Planning Education in Poland

Andrea Frank and Izabela Mironowicz

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Dr. Andrea I. Frank is a lecturer, School of City and Regional Planning, Cardiff University. She is also the Deputy Director (Planning, Housing & Transport) of the Centre for Education in the Built Environment, which has a UK-wide remit to work with relevant university departments to enhance teaching and student learning experiences and disseminate good pedagogical practice through work-shops and conferences. Her recent publications include the annotated 'CPL Bibliography 376: Three decades of Thought on Planning Education' in the *Journal of Planning Literature* (2006) and articles on skills and internationalization in planning education provision. Comments may be sent to the author by email: franka@Cardiff.ac.uk.

Dr. Izabela Mironowicz is Assistant Professor, Department of Spatial Planning (Faculty of Architecture), Wrocław University of Technology. She is a member of the Polish Task Force for Planning Education and Career Development, which has a remit to facilitate the cooperation of Polish planning schools. Her research focuses on urban development and urban transformations. She is a practicing urban planner and consultant, and a board member of the Commission on Architecture and Town Planning in Wrocław, an advisory body to the mayor and local authority representatives. Comments may be sent to the author by email: izabela.mironowicz@pwr.wroc.pl.

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Andrea Frank and Izabela Mironowicz¹

Introduction and Key Issues

This case study examines the state of planning education provision in post-perestroika Poland, a central European state with a population of 38.1 million² (2006 Census) and covering an area of 312,679 square kilometres.³ Poland presents an interesting case for several reasons.

First, the post 1989 emergence of a new market-driven planning system in Poland (and other former communist countries), had not only wide-ranging implications for urban and economic development but resulted in dramatic changes in planning practices and philosophies for which planners were ill prepared, lacking familiarity with the planning approaches and instruments suitable for such a system.⁴ The ensuing decentralization of power resulted in the need to develop a host of spatial and local plans for the newly established planning tiers including over 2400 communes. And, although urbanization, i.e., the level of population living in cities and towns in Poland is rather stable at 62 per cent⁵ showing only a marginal increase of 4 per cent over 25 years, there are some complex dynamics to contend with as larger cities have proportionally grown much more, while smaller towns have lost population.⁶ Construction activity is considerable and there is a lack of planners to process building permissions. For example, in 2008, there were approximately 1200 members of the Chamber of Town Planners.⁷ These are the only professionals who are officially permitted (by law) to prepare building pre-permissions for local authorities. The annual case load lies at over 200,000 application for residential and commercial building pre-permissions.⁸

Second, city, regional or spatial planning taught as an independent subject is fairly new in Polish higher education. In fact, throughout the communist era, planning merely was a professional specialization of either, architecture and engineering with a focus on physical and technical aspects of plan preparation, or economics. Only in 1991, the first free standing programmes in spatial planning and land economy were established. Since then, however, a considerable range of planning education programmes has been established across 17 Polish universities and higher education institutions.

This rapid development of new, independent planning programmes and their relative proliferation are remarkable; many other transition countries have been far less successful in developing similar levels and diversity of programmes in the same period. To some extent this can be explained by the critical demand for new types of planning skills and profes-

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^{2.} Central Statistical Office of Poland, 2007a.

^{3.} Central Statistical Office of Poland, 2007b.

^{4.} See Hirt and Stanilov, 2008.

^{5.} Globalis. UN Common Database, n.d.

^{6.} Szymańska and Matczak, 2002.

^{7.} Chamber of Town Planners, n.d.

^{8.} Government of Poland, 2007.

sionals. However, it is suggested, that one reason why Poland's higher education systems could respond so effectively to demands may be that its academics were able to draw on a well-developed research culture, reasonably advanced institutional infrastructures and extensive international links. Poland's status as an accession state to the European Community (EC) from 1991 and full European Union (EU) membership from 2004 should not be underestimated. The European project includes the creation of an open economic zone and the development of the common European Higher Education Area (EHEA) supporting both, academic and professional mobility. Commonly accepted professional standards and qualifications, quality assurance and the mutual recognition of academic degrees and credits across member states are being developed to facilitate this mobility. The associated processes of integration and harmonization have certainly influenced planning practice and curricula, and planning degree programmes are almost throughout compliant with Bologna guidelines⁹ offering Bachelor, Master and Doctoral degrees.

While touching briefly on Poland's higher education structure and history of planning education, the study focuses on the newly developed educational guidelines and learning outcomes that govern Polish planning education programmes today. The latest planning education guidelines date from 2007. They were developed centrally but in cooperation with the schools teaching the subject. Guidelines detail the length of programmes, determine up to half of the core subjects, outline key competencies and teaching methods as well as basic levels of staffing and academic expertise required to offer planning education. The case study concludes with an evaluation of the diverse and varied education provision of a cross-section of planning schools, while also highlighting success factors and future challenges.

