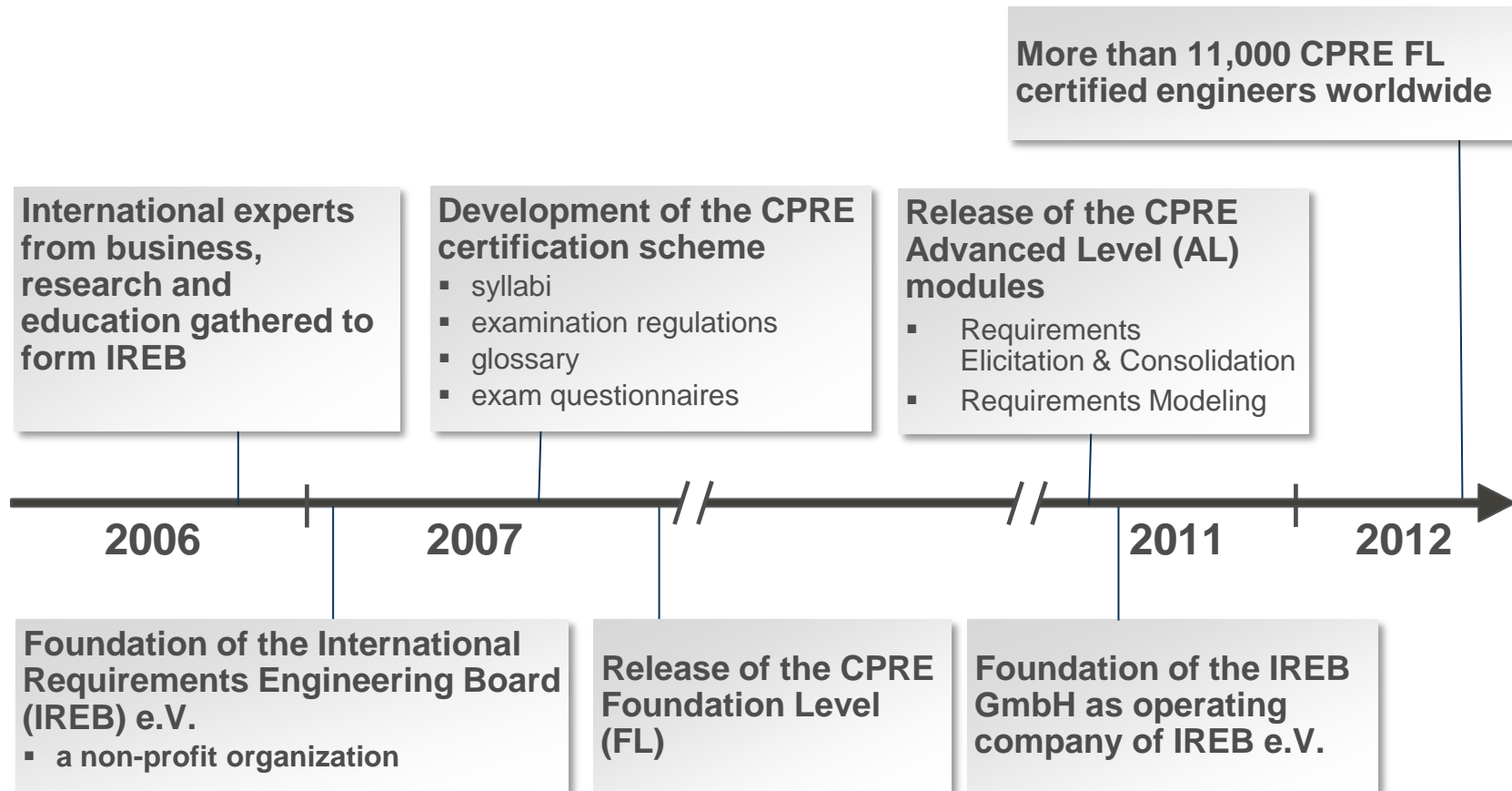
- Personal board members: Renown experts from industry, research, consulting and education
- Supporting Members: Committed persons in the field of Requirements Engineering



■ Activities of the board

- Elaboration of the curriculum, glossary and exams for the „Certified Professional for Requirements Engineering“
- Translations of the artifacts: English, French, German, Polish, Spanish, Portuguese (Brazil)
- Publishing of articles, textbooks and references

The IREB - History



Operating Company of the IREB e.V.

■ Facts

- Since April 1st, 2011
- 100% owned by the IREB e.V.



