



HRK

Collaboration between Universities and Society, Business & Industry in Doctoral Education

Tokyo, 26 April 2018

Prof. Dr. Horst Hippler
German Rectors' Conference

Member Institutions

The **German Rectors' Conference** is the association of state and state-recognized universities in Germany.

The HRK currently has **268 member institutions** which account for **94 per cent of matriculated students** in Germany.

- 105 Universities
- 118 Universities of Applied Sciences
- 45 Colleges of Art and Music

The Universities' Mandate

The **universities' mandate** in

- research-based teaching & learning
- the students' individual development
- research & innovation
- training of early career researchers

makes them function as **the core** of the German **research and innovation system**.

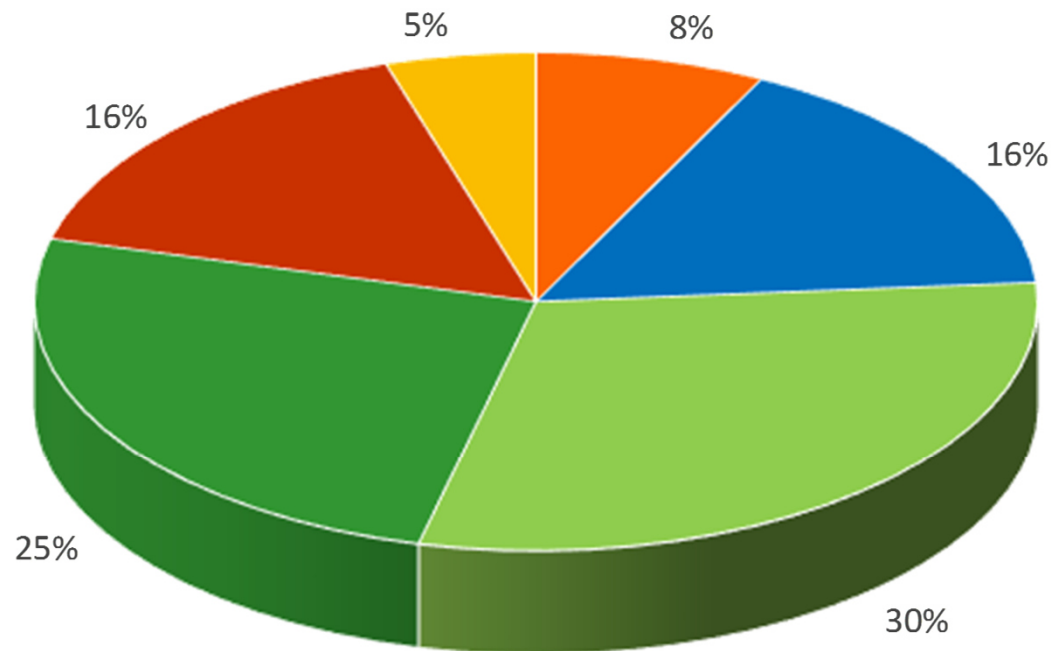
The right to **confer doctoral degrees** lies exclusively with the (research) universities.

Facts and Figures

- Doctoral degrees are conferred by **(research) universities** or **higher education institutions with equivalent status** (e. g. teacher training institutions, universities of art and music).
- The right to confer a doctoral degree is **delegated** from the university **to the respective department** (not the individual researcher).
- **29,303 doctoral degrees** conferred (2016)

Doctoral Education

Doctoral degrees awarded according to subject area (2016)



- Humanities
- Social Sciences, Law
- Natural Sciences, Mathematics
- Medicine, Health Sciences
- Engineering Sciences
- Other

