Latvian doctoral studies and promotion system

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Introduction

The World Bank cooperated with the Government of Latvia and the higher education sector through a first higher education financing RAS (Reimbursable Advisory work) in 2013/14. The main output was a proposed new higher education funding model, which was subsequently adopted by the Latvian Government. The 2nd Latvian Higher Education RAS spans over two years and focuses on three key areas: During Phase 1 on i) institutional governance and ii) institutional (university-internal) financial allocations and during Phase 2 on iii) the doctorate and academic selection, promotion and remuneration. However, the Ministry of Education and Science (MoES) requested the World Bank team to include an assessment of the [governance of] promotion councils already under Phase 1, in connection with the overall work on governance arrangements.

The Government of Latvia has identified the improvement of doctoral studies and promotion system as a key national priority. In addition to increasing the number of doctoral candidates, the government set the following objectives[1]:

- *Improvement of promotion process.*
- *Involvement of the doctoral students in scientific projects.*
- *Establishing scholarships for excellent doctoral students with high research potential.*
- *Preparation of Master students and Doctoral students for specific industrial partners; allocate the state budget subsidy for respective Master and Doctoral studies as priority areas.*
- *Moving towards a joint system of doctoral studies (common quality principles).*
- *Strengthening the link between doctoral studies and research and industry, formation of doctoral centers in Latvia, support for the renovation of infrastructure, etc.*

This note was prepared against this background and will provide an initial discussion on the Latvian doctorate and approach to promotion and assess it in the light of European and international experience. It will feed into the World Bank team's further work on governance and university-internal funding.

This note is based on documentation as well as information collected during discussions with representatives of universities and the Ministry during a two-day site visit in Riga (26-27 September 2016). The programme of the visit (cf. Annex) included meetings in three universities and the Art Academy, as well as meetings with Ministry of Education staff (MoES), members of the Science Council and the executive director of the accreditation agency. Members of the State Scientific Qualifications Commission (SSQC) were met as part of the institutional visits. The visit ended with a workshop organised by MoES, which was attended by about 30 participants.

It should be noted that laboratories and libraries and the full range of institutions, notably those that train doctoral students but are not allowed to confer the doctorate (conferral of the doctorate is called the promotion process in Latvia) were not included in the visit.

[1] This quote is taken from an undated document provided by the Ministry.

This note is structured into three parts as follows:

- Part I provides a summary of the main trends in doctoral education and training in Europe.
- Part II is focused on the current situation of doctoral education and training in Latvia, which is analysed in the light of the international practices described in Part I.
- Part III provides recommendations for enhancing doctoral education and training in Latvia.

I. European trends in doctoral education and training

The international and European consensus view about the purposes of doctoral education is captured in the following quote from the League of European Research Universities, which emphasises the requirement of ensuring "breadth and consistency of training" in doctoral education:

> It is now widely recognised that doctoral graduates make significant contributions to innovation and that they need both a thorough and broad skill set to do so. With many graduates gaining employment outside of academia, the tradition of doctoral training only for replenishment of academia belongs to the past. This recognition has resulted in the growth of structured doctorates and institutional structures to ensure breadth and consistency of training at universities. (LERU 2014: 3)

This vision has guided the quiet revolution that has taken place in Europe in the past decade. Europe started paying attention to doctoral education when the European Commission published reports pointing to the gap in the available number of doctoral holders if Europe were to achieve the objectives of the Lisbon (and later Europe 2020) strategy to become the most competitive and innovative region in the world.

Doctoral education became a topic in the Bologna Process in 2003. The Bologna Follow-up Group asked the European University Association (EUA) to come up with proposals to frame doctoral education in Europe. The European tradition of the doctorate – long viewed as the production of a piece of original research under the supervision of one professor, with very little emphasis on taught courses and loose links to the Master – started to be increasingly questioned following the broad dissemination and discussion of the 'Salzburg Principles' (EUA, 2005), which were adopted by the academic community at a Bologna seminar organised at the University of Salzburg in February 2005. The main elements of the Salzburg Principles were taken up by Ministers of the Bologna signatories and included in the 2005 Bergen Communiqué. At this time EUA was asked to continue its work on the topic and present a more detailed report on doctoral programmes at the 2007 Bologna Ministerial meeting in London that would include a discussion of the organisation and funding of doctoral education at national level.

