

Statement

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Views on the German Fixed-Term Academic Contracts Act (*Wissenschaftszeitvertragsgesetz, WissZeitVG*)

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1. Introduction

The long-awaited evaluation of the Fixed-Term Academic Contracts Act (*WissZeitVG*) has confirmed that there is still a problem deeply rooted in the German academic system despite all the efforts and amendments to date. Many researchers are not able to confidently map out their own careers in academia – even many years after obtaining their doctorate.¹ Whether they can remain in academia usually has to be based purely on a gut feeling and sheer optimism. Meanwhile, talented researchers are leaving German academia and instead choosing to pursue a career in a different country or in another sector, where they will have more scope to plan ahead and feel more appreciated.²

These aspects provide the starting point for this paper by *Die Junge Akademie*. Within the context of the *WissZeitVG*, we aim to provide researchers with a clear idea of their prospects at the early stages of their career. This enables them to plan out their future in academia or to realise that leaving the academic system would be a better option.³

We acknowledge that the academic system is competitive and agree that sustainable quality assurance is essential.⁴ Therefore, not every doctoral candidate or postdoc will be able to – or indeed want to – become a professor. In many disciplines, a doctorate also serves as a qualification for a position outside of the world of academia.

Within the academic system, there is also scope and demand for permanent positions besides professorships, which would make it easier to plan a career in academia in addition to all the other benefits they would bring to the system.

¹ An evaluation of the *WissZeitVG* shows that permanent contracts only outweigh fixed-term contracts once researchers reach the age of 42 to 43 (see page 21 of the final report).

² As has been well documented, female researchers are most affected by this status quo (please refer, for example, to the 2021 DFG report on monitoring equal opportunities: <https://doi.org/10.5281/zenodo.5795513>).

³ Moreover, we believe that the academic system is in need of fundamental changes to its structure that would require more than amendments to the *WissZeitVG*.

⁴ Fair, achievement-based competition can be one way of securing the quality of research. However, we should challenge the assumption that competition equates to quality assurance. We also would like to point out that the conditions and assessment criteria for this competition in their current form are likewise in need of major reform.

If top candidates are to be successfully identified, transparent and reliable criteria are required across all career paths in the academic world together with a firmly established, and binding, long-term, sustainable commitment to staff development.

We consider the following measures as essential.

- Clearly defined career stages (R1–R4, see Section 2) with regulated contract terms
- An incentive scheme to encourage a balance between fixed-term and permanent contracts
- Clear prospects on tenure track pathways
- Permanent positions besides professorships

In **Section 2** of this document, we suggest that academic careers be divided into four stages – R1–R4 – to define different status groups. Most importantly, we recommend that stages R1–R3 within this system replace the general title “junior” researcher to simplify discussions on career prospects and fixed terms.

In **Section 3**, we explain why the introduction of all four status groups (R1–R4) is key for the successful revision of the *WissZeitVG*.

In **Sections 4 to 6**, we look more closely at each of the main career stages in question here – from pre-doctoral candidates to established researchers – and suggest new regulations for the *WissZeitVG* and ways to facilitate planning a career in academia. In **Section 7**, we provide a brief outlook.

2. Four academic career stages (R1–R4) and reasons for narrowing the qualification phase

Academic career paths can be divided into different phases. Since these phases have different functions, a distinction needs to be made in terms of how they are regulated and discussed. Within the current German academic system, anyone in any of the career stages before professorship is referred to as a “junior” researcher⁵. We propose that this description be replaced with the career stage profiles as defined by the European Commission: R1 (first-stage researcher – up to the point of PhD), R2 (recognised researcher – PhD holders or equivalent who are not yet fully independent), R3 (established researcher – researchers who have developed a level of independence) and R4 (leading researcher/professor – researchers leading their research area or field)⁶. Defining the career stages in this way makes it much easier to discuss them and make comparisons across sectors and international borders.

