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# Study on the organisation of doctoral programmes in EU neighbouring countries

## Ukraine





# General information on the study

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## 1. Doctoral programmes data

In Ukraine, there are 861 higher education institutions, according to the last official statistical data of 2009/09, of different forms of property and departmental subordination (subordinate to the Ministry of Education and Science, to the Ministry of Finance, municipal subordination etc.) including 350 universities and academies that have the 3<sup>rd</sup> or 4<sup>th</sup> accreditation level and accordingly carry out research and also provide doctoral (Aspirantura) (245 HEI) and post-doctoral (Doktorantura) (157 HEI) programs.

Some of the most important institutions include:

Taras Shevchenko Kyiv National University¹, (establishment year – 1834; 1st rank as a classic research university according to the Rank of HEI (Universities) of Ukraine with over 30 000 students, 14 sub-departments (faculties) and 5 institutes in education and research fields including the Institute of Research and Development in Physiology, the Botanical Garden, the Zoological Museum, an Astronomical observatory. There are more than 2000 academic and about 1000 scientific staff employed at 158 Departments (Chairs), 82 % of the lecturers have Candidates and Doctors of Sciences degrees, in particular 24 % – Doctors of Sciences or Professors).

National Technical University of Ukraine "Kyiv Polytechnic Institute"<sup>2</sup>, (establishment year – 1898; 1<sup>st</sup> rank as a technical and technological university according to the Rank of HEI (Universities) of Ukraine; size – about 50 000 students; 20 Colleges, 9 Academic and Research Institutes, 12 Research Institutes, 13 Research Laboratories, and other Scientific Units; 10 000 Professors and Researchers).

National Technical University "Kharkiv Polytechnic Institute" (establishment year – 1885; 2<sup>st</sup> rank as a technical and technological university according to the Rank of HEI (Universities) of Ukraine; size – about 30 000 students; 22 sub-departments (faculties), 92 Departments (Chairs), 3 Academic and Research Institutes, Research Institute of ionosphere, Research-&-design institute "Molniya", Research plant and other Scientific Units; 1300 Professors and Researchers including 160 Doctors of Sciences, Professors, 760 Docents and Candidates of Sciences (PhD).

National University of "Kyiv-Mohyla Academy"<sup>4</sup> founded in 1615, (re-establishment year – 1992; the best HEI in social and political sciences; size – about 3,500 students; 6 sub-departments (faculties) and Business school, Doctoral school; about 600 Professors and Researchers including 105 Doctors of Sciences and Professors, 260 Docents and Candidates of Sciences (PhD).

There are 1196 research institutes (RI) of different departmental subordination including 276 RI that provide postgraduate doctoral (Aspirantura) programmes and 92 RI that provide post-doctoral (Doctorantura) programs of the 3<sup>rd</sup> cycle.

The estimates are that, annually, about 10 000 Ukrainian students are enrolled in "Aspirantura" programs (HEI – about 8500 candidates, RI– about 1500) and about 500 Candidates of Sciences are enrolled in "Doktorantura" programmes (HEI – about 400 candidates, RI– about 100).

- Population: 46.2m
- GDP per capita: €2,666
- % of GDP spent on education: 5.3% (2007)
- % of GDP spent on research: 0.87% (2007)
- Doctoral candidates enrolled: 33,915

2008 UNESCO IUS data

<sup>&</sup>lt;sup>1</sup> http://www.univ.kiev.ua/en/

<sup>&</sup>lt;sup>2</sup> http://inter.kpi.ua/about.php

<sup>&</sup>lt;sup>3</sup> http://www.kpi.kharkov.ua/?main=history.html

<sup>&</sup>lt;sup>4</sup> http://www.ukma.kiev.ua/eng site/en

According to the State Committee of Statistics of Ukraine data, 76 % of Ukrainian "aspirants" complete their research programme within the three year period, and only 22% ever submit their dissertations for defence; 92 % of Ukrainian doctoral candidates complete their research programme within the required three year period, and only 22% ever submit their dissertations for defence.

Gender parity index is 1,413 – female and male quantity ratio (UNESCO methods) within the HEI system. Gender balance including both HEI and research institutions: 59 % female – on doctoral (Aspirantura) programmes and 49,4% female – on post-doctoral (Doktorantura) programmes.