Since then, changes at the doctoral level across Europe have been most impressive in their depth and speed of implementation. Intended to improve the overall quality of doctoral education in Europe, changes have focused more particularly on the need to embed doctoral programmes at institutional level and create more critical mass by establishing structures, such as doctoral/research or graduate schools, that nurture a dynamic research environment,

and by introducing more taught courses and training elements, credit systems or transferable skills provision. In 2014, 84.4% of respondents to a survey conducted by EUA reported having established doctoral/graduate schools and over 90% offer structured doctoral programmes (EUA 2014: 6-7).

The new structures being put in place often differ significantly from one institution to another; they are difficult to compare and may have different names, all of which can lead to confusion or misunderstanding among those not familiar with the system in question. In most countries and institutions, however, a mixture of different models (i.e., both individual and structured study programmes and schools) is the common organisational feature. Thus, different routes are being chosen, tailored to the specific profile, mission and goals of each institution.

The work of the EUA's Council for Doctoral Education (EUA-CDE) that was created in 2008 to support universities in improving their doctoral programmes, suggests that doctoral schools facilitate a more stimulating research environment, promote cooperation across disciplines, ensure critical mass, and enhance opportunities for international collaboration and inter-institutional cooperation. They also provide a clear and visible anchor for links with industry, business or public services.

New developments in doctoral education

The establishment of doctoral schools raises many additional questions, for example in relation to the organisation of transparent admission processes, assessing the thesis, and monitoring completion rates. Particularly, the move away from the traditional, one-to-one apprentice relationship toward arrangements based on a contract between the doctoral candidate, the supervisor(s) and the institution has implied thinking of ways to raise and ensure standards of supervision through developing professional training for supervisors. These are being offered at many universities and perceived as a key element of institutional profiling and international competitiveness.

While original research continues to be considered as the core component of all doctorates there is increased recognition of the importance of transferable skills training for all doctoral candidates. The aim is to raise awareness among doctoral candidates of the importance of recognising and enhancing the skills that they have developed as a means of improving their employment prospects and career development both in and outside academia. If the non-academic labour market becomes the destination of an increasing number of doctoral holders, their generic skills must be sufficient to meet employers' expectations. It estimated that around 50% of current doctorate holders are employed outside academia, in businesses, governments, the service sector and other education sectors, holding both research and non-research positions, and it is unlikely that the figure will decrease (EUA 2009: 103).

In addition, there are new forms of doctorates emerging such as the industrial doctorate and professional doctorates that allow those working in particular in the professions to pursue doctorates in their professional fields. "Collaborative doctoral programmes, with their exposure to non-university environments, are seen as an excellent way to improve candidates' ability to relate abstract thinking to practical applications and vice-versa, as required for the development of new knowledge, products or services" (EUA 2009: 103). In

both cases – industrial and professional doctorates – the core component remains original research.

The disciplines in applied and performing arts are currently insisting that they be allowed to train and award doctorates that would be fully recognised as meeting the standards of the traditional academic doctorates. This issue is currently not yet resolved in Europe but some higher education institutions do already offer doctorates in these fields, while holding them to the same exacting standards as those based on traditional scientific research. Thus, a number of universities do so in the United Kingdom. They require the doctoral candidate to submit his/her work (let us say, art work), along with a thesis that puts this work in the context of other art works and explains how the candidate's work builds on art history or aesthetic approaches, etc.

Promoting quality in doctoral education: the unique nature of doctoral education

These changes in doctoral education and the creation of qualifications frameworks have led to more conscious attention being paid by institutions to quality issues and to the type of measures that institutions should be considering in order to effectively monitor the quality of the new 'reformed' European doctoral programmes.

Doctoral education is often described as the bridge between research and education, thus also the essential link between the European Higher Education and Research Areas. Universities across the continent have the main responsibility for providing training both in and through research. As the main component of the doctorate is the original research performed by each doctoral candidate, doctoral education cannot be considered and evaluated in the same way as Bachelor and Master programmes. Moreover, and despite new models of multiple supervision, doctoral training is heavily dependent on the one-to-one relationship between the doctoral candidate and the primary supervisor. This makes evaluation even more challenging and explains that most quality assurance agencies in Europe do not have responsibility for evaluating doctoral education (for more details, cf. p.8).

The large diversity in the organisation of doctoral education across Europe, both at national level and between institutions, presents further challenges to quality assurance. The specificity in nature and diversity in the organisation of doctoral education makes evaluation – internal or external – highly complex. In general, evaluation includes two main but rather distinct aspects: the quality of the doctoral training on offer (educational part) and the quality of research being carried out (including the quality of the research environment, the supervisor and the research team, research outcomes, international reputation, etc.). The challenge is for each university to consider its own internal quality processes and mechanisms, taking account of its specific mission and goals, rather than relying only on external standards or purely quantitative methods and checklists that do not take into account the diversity of organisational models and profiles.