⁵ There are two issues with describing academics as “junior”. First of all, it is not appropriate because it patronises grown adults with degrees. Secondly, the spectrum of people it categorises is too broad. It includes doctoral candidates, postdocs, habilitation candidates and “junior” research group leaders (e.g. W1 professors and ERC “junior” research group leaders). It is clearly contradictory to categorise group leaders in the same status group as their doctoral students given that “junior” group leaders have supervisory responsibility for those doctoral students. Pooling everyone in one status group removes any distinctions between them, making it difficult to know which group of people is being referred to in relevant political debates (for example, politically speaking, permanent contracts for new postdocs are on a completely different level to permanent contracts for group leaders).

⁶ <https://euraxess.ec.europa.eu/europe/career-development/training-researchers/research-profiles-descriptors>

The R1, R2 and R3 researchers discussed here currently have fixed-term contracts under the generalised bracket of the qualification phase according to the regulations set out in the *WissZeitVG*. In actual fact, R1 is the only career stage that can be classified as an academic qualification phase in that it qualifies researchers for activities within the world of academia and beyond (qualification for independent research work, demonstrated by a PhD). While this should be reflected in the legislation, it is not yet the case. Thus, it is not appropriate to refer to R2 and R3 researchers as being in the qualification phase.⁷ It goes without saying that the R2, R3 and R4 career stages require constant learning and development (“lifelong learning”) if the researchers are to be able to perform all their tasks effectively. This need for further learning (and even further qualification) does not end when a researcher enters R4, however. This means that, contrary to current beliefs, the end of the qualification phase cannot be what separates R2 and R3 from R4. Equally, this does not mean that every single person that enters R2 (and is therefore qualified for research work) can – or indeed will want to – stay in academia forever. Assigning researchers to R1, R2 and R3 allows for both internal and external transparent communications.

3. Inclusion of all four status groups (R1 to R4) in a transparent consultation process

The *WissZeitVG* affects R1, R2 and R3 researchers directly and R4 researchers indirectly. With that in mind, it is prudent to include all four status groups *in equal measure* in considerations relating to an overhaul of the law. If some status groups are ignored or prioritised, there is a risk of introducing inadequate solutions and overlooking unintended consequences. It is on this basis that we are calling for a transparent consultation process involving representatives of all four status groups.⁸

4. R1 phase in the *WissZeitVG* (up to the point of PhD)

R1 researchers conduct research under supervision, generally with the aim of becoming qualified to research independently (by obtaining a PhD).

Our legal and contractual suggestions for this phase are as follows.

- Contract terms must cover the whole of the anticipated PhD period. This must be based on the standard time frames for PhDs within the discipline in question.
- Any time away from study (e.g. parental leave, sick leave, carer’s leave etc.) must be automatically added to the end of the contract term as an extension. In the interests of

⁷ The evaluation of the *WissZeitVG* concludes that the qualification phase after a PhD is not clearly defined. “Both sets of findings draw attention to what could not be found – clarity on the length of employment after obtaining a doctoral degree. What we need is an answer to the question of how the postdoc qualification process is structured alongside employment and what it amounts to.” (Final Report on the Evaluation of the *WissZeitVG*, page 167).

⁸ One argument often raised against involving representatives of R1 to R3 in academic policy decision-making processes relating to these career stages is that a conflict of interests may arise. It is, however, incorrect to suggest that there would be no conflict of interests for representatives of R4 since many of the suggestions for reform directly affect R4 researchers too (e.g. if a minimum contract term was introduced for researchers working on projects being led by R4 researchers rather than giving those R4 researchers full flexibility in this regard). Generally speaking, the welcome fact that researchers can work so independently means that conflicts of interest are unavoidable in many academic policy decision-making processes. It is a question of ensuring transparency and equally including all the relevant status groups.

equality alone, this must apply equally to both internally and externally funded positions funded. The provision of delayed (and sometimes even increased) funding requirements must be negotiated between state-level ministries, research institutes and providers of external funding. Several solutions are feasible here.⁹

- Positions held during to doctoral studies shall still be subject to a maximum term of six years – as is the case now. However, this period should not begin until the doctoral studies officially start (meaning that previous contract terms for research assistant positions and so on should not be included in the maximum term). Institutions must record the actual date on which each doctoral candidate officially started their PhD. The maximum contract term applies to positions funded both internally and externally. Any time away from study on parental leave, sick leave or carer's leave must be taken into account. In other words, the maximum contract term is automatically extended to account for the exact length of time away.