There are doctoral (Aspirantura) programmes and post-doctoral (Doktorantura) programmes in 27 disciplines (research fields): physical and mathematical, chemical, biological, geological, technical, philosophical, pedagogical etc.

## 2. Doctoral programmes

#### 2.1 Doctoral programmes overall organisation

In Ukraine, there has been a sharp distinction between education at the HEI on one side and at the RI on the other. This is the heritage of research training from the Soviet Higher Education system and the Ukrainian system of Doctoral programmes is still centralised to a high degree. Today, the vast majority of doctoral candidates are enrolled in HEIs.

There are mainly four actors responsible for doctoral programmes in Ukraine:

- The Ministry of Education and Science of Ukraine (MES of Ukraine) gives certificates/licenses as well as funding. It monitors the development of the doctoral candidates' achievements and is responsible for the Aspirantura programme.
- The Higher/Supreme Attestation/Certification Commission of Ukraine ("VAK") issues approvals to create dissertation degree committees (Specialised Academic Council) and is also the body confirming degrees, which is to award doctoral ("Kandydat nauk" or Candidate of Sciences) and post-doctoral ("Doctor nauk" or Doctor of Sciences) degrees. The decision of the dissertation committees should be ratified by VAK. The VAK provides every Candidate of Sciences with an Englishlanguage PhD diploma and PhD diplomas issued outside Ukraine must undergo a "nostrification procedure" regulated by VAK in order to be recognised in Ukraine. VAK was established in 1992 to coordinate and monitor the quality of Aspirantura and Doktorantura diploma. MES of Ukraine has no influence of the work of VAK.
- The National Academy of Sciences of Ukraine is the highest state-supported research organisation and responsible for the research institutes. According to its statutes, the Academy enjoys the rights of self-government in making decisions about its own activities.
- HEI and Research Institutes depend on the ministry in terms of accreditation, (for example a certain number of professors etc.) but then they can create and design their own doctoral programmes. HEIs and RIs can create doctoral and post-doctoral programmes on approval of the MES of Ukraine (or National Academy of Sciences of Ukraine for RI in accordance with subordination) in the frame of demands and procedures that were developed by MES of Ukraine and VAK. HEI has accreditation levels (I-IV); after ca five years there is usually a procedure to renew the terms of accreditation. The HEI applies to the MES of Ukraine and have to prove that they have academic schools, high profile and professors etc in order

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to be accredited. An important factor is the percentage of academic staff that possesses research degrees.

There are academic (classic) universities that offer education programmes in many different disciplines (research fields) and academies that focus on specific education fields (law, public administration, arts etc.).<sup>5</sup>

#### **Policy**

In 2005, Ukraine signed up to the Bologna process. The Minister of Education and Science has signed a corresponding declaration. However, not all Ukrainian scholars and officials, especially in the educational sphere, support it. The Bologna process opens up international mobility for students. However, opponents of the process argue that it will lead to drainage of talented youth from the country due to the substantial differences in quality of life and research opportunities in Ukraine and the EU.

Reform of higher education system, in particular the organisation of doctoral programmes, is a priority for the R&D policy at national level. Therefore, a Draft Law on Higher Education has been prepared for consideration in Verkhovna Rada (Parliament of Ukraine) which contains a section on implementation of the 3<sup>rd</sup> cycle higher education program. In accordance with the Draft Law, Ukrainian doctoral programmes organisation is an integrated model of both the traditional native model and a Europe inspired model.

In a document prepared by an advisory board to the Ministry of Education and Research for 2009/2010 a number of priorities regarding international mobility were outlined. These include:

- develop steps to strengthen doctoral programmes mobility
- to increase state support for outward mobility
- increase collaboration with UK/EU/RU by introducing exchange projects

Since the new government is in place there has been a change in direction.

The centralisation and the strong power of VAK (who is the driving actor) has been criticised by some voices in the country. A concept law suggesting a change in research education system has been on the agenda for the last years. There have been recommendations on increasing autonomy for universities and that HEI should issue doctoral diplomas rather than VAK. The role of VAK would then rather be monitoring and controlling quality. The first hearing about these issues is now taking place by the MES of Ukraine but there is no deadline when a decision has to be made.