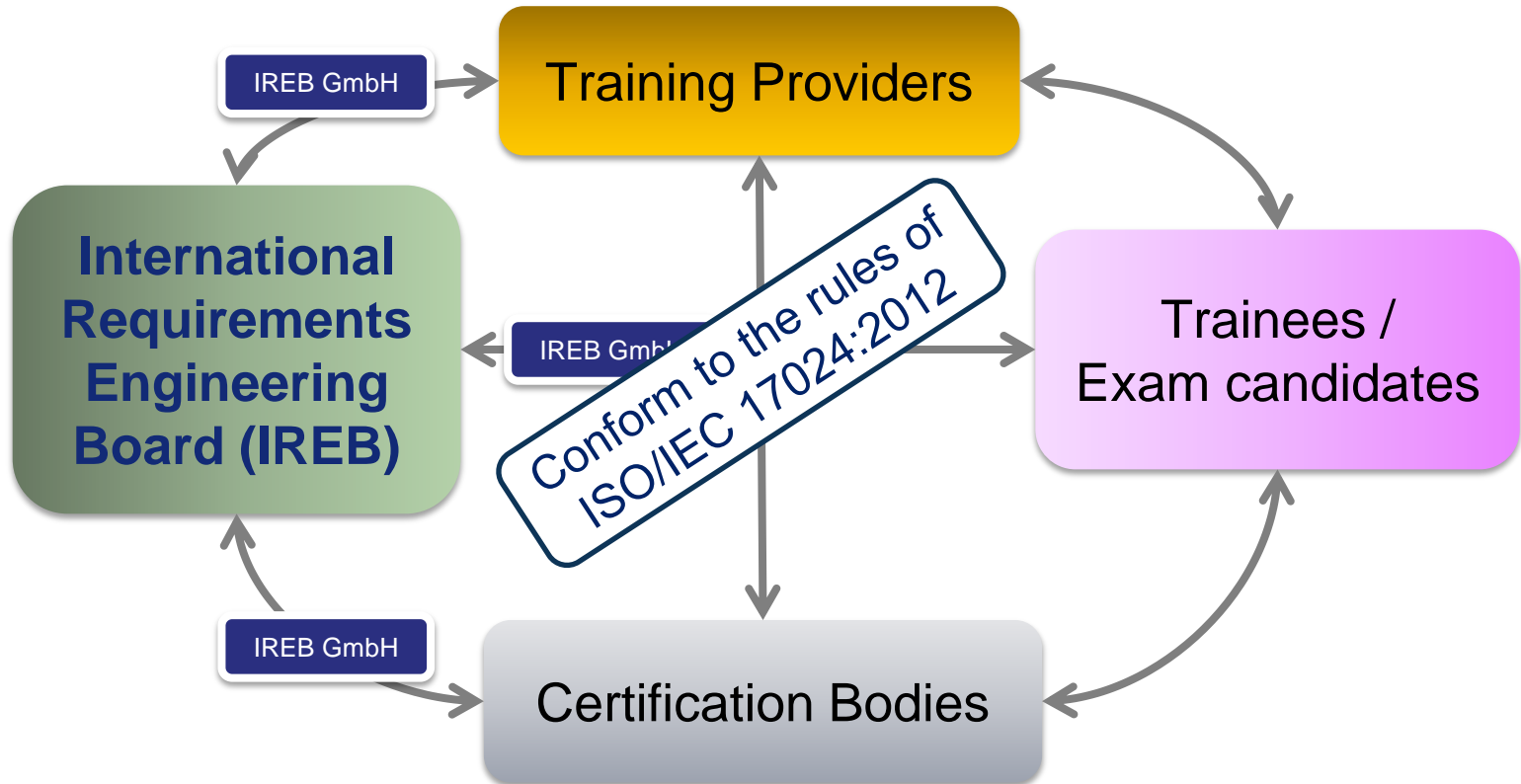
Stefan Sturm
Managing Director IREB GmbH

■ Activities

- Organizational support for the board, workgroups and supporting members
- Coordination of IREB tasks such as
 - Elaboration of the curriculum and the exam questions for the „Certified Professional for Requirements Engineering“
 - Coordination and organization of training providers and certification bodies
 - Marketing of the CPRE certificates
 - Press and media releases
 - Publishing of articles