5. R2 phase in the *WissZeitVG* (recognised researchers/postdocs)

R2 researchers (postdocs) are qualified to conduct research independently and are raising their profile during this orientation phase in preparation for a future career within the world of academia or beyond.

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As it stands in the *WissZeitVG*, the fact that this is a qualification phase is used to justify fixed-term contracts. We propose that this justification be removed. Qualifications that prepare people for a career are bachelor's degrees, master's degrees and PhDs. What actually happens after a doctorate, though, is further learning and career development. Yet further learning and career development are not restricted to the phase prior to obtaining a permanent position. After all, the principle of lifelong learning is at the heart of the entire academic system. In other words, further learning (in a specific discipline and in terms of developing teaching, mentoring and project lead skills) is at least as important to an R4 professor as it is to an R2 postdoc.

Our proposal for restructuring the R2 phase of careers in academia is based on the following three pillars.

- Minimum contract terms of 24 months
- An incentive scheme to limit the typical amount of time researchers remain in R2 at the institutional level
- Structured staff development

Contract terms of an appropriate length and clear prospects will make it easier for researchers to plan their careers. While our proposed incentive scheme will prevent individuals from being limited in their flexibility and freedom to define their own career (as would be the case if the maximum term in R2 was restricted by law), it will however introduce an appropriate and typical term for this career phase. Introducing a structured approach to staff development will allow R2 researchers to achieve independent career progression.

⁹ People who do not have a PhD and are not working towards a PhD may not be given a contract with a term longer than two years in total.

It should also still be possible to apply limits on a project basis – both for positions funded internally and externally – so that an R2 researcher is employed on the typical fixed-term contract, as is the case for postdocs internationally.

We suggest that the following points be applied when arranging the fixed term for researchers in positions funded internally and externally.

- A new minimum contract term should be introduced in line with the project timescale to make it easier to plan ahead (e.g. four years in a sub-project for a Collaborative Research Centre). A lower limit of 24 months should be applied, meaning that no contract terms can be shorter.^{10 11}
- It should be possible to extend the contract term for a given project and institute on a one-off basis to give institutions the option of extending contract terms if additional funds become available (such as when a follow-up application for external funding is successful).¹²
- If a researcher switches to a different project and institute, they can be offered a new fixed term. Again, the minimum contract term is 24 months and it is possible for this to be extended once.

We also propose that standard periods for remaining in the R2 career phase are introduced. These standard periods should vary based on discipline and could be somewhere around the 4–6 year mark. They are intended purely as a guide and are not designed to act as a fixed term for individual researchers. We would typically expect that researchers would move on to R3¹³ or switch to a career outside of academia after their standard period. The standard period refers to the time actually spent working as an R2 researcher. In other words, time spent away (e.g. on parental leave) and time outside of the academic system is not counted. Periods of employment abroad are counted. These standard periods should be structured around an incentive scheme at the institutional level.

- The number of fixed-term R2 contracts in relation to the total number of contracts funded internally should follow a guideline at the institutional level.
- This guideline should be linked to a reward and sanction system to avoid the current situation whereby it is cheaper to keep researchers in the R2 phase for longer.
 - Grants will be paid to institutions that follow the guideline. Sanctions will be enforced upon institutions that do not.
 - Institutions will find themselves facing further sanctions if they have an exceptionally high number of R2 researchers remaining in that phase for much longer than the standard period.
 - In the name of transparency and to support institutions that actively create prospects in their role as R2 employers, the number of R2 fixed-term contracts and the length of time for which researchers have been in the R2 phase should be published for public access.

¹⁰ A lower limit of 36 months already applies to postdoc contracts in some federal states – this should be maintained.

¹¹ This lower limit is based on the actual minimum duration of research projects. For example, organisations that allocate funds for their own postdoc positions – such as the German Research Foundation (DFG) and the Alexander von Humboldt Foundation – work on the basis of 24 months as the standard term required to complete a project.

¹² We are assuming that longer contract terms will become more likely if repeated extensions are not possible for a given project and institute. This could be reassessed after six years, for example.