Today, there are common guidelines, rules and regulations regarding the organisation of doctoral (Aspirantura) and post-doctoral (Doktorantura) studies at the national level.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Source (Ukrainian): <a href="http://www.vak.org.ua/normat.php">http://www.mon.gov.ua</a>

<sup>&</sup>lt;sup>6</sup> Regulations about Research and Pedagogical Personnel Education (Resolution of Cabinet of Ministries of Ukraine № 309, 1.03.1999); Regulations about Specialized Academic Councils (Order of Supreme Attestation Commission № 429, 29.08.2000, and Resolution of Cabinet of Ministries of Ukraine № 429, 29.08.2000); Order on the Award of Research Degrees and Granting Academic Status (Resolution of Cabinet of Ministries of Ukraine № 423, 7.03.2007).

#### 2.2 Doctoral programmes structure

#### 2.2.1 Definition of doctoral programmes

The Ukrainian doctoral study structure is based on a 2-stage system. The titles are:

- Aspirantura (Doctoral Candidate) a person who pursues the Candidate of Sciences degree (title) via the Aspirantura programme. It requires candidates to prepare a public defence of their research thesis (dissertation). If successful, the defence leads to the award of Candidate of Sciences' degree "Kandydat nauk" (comparable to the PhD) (awarded by the Supreme Attestation Commission of Ukraine upon the request of the corresponding specialized academic council).
- Doktorantura (Post-Doctoral Candidate) a Candidate of Sciences degree holder
  who pursues the Doctor of Sciences degree (title) via the procedure of
  Doktorantura and the obligation to write and defend the corresponding doctoral
  dissertation. Successful doctoral dissertation defence leads to the award of Doctor
  of Sciences' degree "Doctor nauk" which is the highest scientific degree in Ukraine
- *Zdobuvach* (Seeker) a person seeking to obtain a Candidate of Sciences' degree, while not enrolled in an *Aspirantura* program.

#### 2.2.2 Duration

The normal length of full-time doctoral and post doctoral programmes is 3 years. Candidates register one time for the full cycle and on an annual basis as they proceed with their doctoral study on the condition that they have demonstrated adequate progress in their research work during the previous year. If they fail, they can be excluded from the doctoral programme.

When the legal duration of doctoral and post-doctoral programmes is over, doctoral and post-doctoral candidates are allowed to continue their research, complete dissertation and defend it.

22% of doctoral candidates and 22% of post-doctoral candidates complete their research program and submit their dissertations for defence within the required three year period.

#### **2.2.3** Funding

The average annual tuition fee for doctoral and post-doctoral programmes is from EUR 600 to EUR 6000 depending on HEI or RI for candidates with private funding.

95% of funding is state-funding, 5% are self-funded or funding received from other sources.

In general, research projects are funded by state and local budgets (about 50%); HEI and RI (7,4%); private sector (about 43%). It is usual that doctoral and post-doctoral candidates conduct their research in the frame of research projects in host HEI or Research institutions, often with their supervisor in a leading role. This is most common in Engineering and Business studies.

Doctoral candidates are mainly funded by the state budget but public institutions can also receive additional external funding from private companies and charities because the state funding is not always sufficient to maintain a high level of teaching and research. External funding is usually a major proportion of the universities' annual budget.

#### Doctoral candidates' living allowance

Only Doctoral and Post-Doctoral Candidates, who study in the frame of "state order" (public funding for valid number of doctoral and post-doctoral candidates), get stipends (scholarships) EUR 140-200 per month from the state budget via host

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institutions. These stipends (scholarships), which include living allowance, are rather low in relation to a persons monthly expenditure, which is why most doctoral candidates have to work outside academia.

The proportion of public funding (national) and private funding for doctoral candidates is: 84% to 16% – for Aspirantura (Doctoral Candidates); 95% to 5% – for Doktorantura (Post-Doctoral Candidates).

The government provides special stipends to different categories of young scientists (up to 35 years old) to keep them in research institutes, and also:

- 1. Special stipends for young Doctors of Sciences. The stipend was introduced at the beginning of 2009. There are less than 50 such persons in Ukraine, and they have to compete for 20 stipends of EUR 200 per month.
- 2. Stipends of the President of Ukraine for young Candidates of Sciences (EUR 90 per month) 300-400 scholars per year.
- 3. Stipends for young scientists from the Presidium of the National Academy of Sciences (EUR 70 per month) 400- 500 scholars per year.
- 4. Regional stipends for young scientists (vary from 30 to 120 Euros per month) not more than 300-400 scholars for the whole country.