Because the supervisor is the key to a successful experience, many universities (cf. Trinity College Dublin, University College London) and associations (AIASM/EDAMBA, LERU) have come up with standards of supervision that define both the characteristics of a supervisor and of good supervision.

EUA's ARDE project (EAU 2013) devotes a full chapter to the topic of supervision. The chapter presents the evolving situation in Europe and a discussion as to whether supervision guidelines should be binding (to protect the doctoral candidates) or the result of a dialogue between the candidate and supervisor(s). According to this report, regulations usually cover the following aspects: "good conduct of research, university regulations, a prescribed minimum amount of communication" and sometimes funding aspects (EUA 2013: 33). In addition, regulations will specify the number of doctoral candidates per supervisor. For all other aspects, the regulations are very different. They might include (mandatory or optional) training of supervisors; the requirements for supervisory teams; complaints and appeals procedures; etc. (EUA 2013: 34)

QAA is very thorough on this topic. It states the general responsibility of the providers to offer students with "opportunities for access to regular and appropriate supervisory support; encouragement to interact with other researchers; advice from one or more independent sources, internal or external; arrangements that protect the research student in the event of the loss of a supervisor" (p. 17). It then lists the four characteristics of good supervision:

- HE "providers appoint supervisors with the appropriate skills and subject knowledge to support and encourage research students, and to monitor their progress effectively." (p. 17)
- "Each research student has a supervisory team containing a main supervisor who is the clearly identified point of contact." (p. 18)
- "Higher education providers ensure that responsibilities of research student supervisors are readily available and clearly communicated to supervisors and students." (p. 19)
- "Higher education providers ensure that individual supervisors have sufficient time to carry out their responsibilities effectively." (P.20)

ECU is even more detailed than QAA in its guidance about this topic. It first states the importance of supervision:

> "Supervisory teams are established to provide guidance to graduate research candidates in the design, conduct and timely completion of the research project, support in publication and dissemination of research findings, and advise on the acquisition of a range of research and other skills as appropriate to the discipline and the background of the candidate". (p. 43)

ECU then details the seven ways that this should be carried out (p.43):

- "Supervisory teams normally comprise at least two academic staff members for the duration of candidature.
- Supervision is appropriately attributed and recognised as a specialised, workload, bearing academic function that has education and research dimension."
- Supervisors are active researchers who possess relevant scholarly expertise.

- The university has appropriate eligibility criteria for all categories of supervisors. All supervisors hold a research degree or equivalent professional or research attainments at the same level of the candidate's enrolment.

- When appointing supervisors the university considers the expertise of the person, the duration of their appointment, other work tasks and any conflict of interest or privileged relationships.

- The university has policies and procedures to manage the appointment and appropriate conduct of all supervisors.

- The university provides professional development and performance review for supervisors."

Some of the elements of internal quality assurance presently being implemented – even if they are not always understood as such, and thus covered under the overall umbrella of 'quality assurance' arrangements within universities – include: the introduction of internal regulations and codes of practice as well as agreements signed between the doctoral candidate, the supervisor and the institution; improvements in standards of access, recruitment and selection; flexible and optional transferable skills training that fits each candidate's career needs; the introduction of new supervision models including professional development for supervisors; regular monitoring of each doctoral candidate's progress; support for internationalisation and mobility; ensuring high standards of the process of the thesis defence; introduction of procedures for monitoring time to degree (TTD) and completion rates and for tracking doctoral graduates.

With growing institutional diversity and a focus on more distinct institutional profiles, universities are increasingly identifying and implementing internal quality indicators at doctoral level that make sense in their own specific context. Some focus more on improving access, recruitment and selection procedures while some others try to enhance the quality of supervision or follow completion rates. The evidence suggests that these various elements of quality assurance are easier to achieve and monitor if doctoral education is structured, in one way or another. While this does not mean that there is one model of 'the doctoral school' that works best or is the only way to organise doctoral education, it is clear that the creation of doctoral schools and administrative processes allows for better monitoring of progression and achievement and thus has a major impact on quality.