¹³ Transitions from R2 to R3 could be planned into structured external funding programmes (such as special research areas) as strategic elements.

The guideline could be set for each subject by a single national expert commission (set up by the German Federal Ministry of Education and Research) within which all status groups (R1, R2, R3 and R4) are represented equally. This would ensure that all the relevant perspectives are taken into account equally. This commission could set regulations relating to specific disciplines if that proves to be necessary and expedient.

With a view to helping postdocs assess whether or not remaining in academia is a realistic option for them, we suggest that feedback mechanisms are put in place – and that the required resources are provided – as part of a long-term and responsible commitment to staff development.¹⁴ We are confident that an appropriate system for staff development and effective feedback mechanisms would allow researchers to make up their own mind regarding how long they can remain in the academic system after their doctorate based on their realistic prospects (rather than hope alone) and the potential risks. It is also essential that institutions are provided with the support they need to transition eligible researchers from R2 to R3 within the standard periods specific to each discipline.

6. R3 phase in the *WissZeitVG* (established researchers)

R3 researchers have developed their own, (internationally) visible profile by means of their proven ability to research independently. Depending on the discipline, they may be in charge of other employees. They have decided to pursue a career within the world of academia. In the German academic system, examples of R3 researchers include W1 professors, leaders of an Emmy Noether Research Group or similar (e.g. VW 'Freigeist' fellow, Helmholtz (Junior) Research Group leader, Max Planck Research Group leader and ERC Starting Grant) and researchers who are working through the habilitation process or have completed it but are not professors (yet). The career paths of R3 researchers are diverse, however. The bracket of R3 researchers includes researchers in permanent positions besides professorships with many areas and tasks to focus on that may change at various points during their career (lifelong learning).

We believe that moving into the R3 phase in Germany should be linked with the concrete prospect of remaining in academia in the form of a tenure track pathway. We would like to highlight the following points here.

- A researcher choosing to remain in academia does not necessarily have to become a (tenured) professor. They may choose to take up a different permanent position

¹⁴ This could take the following forms.

i) A set of concrete criteria applicable to each discipline that can be used to categorise postdocs based on the areas in which they need to develop and how they are faring compared to the competition within their discipline. It is important that these sets of criteria do not fall foul to the problems associated with quantitative metrics (for example, the target for the number of publications should not be “as many as possible”). Instead, qualitative assessment criteria should be used.

ii) A one-off offer of two or three external and anonymous appraisals from representatives of the academic community and experts in academic staff development (who can assess leadership, supervision and teaching skills) with the sole purpose of providing postdocs with information (with no bearing on fund allocation or the institution's decision to move the researcher up to phase R3) and allowing them to assess the likelihood of them having a long-term career in academia.

iii) Feedback provided by the employer/direct mentor that covers a career development plan and involves regular target setting together.

besides professorship, which could involve research and teaching, for example, and would actually become permanent once the researcher has tenure. In other words, permanent positions are available to researchers remaining in R3 or moving up to R4.

- This option is not guaranteed, with permanent positions only available to researchers who have achieved specific targets agreed upon between them and their institution. The conditions to be fulfilled in order to be granted a permanent position need to be clearly defined in writing before signing any contract. The conditions will naturally vary by discipline but there should be some level of consistency across each institution and discipline. Quantitative metrics (number of publications, amount of external funding secured) should not be used as the main criteria because it is important that the quality of research is actually assessed.¹⁵

We believe that permanent positions for R3 researchers are necessary for multiple reasons.