Candidates can also be contracted by a private company (could also be foreign sources). For Zdobuvach (independent studies) it is possible to collaborate with an institution if teaching is included in doctoral education.

Breaks during the Aspirantura are common. The main reason is funding problems and that candidates have to work besides research to be able to afford their studies.

#### 2.2.4 Doctoral candidate status

Doctoral Candidates (Aspirantura) have the status of both students and early stage researchers; Post-Doctoral Candidates (Doktorantura) have the status of early stage researchers and they are considered as employees, and they are also used as research fellows, teaching assistants, lab supervisors. They are not regular students but have the same rights and privileges.

#### 2.2.5 Doctoral candidates rights

Doctoral and post-doctoral candidates pay taxes and benefit from social security coverage. Social benefits include pension rights; pregnancy leave and maternity leave. However, candidates do not enjoy the same pension rights as formally employed researchers. They only receive about 50 percent

Doctoral Candidates can participate in HEI or RI Academic Councils as representatives of students (who constitute up to 10% of the members); Post-Doctoral Candidates can participate in HEI or RI Academic Councils as representatives of research staff.

#### 2.2.6 Organisation of doctoral programmes

The predominant model in the organisation of doctoral programmes (Aspirantura) is tutored individual education with taught courses for compulsory Candidates exams, usually: Philosophy, Pedagogy and Psychology, a foreign language and courses in appropriative research fields as well as independent research project (dissertation).

The most common model in the organisation of post-doctoral programmes (Doktorantura) is individual education (traditional mentoring) without taught courses, and also independent research project (dissertation).

Aspirantura have classes and must pass three exams – Philosophy (inherited from the Soviet Union), foreign language and the speciality (where there are no classes). Usually this is completed during the first years. Doctoral candidates have to know a foreign language, usually English. Candidates have to present written reports on research projects in Ukrainian or Russian.

Zdobuvach has the legal status, but are not enrolled in an *Aspirantura* program. Universities have doctoral candidates from many fields. Sometimes there is no relevant supervisor in place with the ability to lead a doctoral candidate in a specific subject. He or she must pass 3 compulsory Candidates exams. These candidates are then called Zdobuvach, but will defend a thesis as well.

There is an emerging trend towards a more structured approach to doctoral programmes but at present, there is no doctoral programme structure in Ukraine. The first doctoral programme has been implemented at Kiev-Mohyla University. The objective is to become a model for reform throughout the country. The first programmes started in 2008. 16 doctoral candidates were enrolled into three doctoral programmes: Management in Public Health (an initiative of the Kyiv-Mohyla School of Public Health); Mass Communications (a joint programme of the Kyiv-Mohyla School of Journalism and Department of Sociology); Finance (a joint programme of the Department of Finance and Kyiv-Mohyla Business School). Each doctoral programme was established with extensive international partner cooperation of Norwegian, American, Spanish, and Dutch academics, serving as programme experts, research supervisors, and potential dissertation examiners. In 2009 two more PhD programmes were launched and in 2010 another two.

The structure of training at the Kyiv-Mohyla Doctoral School consists of the following: during their first year of studies, in addition to commencing their individual research projects, doctoral candidates take part in a series of methodological and skills training courses that are organised by the Doctoral School (up to 20 credits), and also partake in thematic courses and seminars organised by each Doctoral program (up to 20 credits). During the second year of studies, the number of structured courses is somewhat reduced (total of 30 credits) with research becoming more central to each PhD candidate's activities as he/she proceeds through the 4 year doctoral programme. The courses are officially given in two languages: Ukrainian and English.

At present, the Doctoral School initiative at Kyiv-Mohyla Academy is limited in resources to scarce internal university funding and small grants, and the project is currently supported by an enthusiastic group of Kyiv Mohyla faculty who see an urgent need for aspirantura reform. Background knowledge and training for this group was obtained through a European Union-funded Tempus project in 2006-7, and a follow-up application to Tempus was submitted for 2009-10. A grant from the Kyiv Mohyla Foundation of America financed organisation and management training of PhD programmes at U.S. universities. In addition, the PhD programme in Mass Communications obtained a 50 000 Euro start-up grant from Rinat Akhmetov's Foundation for the Development of Ukraine.