The CPRE

The principles of the certification



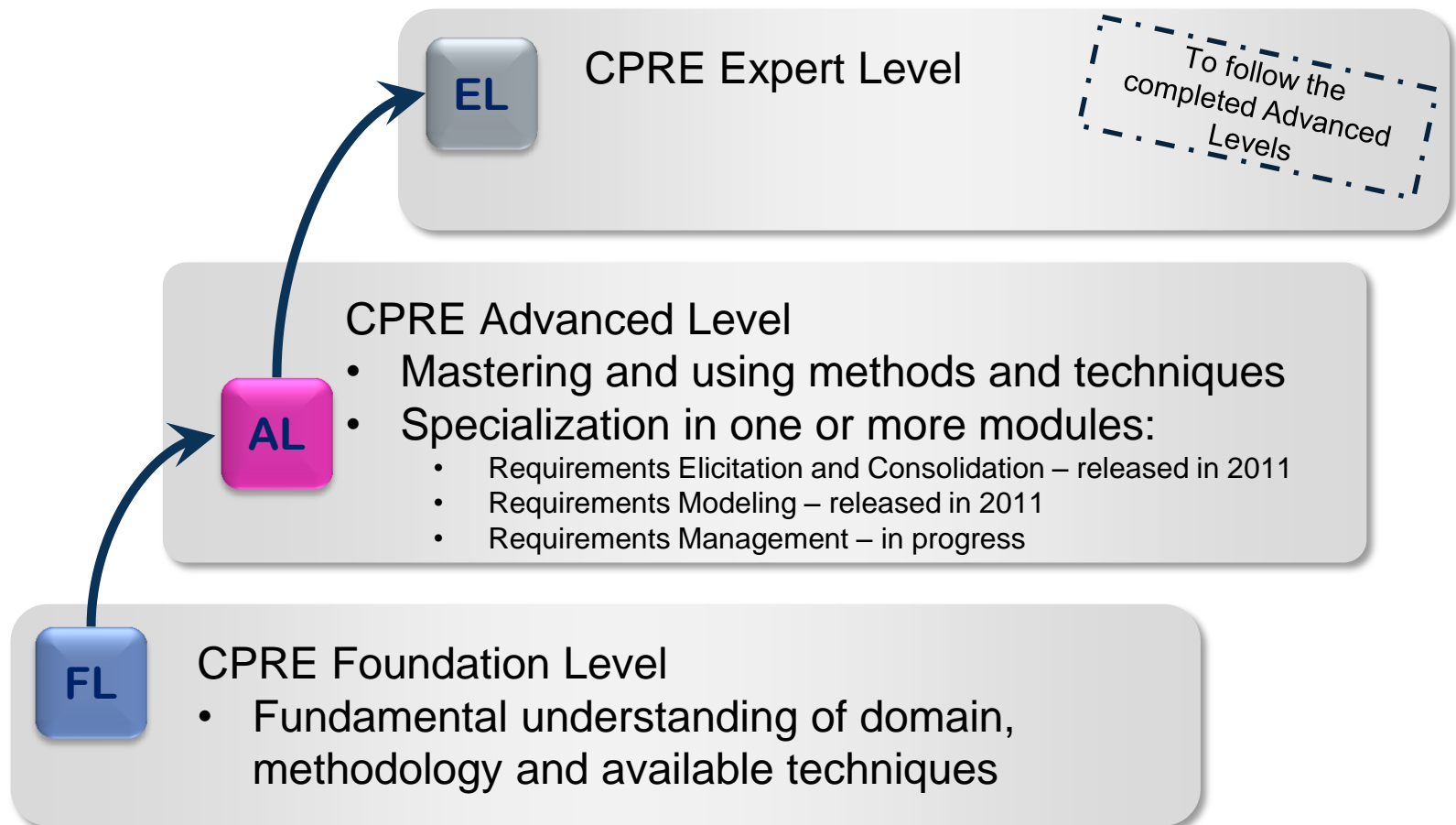
Allocation of tasks to clearly separated and independent organizations ensures fairness and neutrality.

The CPRE

Certified Professional for Requirements Engineering

- Personal certificate for requirements engineering
 - not time limited
- Three step certification program
 - Foundation Level A small blue square icon with the white letters 'FL'.
 - Advanced Level A small pink square icon with the white letters 'AL'.
 - Expert Level A small grey square icon with the white letters 'EL'.
- CPRE Foundation Level
 - accessible to everyone, as there are no prerequisites

The CPRE - Three level certification program

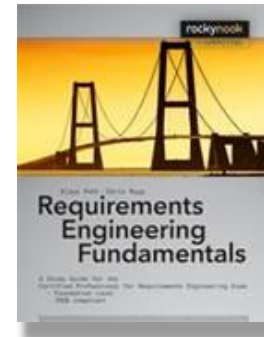


**Most important education in RE worldwide
- besides the university education!**

The CPRE - Foundation Level



- Fundamental understanding of RE
- Languages
 - Syllabi and exams currently in English, French, German, Polish, Portuguese (Brazil), Spanish - Chinese in preparation
- No prerequisite
- Companion Book
 - available in English, German and Portuguese (Brazil)