Core Values

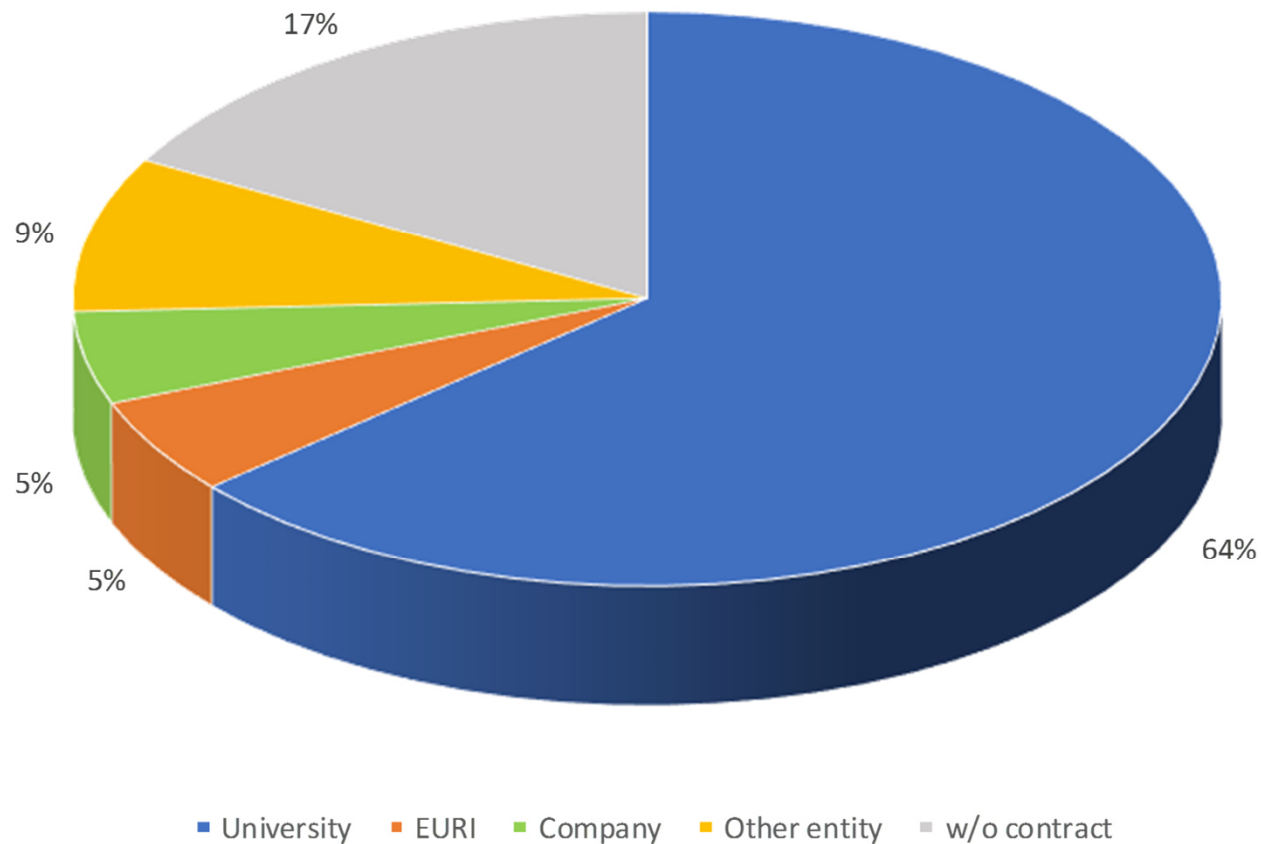
- The **doctoral phase** is the **first phase of independent research**: substantial contribution to the state of knowledge in the relevant discipline(s).
- It is the **sole right and responsibility of the universities** to **safeguard the quality** of their doctoral education:
 - Trend towards a **distinct status** for doctoral candidates (employment contracts vs. scholarships; currently 83% employed)
 - Limited **duration** (generally 3-4 years, depending on the subject)
 - **Board of examiners**
 - Obligation to **publish** results

A Joint European Understanding

- Doctoral phase as the **first phase of independent research**
⇒ It is not the third study cycle of the „Bologna system“.
- **European University Association: Salzburg Principles (2005)** and **Salzburg II Recommendations (2010)**
 - The doctorate is and must be research-based.
 - Autonomy for the institution to choose mission and strategy and to set up the appropriate structures
- **Joint declaration on doctoral training in Europe** of the British, Flemish, French (CPU & CDEFI), German, Hungarian, Polish, Spanish and Swiss rectors' conferences (2012): the universities' „strategic responsibility for doctoral training“

Doctoral Education

Doctoral candidates according to employment (internal estimate)



Doctorates with external employment contract: Cooperation with extra-university research institutes

- Joint doctorates with **extra-university research institutions** (Max Planck Society, Helmholtz Association, Leibniz Association, Fraunhofer Society)
- ca. **1,400 joint doctoral degrees p. a.** = 5 % (internal estimate)
- **Creating win-win situations:** Enhancing quality and striving for excellence (e. g. government-funded Excellence Initiative and Excellence Strategy)
- **But:** Quality assurances lies with the universities; clear rules and regulations are needed (with regard to publications, IPR, etc.).

Doctorates with external employment contract: Cooperation with companies and other entities

Joint doctorates with companies and other entities:

- ca. **1,450 joint doctorates with companies p. a.**
= 5% (internal estimate)
- ca. **2,600 joint doctorates with other entities p .a.**
= 9% (internal estimate, incl. scholarships)

Doctorates with external employment contract at companies – HRK key points

Ideally, a **win-win situation** – **linking the research interests of universities and companies:**

- ✓ **Universities** get access to actual industrial research problems and access to industrial research infrastructure
- ✓ **Companies** get access to young talents, enhance their innovative strength and benefit from the university's infrastructure
- ✓ Various career options in academia, industry and administration open up for **doctoral candidates**

Doctorates with external employment contract at companies – HRK key points

BUT: The right and responsibility for **quality assurance** must lie solely with the respective **university department**:

- ✓ **Transparent access** (selection of topics and candidates, admission and initiation of procedure)
- ✓ **Supervision agreement**
- ✓ **Integration into the academic environment** (training both in the discipline and across disciplines)
- ✓ **Assessment and rating** (data must open to board of examiners)
- ✓ **Publication and copyright** (Wide-ranging confidentiality agreements are not compatible with a thesis for an academic qualification)
- ✓ Following the rules of **good scientific practice**

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Thank you!
ご静聴ありがとうございました

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