#### 2.3 Doctoral programmes content

#### 2.3.1 Research

After the candidate is enrolled, the host department formulates the title of the research thesis. The chair or department plays an important role in the decision over content. The doctoral candidate first makes a presentation and the department formulates certain needed requirements.

The percentage of time spent by the candidate on doing his/her own research is 80-90%. The process for defining the research thesis subject is: a candidate prepares a proposal in consultation with the supervisor and submits it to the Academic council for approval.



#### 2.3.2 Training during doctoral programmes besides research

Courses are taught for doctoral candidates (Aspirantura) usually: Philosophy, Pedagogy and Psychology, a foreign language and courses in appropriative research fields only in the first year. Doctoral Candidates have to pass compulsory Candidate exams before the defence of dissertation: Philosophy, a foreign language and a specific discipline or field according to the chosen research field (specialty).

There is no training in transferable/generic skills for Doctoral Candidates.

Doctoral candidates have teaching duties along with writing their thesis first year. This teaching activity is mandatory. Doctoral candidates can teach as assistants of their supervisors in HEI.

For Doktorantura there are no course requirements. They have individual research plans and are expected to attend conferences and seminars.

#### 2.3.3 Teaching during doctoral programmes besides research

Doctoral candidates have teaching duties along with writing their thesis first year. This teaching activity is mandatory. Doctoral candidates can teach as assistants of their supervisors in HEI. The amount does not differ between universities and research institutes. The time dedicated to teaching does usually not exceed 1/3 of the study. ECTS credits are planned to be introduced for evaluation of the candidate workload during the doctoral programmes.

# 2.4 Doctoral programmes process: admission, supervision, monitoring and assessment

Preparation for Aspirantura and Doktorantura is the same at research institutes and HEIs. There is the same proportion of full time and part-time active candidates at research institutes and HEIs. There is no difference in salaries/grants or taxes between universities and research institutes.

Some of the interviewees considered the quality of the research carried out by a candidate affiliated with a university to be higher than one being affiliated with a research institute.

#### 2.4.1 Admission/recruitment

To be admitted to an Aspirantura programme, Specialist's or Master's degree holders should take competitive entrance examinations. Candidates must pass entrance examinations in a foreign language, Philosophy, and in a specific discipline or field (according to the chosen specialty).

Applicants for the Doktorantura must hold a Candidate of Sciences degree and provide proof of research productivity and publications in their scientific field and defence of the research project proposal.

Available doctoral and post-doctoral positions are publicly advertised. It is stipulated that advertisements for posts should be published three months before enrolment. The candidate applying must have a recommendation from the board. The decision of admission lies within the institution (department, professors). It is important to have good recommendations from the chair of the former institution and a good knowledge of English.

There are not different procedures for candidates coming from other national HEI or from Research institutes.

#### 2.4.2 Supervision system

There is a single (individual) supervision throughout the study period. Qualification requirements for a supervisor are:

- for Doctoral Candidates (Aspirantura) he/she must hold a Doctor of Sciences degree or, in some cases, Candidate of Sciences degree in appropriative research field:
- for Post-Doctoral Candidates (Doktorantura) he/she must hold a Doctor of Sciences degree in appropriative research field.

There is a maximum number of candidates per supervisor: five doctoral and post-doctoral candidates for Doctor of Sciences; three doctoral candidates for Candidate of Sciences.

There are no precise criteria for content of supervision except regarding workload which is equivalent to 50 academic hours per year and candidate. A supervisor can provide monitoring of doctoral and post-doctoral candidates' progress by reading and discussing articles and papers, or debating research issues. However, there are Regulations defining duties and rights of doctoral and post-doctoral candidates and supervisors (Regulations about research and pedagogical personnel education, Resolution of Cabinet of Ministries of Ukraine Nº 309, 1.03.1999).

There is no other support to the doctoral and post-doctoral candidates apart from the legal supervisor. If the research topic is interdisciplinary, two supervisors might be considered but multiple supervisors are uncommon. The project is usually selected together with the supervisor. Grants awarded to the doctoral candidate does usually also partly cover the salary of supervisor.