It is also clear that given the growing strategic importance and structuring of doctoral education in universities across Europe and beyond, national quality agencies are becoming increasingly interested in including provision for the evaluation or accreditation of doctoral programmes in their activities. In New Zealand, for instance, the quality assurance agency's "academic handbook" lists the related questions that universities are asked to address in their self-study (AQA, 2013, pp. 70-75). The Australian government issued a consultation paper (2011) on ensuring the quality of doctoral education.

At present only very few national quality assurance agencies in Europe address doctoral education as part of their core activities. These include in particular the French national evaluation agency (HCERES) that has responsibility for the evaluation of research more

generally and specifically includes a strand focused on the evaluation of doctoral schools in its activities, ZeVa in Hanover, PKA, the Polish accreditation agency, QANU in the Netherlands that evaluates doctoral programmes as part of the evaluation of research units and the Hungarian accreditation agency. ARACIS, the Romanian agency, is launching the evaluation of doctoral programmes.

The trend in Europe, however, is shifting toward institutional evaluations or accreditations, with the expectation that the universities would be responsible for reviewing all their study programmes, including their doctoral education and training. Thus, in the UK, the structuring of doctoral education at institutional level is one of the elements that is considered in the QAA's programme of institutional audits; furthermore, QAA (2015) came up with a 'Quality Code' that outlines nine aspects that the agency expects to see in doctoral training.[2] Ireland is set to produce its own code in 2016. In other countries, the evaluation of doctoral education is linked to the funding of the specific doctoral programmes and thus often the responsibility of research bodies.

Perhaps because doctoral education is a rapidly changing area, it is noteworthy that, as is the case at the European level where EUA has taken the lead in this area, governments tend to leave to the Rectors' conferences latitude to define the quality of the third cycle. Useful documents include the ones prepared by the Council of Deans and Directors of Graduate Studies in Australia (2010), the results of the Edith Cowan project (2013) and the Universities New Zealand's CUAP Handbook 2015.

II. The current situation in Latvia

The general observations based on the site visit (cf. p. 2) and the documentation provided include the following:

1. Doctoral education is well developed in the institutions that were visited. These institutions offer relatively good conditions for their students; the administration and staff showed commitment to student success and students were clearly motivated despite their difficult financial situation.

2. The funding of graduate students is in general very low:

   - The monthly State stipend (113 Euro) does not allow students to focus full time on their doctoral studies because most of them need to work to cover their living expenses. (By contrast, during the time that Latvia was in receipt of structural funds in support of doctoral studies, students were able to work full time on their research.) Doctoral students in two different universities used the word 'hobby' to refer to their doctoral work.

   - The available research funding totals 8 million Euro per year (0.3% of the State budget). The process of grant proposals is not launched every year, which means that

[2] The nine aspects include: higher education provider arrangements; the research environment; selection, admission and induction of students; supervision; progress and review arrangements; development of research and other skills; evaluation mechanisms; assessment; and student complaints and appeals procedures.

research funding goes through cycles and it is difficult to plan the intake of doctoral students; in some cases, students would have to change their research topic if the grant supporting them has ended before they were finished. Some fields (medicine, engineering) are better able to support students than other fields (social sciences and humanities). Unsurprisingly, the system fails to attract international students. In addition, because most are working, the Latvian students take longer than planned to complete their doctoral work.

3. The funding formula used by MoES stipulates a standard allocation per student, depending on the field. For each field, MoES establishes a minimum and an optimum amount. Currently, HEIs are provided with the minimum amount, which does not seem sufficient to cover the full costs in all cases. The allocation for doctoral students is three times higher than the allocation for undergraduate students. However, due to the underfunding of undergraduate studies, it was reported that (at least) some institutions divert (part or all of) this lump sum to undergraduate education because it is underfunded. This information was obtained from two different observers. MoES believes that this triple amount is leading to the opening up of too many doctoral places.

4. Of the four institutions that were visited, the medical and technical universities seemed to be in a relatively better position to diversify their income sources. Riga Technical University works with industry to provide collaborative research environment; the situation at Riga Stradins University is more complex given the existence of several 'university hospitals' that are unattached to universities. Agreements to carry out clinical research must be negotiated yearly.

5. Like in various other middle-income countries, Latvian industrial R&D capacity is reported not to be very strong; concerns were expressed that doctoral training is undervalued by industry and the opportunities for collaborative doctorates are rare; there was no evidence of transferable skills developments offered by the universities.