- Researchers are generally in their thirties by the time they enter the R3 phase.¹⁶ By this age, many people are looking to find a permanent focus for their lives or settle down and start a family. A lack of permanent opportunities forces talented researchers to leave the world of academia behind – regardless of their research achievements to date – purely because they are no longer willing to tolerate the uncertainty and risks. This is the opposite of identifying the top candidates and is more likely to affect women and marginalised groups.
- R3 researchers have already developed their own independent programme of research. If they are facing constant pressure from short-term contracts and a lack of prospects, they will be forced to restrict their research programme to the short term since they will always be looking ahead to the next application process a few short years away. This means that the system will be ruling out genuine inter- and transdisciplinary research, high-risk research with the potential for serious breakthroughs, pursuing research topics beyond the mainstream and academic trends, and research that systematically progresses from the very foundations to practical application. The German academic system – and in turn society and industry as a whole – will be missing out on important innovations at both the basic and applied research level.
- There is a fundamental problem when doctoral candidates and other researchers are led by group leaders on fixed-term contracts themselves. The situation creates an extreme state of dependency, as the group leaders find themselves under huge pressure to quickly find a way to secure a permanent position and that pressure might be passed on to other researchers in the group. This situation also undermines the authority of the group leaders since they often do not have the status of a full member of the faculty. R3 researchers in this position sometimes find it difficult to find talented R1/R2 researchers.
- The lack of potential permanent positions puts Germany at a disadvantage as a research location. Many universities in other countries have perfected the art of identifying “rising stars” at the early stages of their career and attracting them to join and remain at their university with tenure track positions. German universities are not in a position to compete with this in any meaningful way. Instead, they have to resort to

¹⁵ For more on this, visit <https://op.europa.eu/en/publication-detail/-/publication/36ebb96c-50c5-11ec-91ac-01aa75ed71a1/language-en>.

¹⁶ According to the 2021 government report on young academics, the median age of researchers completing a doctorate is 30.5. If we assume that they will spend between four and six years in the R2 phase, the average age of researchers entering R3 will be 34.5 to 36.5.

using substantial resources to tempt these talented researchers to make a major life change at a later stage in their career.

Across all disciplines, opportunities to move to the R3 phase are publicly advertised and awarded on the basis of a transparent, competitive process. Positions can only be advertised in this way if permanent funding is guaranteed.¹⁷

Under our proposal, it will no longer be possible to start the habilitation process without the institution confirming the prospect of a permanent position. Fixed-term contracts are no longer an option for R4 researchers either. There is no way of becoming a “junior” research group leader without being on track for a permanent position. This pushes the career path-bottleneck forwards by a significant number of years, making it possible to plan a career in academia at a much earlier stage. Researchers are able to realistically assess their prospects of remaining in academia in a permanent position much earlier – when they are ready to take the next step in their career after just a few years in the postdoc phase. In our opinion, this is the right timescale and this is what we believe we should be aiming for.

Open-topic R3 positions should be created with a view to ensuring there is enough scope for interdisciplinary research and less common research topics within our academic system.

Our recommendation for the maximum fixed term for R3 positions is six years, excluding any time spent away for parental leave, carer’s leave and so on. The options for permanent positions following on from fixed-term R3 positions are at R3 or R4 level. They can be advertised, for example, as tenure track positions for

- tenured professors or lecturers¹⁸,
- permanent positions besides professorships, such as senior assistants/engineers (TVL-E14/15) and academic consultants (A13/A14) with permanent research, teaching or transfer responsibilities (see below),
- or positions in line with the USB model, which gives researchers who have passed an intermediate evaluation the option to pursue the pathway to become a professor or take up a permanent position besides professorship¹⁹.

All of these options involve positions that are on a fixed term covering the entire duration of the tenure track pathway, including a clause to the effect that

- the contract will end if the researcher does not pass the intermediate evaluation at the halfway point and
- the fixed-term contract will be upgraded to a permanent contract provided that the researcher has passed an intermediate review and meets all the agreed targets by the end of the contract term.

If our proposal to create permanent research positions besides professorship is implemented correctly, it will constitute a major improvement for researchers at the early stages of their

¹⁷ As it stands, this requires a vacant position already allocated (“Stellenhülse”), which could pose a practical challenge in terms of our proposal. Looking abroad, however, shows us that tenure track pathways can work without such positions in place. In other words, the need for an allocated position puts the German academic system at a disadvantage when competing against international universities.

¹⁸ Factoring in the special requirements set out under state law for higher education institutions.

¹⁹ <https://www.jmwiarda.de/2021/12/02/wissenschaftlerkarrieren-nach-dem-usb-modell/>

career, universities, research institutes and R4 researchers alike. Here is a (non-exhaustive) list of what these positions might involve.