#### 2.4.3 Doctoral thesis and defence

The thesis is assessed by a specialised academic council (jury) consisting of 11 - 25 persons with equal representation of experts in each research field. Members of specialised academic council (jury) for Post-Doctoral Candidates (Doctor of Science degree) should have, at least, a Doctor of Sciences degree. Members of a specialised academic council (jury) for Doctoral Candidates (Candidate of Sciences degree) should have Candidate of Sciences or Doctor of Sciences degree. At the same time the number of Doctors of Sciences should not be less than 50% of the jury. The supervisor can be a member of the jury, but this is not always the case. Members of the academic council (jury) have the right to vote for degree awarding as a result of a successful public defence of the dissertation.

The doctoral candidate first makes a presentation and the board formulates certain needed requirements. This has to be done before the candidate is allowed to defend the dissertation. The defence council publishes the dates etc for defence.

Autoreferate: a short content description of about 20 pages is sent to some compulsory institutions as well as concerned institutions (100 copies to different institutions also abroad). Then they wait for feedback. Normally, around 10-15 people reply.

On the day of the defence this information becomes available and can be published in the official journal of the Supreme Attestation Commission. After the defence, a huge volume of documentation (minutes of all the events, the comments by opponents etc.) should be prepared and delivered to the Supreme Attestation Commission. The Commission must approve the specialised academic councils' decisions. The Commission can refuse a decision by the specialised academic council, but this is not common. However, this is a complicated process with a lot of bureaucracy and it has been debated whether the requirements should be so high. The procedure is more or less the same for all levels.



Very few, only the biggest, mainly in Kiev, 3<sup>rd</sup> -4<sup>th</sup> level accreditation, HEIs have their own specialised academic councils. Many candidates therefore need to travel a long way when it is time for dissertation, and also to different institutions.

A supervisor of the candidate can be a member of the council (but without the right to vote). S/he can be present during the defence. During the defence there are two opponents present. One is a Doctor of Sciences; the other one is a Candidate of Sciences. They are appointed by the Council. It is almost impossible for foreigners to be opponents. If there is a lack of specialists, a foreigner could theoretically be appointed to the council.

- There are publication requirements for both the Aspirantura and the Doktorantura. Doctoral candidates have to publish 3 articles in Ukrainian scientific journals and post-doctoral candidates have to publish 20 articles and one monograph (>120 pages for natural scientist and >200 pages for other scientists). There is a list of the scientific journals which are recognised by the Supreme Attestation Commission. Around 900 different journals in 27 different fields exist in Ukraine. Universities and research institutes can start a journal but Doctor of Sciences degree holders have to be members of the editorial board. In order to be included in the list of recognised journals an application to the Supreme Attestation Commission has to be approved. This has to be repeated every 3 years. A majority of the journals require the author to pay a fee in relation to the number of pages. Very few Ukrainian scientific journals in natural sciences are published in English and thus not known for the international academic community.
- Since a couple of years, articles published in a number of listed international peerreview journals can be recognised by the Supreme Attestation Commission as a substitute for the traditional Ukrainian journals.

#### 2.4.4 Quality assurance mechanisms

HEIs and RIs have developed policies for the assurance of the quality of standards of the doctoral programmes and awards: candidates present their dissertation (predefence) in a Department faculty (chair) meeting with the participation of external experts. Only on the basis of Department faculty's approval, candidates are allowed to proceed to a public defence.

Also host institutions have formal mechanisms for the approval and monitoring of the candidates' achievements. Candidates are expected to report to a Department faculty (chair) twice a year.

In Ukraine there is state body – the Supreme Attestation Commission that provides external quality assurance mechanisms for doctoral and post-doctoral dissertations. It awards appropriative degrees after a peer review process.

When applying for a degree diploma from the Supreme Attestation Commission a number of criteria have to be fulfilled:

- 1. The aspirantura has to be in the same field as the MSc.
- 2. The submitted documentation according to requests of the Supreme Attestation Commission has to be in original form.
- 3. A specialised department at the Supreme Attestation Commission makes sure the submitted dissertation is not plagiarism but rather original work.
- 4. The 3 submitted dissertations are studied by one of the 43 different state expert councils. In total these councils consist of 807 scientists. The councils meet once every month to analyse the content of the submitted dissertations.

National quality assurance is weak in the Ukrainian system. The Supreme Attestation Commission can stop activities of specialised academic council in case of inadequate quality of research dissertations. The Ministry only monitors the development by asking for reports and statistics from the institutions (e.g. How many did complete the training?). This does not however affect the institution, for instance more or less funding to institutions.