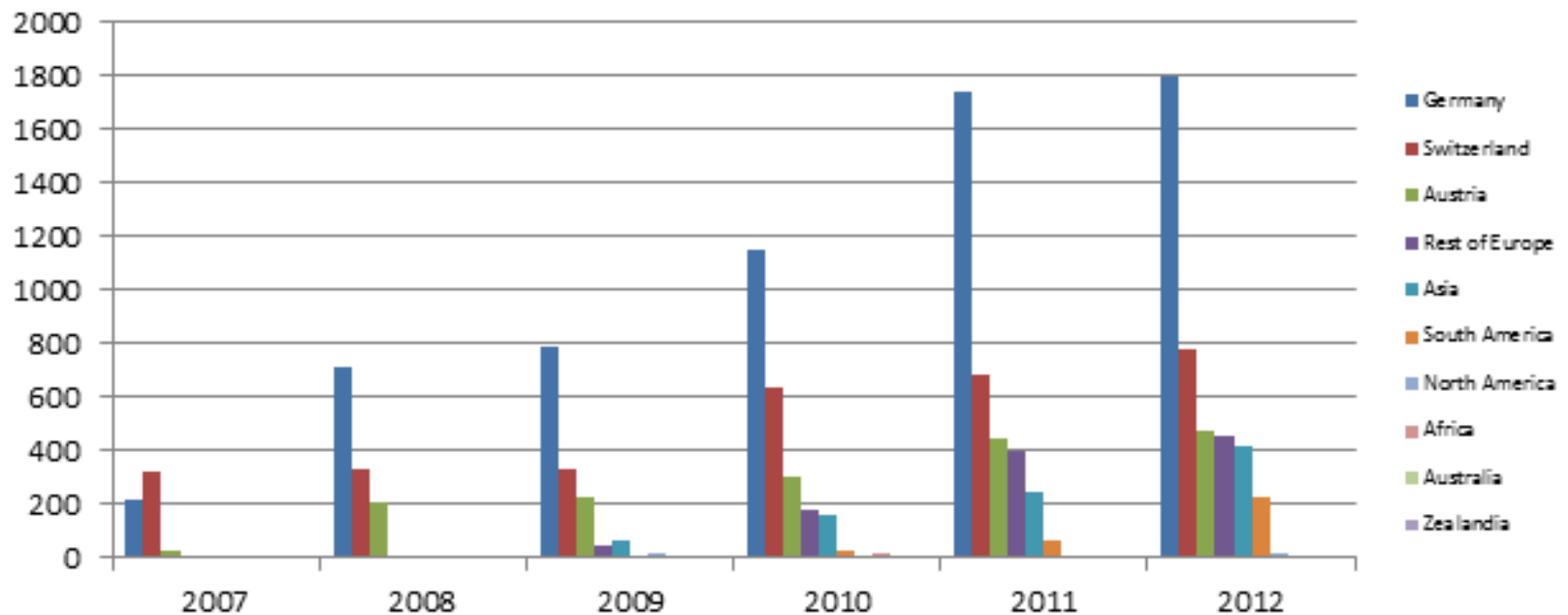
The CPRE - Advanced Level



- Released Modules
 - Requirements Elicitation & Consolidation, March 1st, 2011
 - Requirements Modeling, March 1st, 2011
- Module in work
 - Requirements Management, planned for 2013
- Languages
 - Syllabi and exams currently in German and English (the latter for Requirements Elicitation & Consolidation only)
- Prerequisite
 - CPRE Foundation Level certificate

The CPRE - Growth and geographic distribution

Examinations since inception



- Certifications in 40 countries
- Passing rate of approx. 80 %
- More than 11,000 certificates worldwide

The CPRE - What makes the CPRE unique?

- **No prerequisites** for the CPRE Foundation Level - everyone can strive for it!
- **No recertification**
- **International acceptance** – more than 11,000 certified in 40 countries
- **Openness and fairness** towards partners and the RE community – supporters are welcome to
 - contribute - as part of the “IREB family” - to the development of the CPRE program
 - expand the offer of CPRE trainings
- **Reinvestment of the revenues** of IREB in the development and the spread of the CPRE
- **Clear focus on the improvement of applied RE** - not on the kudos!

The CPRE - The goals

- **The goals of the CPRE are...**
 - ...to establish a common terminology in RE
 - ...to provide international accepted techniques and methods for RE
 - ...to provide an international accepted base for training in RE
 - ...to improve the current practice of RE

... to cross the chasm!!!

Discussion

Any questions?

Stefan.Sturm@certified-re.de