- Focus on teaching: Creating positions with a high number of teaching hours could encourage people with excellent teaching skills to stay and work at universities. This would improve the quality of teaching and strengthen one of the core pillars of our universities. It would also be possible to reduce the teaching hours of other staff, such as W1 professors on tenure track pathways, or temporarily free up more time for researchers who want to focus more on research as their core skill.
- Focus on project coordination and planning: More and more projects within the German academic system are being funded by external means. The number of collaborative projects researchers are involved in is on the rise as well. So far, there has been very little dedicated support available for planning projects, securing funding and tracking progress. This work is performed by professors on the side, outsourced to external service providers or assigned to academic staff who are not professors. The first two options are not cost-effective and the third option burdens R1/R2 researchers with a task that does neither matches their job description nor their qualifications. Creating permanent R3 positions to focus on this area would make project management and coordination more professional.
- Focus on science communication: There has been a keen focus in recent years (including from a political perspective) on effectively communicating scientific results and methodology to the wider public. This is quite a challenge, however, because research staff are not trained to communicate in this way and often do not have much time to spend on perfecting these skills alongside their other duties. Meanwhile, staff at press offices often lack the broad technical expertise they would ideally need to be able to present findings from all disciplines at a high level. Creating permanent academic positions focused on communicating findings would solve this problem and form a stronger link between the academic world and society as a whole.
- Focus on transfer: The transfer of scientific and technical breakthroughs from research institutions is often slow and convoluted. In recent years, more and more universities in Germany have identified the existing potential and set up technology transfer centres. Industrial partnerships work in the same way and are mostly directly managed by professors. As with the project coordination and planning role, specialist R3 researchers could provide support here too.
- Focus on (large-scale) equipment and IT infrastructure: Taking responsibility for (large-scale) equipment that is often highly specialised and IT infrastructure is an ongoing job. It is clear, then, that the relevant staff need to be employed in permanent positions.
- Focus on team leadership and mentoring: Supervising employees sufficiently, leading teams and providing effective mentoring are all time-consuming responsibilities that require a certain level of further learning and training. Working groups suffer noticeably when professors do not undertake the necessary further learning or training and do not treat these responsibilities as a priority when managing their workload. Since these responsibilities are clearly ongoing, it would make sense to create dedicated permanent positions.

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7. Outlook

In summary, we believe we have found a way to provide researchers with a clear idea of their prospects without abolishing all fixed-term contracts. This is beneficial to individual researchers

and the academic system as a whole. Nevertheless, we are well aware that our idea to introduce structured transitions from R1 to R2 to R3 (and to R4) across the board and the binding prospect of a permanent position from the R3 phase onwards represents a huge change to the status quo. This would be a major challenge for everyone involved. Our suggestions would require R2 and R3 researchers to take on greater responsibility. R4 researchers would need to focus more on staff development in line with our suggestions. If researchers are to be able to assume this responsibility and the R1, R2 and R3 phases are to be restructured as required, it is likely that the system as we know it will need to undergo some major changes too. The structured transitions will only be possible if staff planning is approached differently by universities and if new organisational structures are introduced.

The federal government and states would also be called upon for their input because the workforce would need to be increased. Providers of external funding would also need to make changes to their funding schemes and time scales if our suggestions were adopted. We are convinced, however, that these necessary changes and challenges would be worthwhile, and the opportunities brought about by a fundamental structural change of this scale would outweigh them by far. Those opportunities would constitute a central legal pillar in an academic system designed to allow highly qualified, motivated, creative and innovative people to pursue careers, guided by a clear idea of what their prospects are, and ultimately achieve their full potential²⁰.

Die Junge Akademie
at the Berlin-Brandenburg Academy of Sciences and Humanities
and the German National Academy of Sciences Leopoldina

Die Junge Akademie was founded in 2000 as the world's first academy for outstanding young academics. Its members – who come from all academic disciplines as well as creative fields – explore the potential and limits of interdisciplinary work in new projects, aim to encourage dialogue between academia and society, and provide new impetus in discussions about scientific policy. *Die Junge Akademie* is supported by the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW) and the German National Academy of Sciences Leopoldina. Its office is located in Berlin.

²⁰ <https://www.pnas.org/doi/epdf/10.1073/pnas.2200927119>