#### 2.5 After the graduation

Most successful Doctoral candidates continue their work as researchers or teachers at universities. If there are no research grants available, they can continue as employed teachers. The important thing is to acquire further titles (which is essential). Sometimes universities produce more doctors than can be employed in that specific subject. Some of them are then employed as teachers in a different field.

Academic titles (statuses) used in the Ukrainian higher education system are Senior Researcher, Docent (Associate Professor), and Professor. The Supreme Attestation Commission of Ukraine may award the title of Senior Researcher based on the decision of the Academic Council of a HEI or RI that employs the applicant researcher (applicable to State-owned institutions only).

The academic status of the Associate Professor (Docent) is conferred by the academic councils of higher education institutions (accreditation levels 3<sup>rd</sup> and 4<sup>th</sup>) to those persons who are involved in educational/scientific activity in the relevant department. This status is given to Candidates and Doctors of Sciences who have been employed for at least one academic year in a position of Associate Professor (Docent) and whose length of service in the field of education is not less than 5 years.

The academic status of Professor is conferred holders of the Doctor of Science degree who have worked at least one academic year in a position of Professor, whose length of service in the field of education is not less than 10 years, who have published textbooks and monographs, and who has supervised 3 Candidates and Doctors of Sciences.

92% of all Doctors of Sciences and 81% of all Candidates of Sciences in Ukraine work in the HE system. Despite the foregoing, more than 50% of the research and academic staff of HEIs hold no academic titles or degrees, i.e. the highest qualification.

Doctors are not attractive for industry. Aspirants do not have considerably higher salaries than MSc in industry. The percentage of higher education research and development funds financed by industry is only 0.4% GDP.

# 3. International collaboration, mobility and joint doctoral degrees

#### 3.1 International cooperation data

The awareness of international programmes such as Tempus, Framework Programmes, Erasmus Mundus among candidates is not as high as it could be. Individual scientists participate in Framework Programme projects but there is a lack of national structure. Individual universities might have information about international programmes but it is up to each international relation office. There is a great interest from candidates to know more about EU but state funding dedicated to international PhD activities is low.

More than 500 bilateral agreements exist between Ukrainian universities and foreign universities. None of these are for doctoral programmes. In general, Ukrainian universities are rather focusing international activities for Master and Bachelor students.

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A specific bilateral agreement with France exists, which makes the procedure to transfer a diploma into Ukrainian much easier than with other countries.

#### 3.2 Foreigners as doctoral candidates

Currently, 125 foreign doctoral candidates apply to the Supreme Attestation Commission for a formal recognition of their foreign degrees into Ukrainian Candidate of Sciences degrees. These candidates are mainly from Syria, Georgia, Poland, Hungary and Russia. 8-10 post-doctoral candidates apply for Ukrainian Doctor of Sciences degrees. These degree holders have mainly been studying in 8-12 countries such as the US, EU, and Russia. According to VAC, there is an interest to further adapt to the Bologna process.

There is an increasing trend for students to go abroad but also to return. Since 1993 it is possible for international doctoral candidates to get a diploma abroad when finishing an Aspirantura. The admission requirements for foreign candidates are the same as those for residents. The foreign Master diplomas and degrees are recognised through a nostrification (recognition) procedure that is provided by the Ministry of Education and Science of Ukraine. For access to advanced studies and research, all applicants must submit complete official documents together with their application form to the HEI or the Research institute. Foreigners do not benefit from the same rights, funding and salary as national candidates.

The criteria to obtain a Candidate of Sciences and Doctor of Sciences degree are the same for international candidates as for Ukrainian candidates. The thesis has to be written in either Russian or Ukrainian. Very few universities provide courses in English.

Multilateral agreements concerning recognition of foreign studies7:

Name of agreement: Paris Convention. Convention for the Recognition of Studies, Diplomas and Degrees Concerning Higher Education in the States Belonging to the European Region. Year of signature: 1979

Name of agreement: Prague Convention. Convention of Socialist Countries for the Mutual Recognition or Equivalence of Education Documents, Scientific Degrees and Titles. Year of signature: 1972

Name of agreement: Lisbon Convention. Year of signature: 1997

#### 3.3 National doctoral candidates going abroad

- 60-80 Ukrainians with foreign doctoral diplomas apply each year to VAC for translation into a Ukrainian Aspirantura diploma and 8-10/year for a Doktorantura diploma. These candidates have mainly been studying in 8-12 countries such as US, EU, and Russia.
- In the last years the interest to study abroad has increased. The most popular countries to study in are US, Canada; EU countries including: Poland, Germany, Netherlands, Sweden, UK etc.
- There is no systematic follow up of returning exchange students and thus no statistics regarding the number of outgoing exchange students.