6. The transition away from the one-to-one apprentice model has started recently. One university introduced clear criteria for the doctorate only last year. There was some evidence that doctoral schools are limited to offering courses and review publications. As an example, this structure is called summer schools in one of the universities. In other words, the concept of a doctoral school that would be entrusted with managing and monitoring standards at all steps of a doctorate (admission, progress, conferral) is not yet a reality but some of the universities have introduced some of these functions and are monitoring their students' success in a formal way. Thus, one university limits the number of students that a supervisor can supervise; students must have a plan, which is monitored regularly on the basis of an annual report prepared by the students.

7. Some students felt untrained in certain core competences such as research methodology and mentioned that the information they receive from the university concerning their education can be patchy in the larger institutions. It is unclear if this problem is acute and widespread or the expression of the normal anxiety that is linked to doctoral training.

8. LSA and ALYS representatives[3] noted that while universities claim to be offering courses, in fact they rarely do but the students are required to take exams at the end of the programme: "These exams are usually for the whole field and test the knowledge in that given field. The problem here is that if a doctoral student chooses to specialize in one specific part of the field, he may not need or even know the intricacies of the rest of the field."

9. It was mentioned several times that interdisciplinarity is hampered by the structure of the Science Council (a national body organised in traditional branches) and the lack of national research funding for such type of studies. The Science Council's responsibilities include maintaining the register of experts that are allowed to participate in promotion committees; assessing the research capacity of an institution to ascertain if it is fit for doctoral training and can be granted the right to confer a doctoral degree; reviewing grant proposals and evaluating new study programmes. Some students expressed dissatisfaction with the quality of the experts nominated to the promotion committees.

10. The higher education system is small but fragmented. This is true at the government level, with several ministries in charge (agriculture, culture, education, health, welfare, defence, interior). It is also true at the institutional level to the extent that there is little inter-institutional cooperation, even in basic services such as across the university libraries located in Riga.

11. In addition, there is no possibility to deliver a joint doctorate whether within Latvia or internationally and there is very little student international mobility, whether incoming or outgoing.

12. The training of doctoral students is distinguished from the conferral of the doctorate. A student could be trained in one institution and go to another one for the conferral process if his/her institution does not have the right to confer the doctorate.

13. There are currently no incentives or a framework to promote inter-institutional doctoral programmes. Although a legal provision to **implement** joint study programmes exists (Law on HEIs, 55.1. article), there is no legal provision to form **a joint promotion council**; therefore the degree can only conferred by one of the institutions.

14. The promotion process is very complex. One vice rector provided a three-page PowerPoint to show (in a simplified way) how this works. The process can be very lengthy. Some students mentioned duration of up to nine months but one university staff reported that if the supervisor is well connected, a phone call could help speed up the process.

15. From a European and international perspective, there are two unusual features of the promotion process: (a) the interference of an external process **during** the internal approval of a thesis and (b) a rather complicated **internal** process:

[3] Joint communication to the author from LSA and ALYS, respectively the Latvian Student Association and the Association of Latvian young scientists.

- Although the universities have 'doctoral programme committees', they must form promotion councils if they want to confer the doctorate.
- The Science Council must vet the members of these promotion councils. The main criterion to become member of a promotion council is to have published two papers in Scopus or Web of Science in the past three years. This process is considered by some to be too permissive and to result in the proliferation of doctoral programmes. While it is difficult to understand why such a simple process could not be entrusted to the universities themselves, it is important to consider that this is the first quality assurance mechanism that serves as external filter for conferring the doctorate.
- In the larger institutions, the university is able to set up a promotion council that correspond to the thesis' discipline but this is not possible everywhere.
- The promotion council will evaluate a thesis and, if found acceptable, it will be sent to the State Scientific Qualifications Commission (SSQC), which is part of the Academy of Science. SSQC will select an anonymous reviewer who evaluates the thesis. If the evaluation is positive, the promotion council will set up a committee of three reviewers who will manage the thesis defence. To note, there is a general dislike of the SSQC, which is described as a 'black box' and the anonymous reviewer is nicknamed the 'dark reviewer'. MoES finds this part of the process "out-dated" and providing "a bureaucratic, controlling element without real scientific value". The main proponents of the SSQC seem to be some (albeit not all) of its members who argue that the higher education system is very fragmented and that the SSQC provides the only common framework.
- The reviewers, vetted by the Science Council and appointed by the university, will read the thesis cover to cover but the decision on accepting the thesis following the defence will be based on the vote of these reviewers plus a couple of members from the promotion council. Concerns were expressed that, in practice, members of the promotion councils might not have read the thesis as carefully as the reviewers.
- If the thesis is accepted, it goes back to the SSQC, which has the right to dispute the final decision. The university has also the right to dispute the final decision. Students have the right to appeal to the Science Council; if they are unsatisfied with the outcome of this appeal, they can go court (based on Regulation 1001, articles 37 and 38).