<sup>&</sup>lt;sup>7</sup> Source: <u>http://www.euroeducation.net/prof/ukrco.htm</u>

• In Ukraine, there are no loans and grants available to students for study abroad. The current legislation does not provide for portable grants to students. There is no specific state funding for doctoral programmes.

## 4. Challenges and possible future policy actions

One of the main challenges for Ukrainian doctoral programmes is the decreasing attractiveness of the academic career, with low salaries and few funding opportunities. Additionally, the overall status of the Candidate of Sciences and Doctor of Sciences degrees holders on the labour market is not high. There are few positions outside academia where Candidate of Sciences and Doctor of Sciences degrees are required or even considered to be an asset. This obviously affects the number of doctoral and post-doctoral applicants. According to some interviewees, Aspiranturas not qualifying in the entrance test can bribe their way in. The widespread corruption in the system diminishes trust and status even more.

While in the system, there are high drop-out rates in the Aspirantura. There are indications that there is not enough institutional support for the doctoral candidates in terms of supervision and mentoring. Other barriers include lack of access to scientific information and insufficient infrastructure and technical facilities at HEIs and research institutes.

There is currently more international collaboration in the field of exact sciences than in the social sciences and humanities. To meet international standards, there is a great need for more collaboration with scholars from other countries.

There is also a need for a strategy for the internationalisation of universities, which is still under consideration by Ministry of Education and Research. However, there exists some resistance in the system, and suspicion towards internationalisation due to quality reasons. There is also a risk that the implementation will be further delayed because of change in government. There is a lack of information regarding other FP initiatives. The information regarding FPs is often too complicated and researchers get discouraged by the paper work included in many of EUs programmes. Because of the high rejection rate when it comes to Tempus projects, researchers tend to lose interest in applying for grants.

Furthermore, the recognition of diplomas obtained in foreign countries need to be further developed. It usually takes 6 months to 2 years before a foreign degree has been transferred into a Ukrainian degree. There should be better information regarding EU activities targeting PhD related activities and research. The problem is that the EC delegation only consists of one single person. More help from the EC to promote access to mobility and research programmes is asked for.



# Appendix A - List of interviewees

Figure 1 List of interviewees

Name	Position	Organisation	Contact details
Volodymyr Shatokha	Professor	National Metallurgical Academy of Ukraine, Dnipropetrovsk	+38 0562 47 44 33 shatokha@metal.dmeti.d p.ua
Yuriy Savelyev	Head of Postgraduate and Doctoral Studies Department	National University of Kyiv	<u>yursave@yahoo.com</u> +380 68 399 27 03
Taras Dobko	1st Vice-rector,	Ukrainian Catholic University	dobko@ucu.edu.ua +380 50 194 6510
Svitlana Kryshtof	Deputy Director of Department of Higher Education	Ministry of Education and Sciences of Ukraine	+38 044486-76-13
Yuriy Rashkevych	Vice-Rector for Academic Work and International Relations,	National University "Lvivs'ka Politekhnika"	rashkevyuriy@yahoo.co m +3803222744143
Mykola Derzhaluk	Academic Secretary	Supreme Attestation Commission ( VAK)	+38 044254-10-41
Volodymyr Luhovyi	Vice-President	National Academy of Pedagogical Sciences of Ukraine	luhovyi@ukr.net +38 0442 866968
Zhanna Talanova	Manager, PhD in Public Administration (in Higher Education)	National Tempus-office in Ukraine	tempus@ilid.org.ua +38 0442 866668
Mychailo Wynnyckyj	Head of Doctoral School	Kyiv-Mohyla Academy	mychailo@ukma.kiev.ua +38 050 806 2816
Tetiana Kostiuchenko Vasyl Zhuk	doctoral students	Kyiv-Mohyla Academy	

# Appendix B - Bibliography

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- The European Education Directory.
- http://www.euroeducation.net/prof/ukrco.htm