16. The system is attempting to control quality ex-post rather than ex-ante. More specifically, it has been reported that there are certain weak spots in the system – the research institutes, teachers' colleges and the social sciences to name a few – where doctoral students are accepted even though they may be totally isolated, and have no access to research projects in their field. The complex promotion system was developed to control the poor quality of some of the doctoral theses produced.

17. In addition, some students complained that the focus of the promotion system is to ensure compliance with a set of threshold requirements that are not conducive to innovation, creativity and interdisciplinarity. Furthermore, LSA and ALYS conducted a

survey in August 2015 to which 350 doctoral students from 7 universities answered. Their main findings include the following conclusions:

The main findings were that not all promotional councils support all promotion work types that are regulated nationally. Thus, some councils do not accept a set of publications as a promotional work. Another identified problem was that finding information on the doctoral and promotional process [w]as very difficult and led to confusion. Furthermore, not all promotional rules of higher education institutions are publicly available, which leads to a lack of transparency.

The requirements for the promotional works also greatly vary, some higher education institutions require that the aspirant has at least 10 publications, while other require none. This is exacerbated by the problem that all doctoral works have to be written in Latvian, which makes the internationalisation of science highly difficult.

It should be noted, however, that according to the Law on Scientific Activity, article 11 (5), a thesis could be submitted and defended in Latvian or in any of the EU languages, with an abstract in Latvian. Non-EU languages can be used, if they are relevant to a particular research.

Apart from this point, the Ministry's assessment corresponds to the students and young scholars' analysis. MoES raised the question of whether there should be common criteria for delivering the PhD to address the following issues:

- *Loopholes and discrepancies in the legal regulation lead to the possibility of misinterpretation and lowering standards of scientific qualification.*
- *There are no clear criteria on the basis of which promotion rights to higher education institutions are granted.*
- *Requirements of scientific quality (publications, participation in conferences, etc.): the regulation allows a certain degree of variation, thus, different standards are applied at different HEIs. Should there be a unified regulation regarding the quality requirements?*
- *Length of the doctorate – 3-4 years. Is it the optimum length?*

18. The Art Academy of Latvia and the Sport Academy raised the possibility of conferring a 'practical doctorate'. It should be noted that current discussions among the Baltic countries are being held about this issue and that Lithuania already offers the possibility of a practical doctorate. In addition, this is an option in a number of European countries even if European consensus about this type of doctorate has not yet been reached.

III. Recommendations

The complex promotion system in Latvia was developed at a time when quality assurance mechanisms for the doctoral level did not yet exist. However, there have been three developments in the last decade that would justify rethinking the process:

- Today, there is the possibility in Latvia to accredit doctoral programmes and the research capacity of institutions delivering the doctorate although the accreditation agency is still in a pilot phase and there is a split of responsibilities with the Science Council evaluating the research capacity.

- There is a national qualifications framework that could be used to define standards of doctoral education.

- At least some of the universities are transiting away from the apprentice model, even if the concept of doctoral schools is not fully used and the universities are developing their internal QA processes.

It seems opportune therefore to review the system and overhaul it completely. The following recommendations outline ten steps that could be taken **sequentially** to progress in this area:

1. The national qualifications framework should be examined and compared to other national qualifications frameworks to ensure that it provides appropriate definitions of the doctoral level. (For instance, the Universities New Zealand's CUAP handbook identifies common criteria for the doctorate, p. 25.) If the decision is taken to introduce the possibility of practical doctorates, it would be important that their standards are the same as for the 'generic' doctorates and that Latvia monitors European and international developments in this fast-moving area.

2. The distinction between doctoral training and the conferral of the doctorate should be ended. Instead, there must be a process to monitor and control the creation of doctoral programmes in Latvia. This should be based on an ex-ante evaluation, which would replace the current assessment by the Scientific Council and would be conducted by the Latvian accreditation agency, that would look at the research capacity of an institution and whether it provides a suitable research environment (for a more detailed discussion of the characteristics of such an environment, cf. QAA 2015). The Portuguese higher education law could provide inspiration in that it defines very strictly the criteria for doctoral programmes, such as the percentage of academic staff with PhD, how to assess of their research activities, the existence of laboratories and other infrastructures, etc.

3. If an institution cannot offer the appropriate research environment (and therefore cannot confer the doctorate), it should not be allowed to provide training to students. However, if such an institution (let us call it Institution A) wants to develop doctoral programmes, an intermediate step would be to require it to be formally linked to a university that has been accredited to deliver the doctoral. In this scheme both institutions would be responsible for the training and supervision of the Institution A's doctoral students but the university would award the doctorate on behalf of Institution A. The promotion processes involving the Universities of Applied Sciences in Germany provide an example of such an approach. In the United Kingdom, an institution wishing to develop a new level of qualifications must work with an established university that will 'validate' its new qualifications for a period of four years.

4. Furthermore, the fragmentation of the higher education system could be mitigated by encouraging neighbouring institutions to cooperate for a range of services: libraries, courses in transferable skills, in research methodology, etc. This would increase the efficiency and effectiveness of doctoral education and create critical mass where needed.

5. In order to encourage internationalisation, the possibilities of establishing joint doctorates should be provided. At the very least, there must be funding to support student and staff exchange. This is key to the quality of doctoral education, particularly given the small size of the Latvia higher education system.

6. In parallel, the organisation by branches of the Science Council should be reviewed to ensure that it is not hindering interdisciplinarity, particularly of research projects.

7. MoES raised the question of the optimal length of the doctorate. Three to four years seems to be the rule elsewhere but as long as the funding of doctoral candidates is low, it will be impossible to hold them to account and make length a criterion. It would be useful to hold a national discussion on the numbers of doctoral candidates by field who can be funded at an appropriate level. In addition, the selection and admission system must be linked with available funding instead of being an annual procedure. A flexible admission schedule might be the answer to the intermittent availability of funding, unless it proves possible to have an annual research funding cycle.

8. Universities should be encouraged to develop graduate or doctoral schools in line with best European practice. These schools would provide courses to strengthen the research and soft skills of doctoral candidates and promote an academically stimulating research environment by organising events (conferences, seminars, etc.) to bring doctoral students together with researchers to discuss issues of interest. Most importantly, the schools would be entrusted with the development of the internal quality system at doctoral level. This quality system would ensure the robustness of all phases of a student's passage in the university: admission, orientation, supervision, and assessment. Particular attention would be placed on the selection and monitoring of supervisors because they are the key to the quality of the doctoral student's experience. A code of good practice for Latvian universities, such as the one that QAA, the UK quality assurance agency, developed would be a useful instrument, (cf. reference list).

9. The Latvian accreditation agency should be conducting an ex-post evaluation that would examine whether the universities have developed robust internal quality systems for their research environment; the selection, admission and induction of students; supervision; progress and review arrangements; development of research and other skills; evaluation mechanisms; and assessment. In addition, universities should have in place a student's complaints and appeals procedures, a code of ethics (cf. Oxford University's ethical code) and a policy regarding intellectual property.

10. Once all the above recommendations are implemented satisfactorily, it would be possible to envisage replacing the SSQC and the promotion councils and putting the universities in charge of the quality the doctoral training, doctoral supervision and the

resulting thesis. The SSQC and the promotion councils would be replaced by thesis committees. Doctoral programmes would be required to form thesis committees (5 members) that reflect the nature of the thesis and would be responsible for the assessment of the candidates. Doctoral candidates – in consultation with their thesis supervisor – could propose names. These committees should be validated by the respective faculty (or doctoral school where it exists) and the university. Supervisors would not be part of the thesis committees, which would include at least two members from outside the institution, one of whom would be international (e.g. from the Latvian academic diaspora).

Overview of recommendations		
Timeline	**Current situation**	**Recommendation**
Within 6 months	National qualifications framework	N°1: The national qualifications framework should be examined and compared to other national qualifications frameworks to ensure that it provides appropriate definitions of the doctoral level.
Within 36 months	Science Council decides if an institution has the right to confer the doctorate	N°2: The distinction between doctoral training and the conferral of the doctorate should be ended. Instead, there must be a process to monitor and control the creation of doctoral programmes in Latvia. This should be based on an ex-ante evaluation, conducted by the Latvian accreditation agency that would look at the research capacity of an institution and whether it provides a suitable research environment. N°3: Consider the possibility of setting a validation model for institutions that are interested in developing the doctorate but are not entitled to confer it.
Within 12 months	Fragmented landscape	N° 4: Encourage inter-institutional cooperation, starting with some services such as libraries, soft-skills development courses, etc.
Within 12 months	Weak internationalisation	N°5: Encourage internationalisation through joint doctorates funding to support student and staff exchange.
Within 12 months	Weak interdisciplinarity	N°6: Review the branch organisation of the Science Council.

Within 12 months	Lack of funding and weak link between admission and funding	N°7: Decide on the numbers of doctoral candidates by field who can be funded at an appropriate level; link the selection and admission system with the available funding instead of being an annual procedure and allow a flexible admission schedule.
Within 24 months	Doctoral schools are under development	N° 8: Create doctoral schools and develop quality mechanisms for all phases of a doctoral student's passage in the university.
Within 48 months	No accreditation of doctoral education	N°9: the Latvian accreditation agency would have evaluated all the doctoral schools.
After 48 months	Responsibility for quality of doctoral education is in the hand of the SSQC and promotion councils	N° 10: SSQC and promotion councils would be replaced by thesis committees.

References

Australian Government (2011) *Defining quality for research training in Australia: A Consultation Paper*.

AQA (2013) *Cycle 5 Academic Audit Handbook*, New Zealand, http://www.aqa.ac.nz/cycle5handbook

Council of Deans and Directors of Graduate Studies in Australia (2010), *Best Practice Guidelines: Research Doctorates*, https://staff.mq.edu.**au**/public/download.jsp?id=50751

Edith Cowan University (ECU) (2013) Higher Degree for Research Training, https://www.ecu.edu.au/__data/assets/pdf_file/0003/455673/Final-Good-Practice-Framework.pdf

EIASM/EDAMBA (2015), Guidelines for Doctoral Programs in Business and Management, http://www.eiasm.org/UserFiles/European%20Code%20of%20Practice%20-%20Revised%20(shorter)%20version%20-%20Sept%202015.pdf

EUA (209) Collaborative Doctoral Education: University-Industry Partnerships for Enhancing Knowledge Exchange, DOC-CAREERS Project. http://www.eua.be/activities-services/publications/eua-reports-studies-and-occasional-papers.aspx

EUA (2013) Quality Assurance in Doctoral Education: Results of the ARDE Project. http://www.eua.be/Libraries/publications-homepage-list/EUA_ARDE_Publication.pdf?sfvrsn=4

EUA (2014) Europe's Universities: Main Drivers in Achieving the European Research Area (ERA). http://www.eua.be/Libraries/publications-homepage-list/EUA_ERA_Publication_04_14_web.pdf?sfvrsn=4

Trends 2010: A decade of change in European Higher Education, by Andrée Sursock & Hanne Smidt 2010. http://www.eua.be/Libraries/publications-homepage-list/trends_2010049364ca84b96a879ce5ff00009465c7.pdf?sfvrsn=0

LERU (2014) Good Practice Elements in Doctoral Training. http://www.leru.org/files/publications/LERU_AP_15_Good_practice_elements_in_doctoral_training_2014.pdf

QAA (2015) Quality Code for Higher Education, chapter B11. http://www.qaa.ac.uk/assuring-standards-and-quality/the-quality-code/quality-code-part-b

Trinity College Dublin, Medical Schools, Supervision of Research Students: Best Practices Guidelines, http://www.medicine.tcd.ie/assets/pdf/Supervision-Guidelines.pdf

University College London, UCL Doctoral School: Essential Information, http://www.grad.ucl.ac.uk/essinfo/

UNZ (2015) *CUAP Handbook 2015*, http://www.universitiesnz.ac.nz/files/all/_2015%20CUAP%20Handbook.pdf

University of Oxford, *Academic integrity in research: Code of practice and procedure* http://www.admin.ox.ac.uk/personnel/cops/researchintegrity/#d.en.54058

Annex: Site visit programme

26/09/2016

09.00 – 10.00 MoES representatives
10.15 – 11.45 University of Latvia (30 mn each with institutional leadership, a group of supervisors and a group of students)
13.00 – 14.30 Art Academy of Latvia (30 mn each with institutional leadership, a group of supervisors and a group of students)
15.00 – 16.30 Latvia Science Council

27/09/2016

09.00 – 10.00 Riga Technical University ((30 mn each with institutional leadership, a group of supervisors and a group of students)
11.00 – 12.30 Riga Stradins University (Head of research department, one supervisor and three doctoral students)
14.00 – 17.00 MoES Workshop
17.00 – 18.00 Meeting with Andrejs Rauhvargers