Overview of Higher Education Structures

Historically, Polish higher education institutions had a strong tradition of autonomy and selfgovernance, but during Poland's communist period 1945–1989 a Soviet style model of higher education was implemented. In this system a set of centralized, state-run, public institutions was established providing specialized education in broad fields like engineering, medical sciences, the humanities. As a result, the country's landscape of higher education is and remains to this date characterized by a multitude of highly specialized institutions: universities for the humanities, natural sciences or formal sciences, technical universities and colleges of applied technology (or "polytechnics"), medical universities, agricultural universities, universities of economics, pedagogical universities and art academies.

Post 1989, autonomy was re-established for the larger institutions by the 1990 Higher Education Act¹⁰ while the state also relinquished its monopoly leading to the establishment of new private institutions of higher education. There was also a significant increase in student numbers. In less than 20 years, the percentage of population gaining a university degree more than doubled from 6.5 per cent (1988) to 15.3 per cent in 2006.¹¹ In absolute terms, the number of institutions of higher education quadrupled and student numbers almost quintupled from 1990 to 2006 (Table 1).

However, the most significant change in Polish higher education in recent history was initiated, when Poland became a signatory of the Bologna Declaration and thereby agreed to implement comparable degree structures organized into three consecutive cycles (Bachelor-Master-Doctorate) "to establish the European area of higher education and to promote the European system of higher education world-wide".¹² Until the beginning of the 21st Century,

^{9.} Bologna Declaration, 1999.

^{10.} Butler and Kritsonis, 2006; Polish Higher Education Act, 1990.

^{11.} Fulton et al, 2007.

^{12.} Bologna Declaration, 1999.

most institutions in Poland conferred degrees that followed the traditional European model of 4–5 year long qualifications, which meant institutions had to transform their long continuous programmes into a two-cycle system (undergraduate and Master studies) with an added third cycle representing doctoral studies. In addition, all study units (courses) have to be assigned credits that conform to the European Credit Transfer System (ECTS) to facilitate the mobility of students. Three-cycle programmes and ECTS have been introduced very efficiently in Poland; they are integral to Poland's Higher Education Act (2005).¹³ Traditional long programmes (9–12 semesters) are only retained for specific study areas such as medicine or pharmacy.

Table 1. Development of highereducation institutions and studentpopulation

Academic year	Number of higher education institutions	Number of students (in thousands)
1990/1991	112	403.8
2005/2006	445	1953.8
2006/2007	448	1941.4*

* 1301.1 in public and 640.3 in non-public higher education institutions.

Figure 1 illustrates Poland's modern degree structure, which also applies to planning education.



Figure	1.	General	degree	structures	in	higher	educatio	on in	ı Pe	oland

History of Planning Education and Planning Schools

Although planning was not taught and fully established as an independent field of study until the early 1990s, some planning-related courses, and especially planning research started in Poland at the same time as in other European countries. For, example, a Department of *Town Building* was established as early as 1913 at Lvov Technical University¹⁴ under the leadership of Ignacy Drexler.¹⁵ And, in 1915, Polish urban planner Tadeusz Tołwiński, who had graduated in town planning from the University of Karlsruhe (Germany), became one of the founders of Warsaw University of Technology (formerly Warsaw Technical University).

14. Although in 1913 Poland was not an independent state and Lvov was a part of the Habsburg Monarchy, academic staff of Lvov Technical University—like the majority of Lvov citizens—consisted of many scientists of Polish nationality.

^{13.} Polish Higher Education Act, 2005.

^{15.} Pawłowski, 1973.

After the Second World War, a re-established Polish nation (albeit with new territorial borders) was faced with the task of rebuilding its largely destroyed cities, infrastructure and devastated economy. Now under Soviet influence, Poland's communist government rejected participation in the Marshall plan and reconstruction followed new socialist economic rules. This meant that all important political, social and economic decisions were made by the communist party, reducing planning practice to a technocratic design task. With no planning education programmes in existence, planning became a professional specialization for graduates of architecture or engineering. In the 1970s there was an attempt to implement planning as an independent specialization of studies in the Faculty of Architecture at Gdańsk University of Technology, but the programme had to be abandoned after a few years. Despite the lack of planning education, planning theory and planning-related research nevertheless prospered. In 1958, for example, the Polish Academy of Science (a state run science institution) established the Committee on Spatial Economy and Regional Planning (CSERP) with the objective to inspire and define new studies in spatial economy and planning in Poland. The committee, by drawing on academics from different universities and professions, not only established a multidisciplinary approach to planning, but also fostered discussions of planning-related research, and initiated the development of planning researchers and institutions.

Therefore, Polish planning academics were quite aware that post 1989 democracy and economic freedom would require new planning approaches and instruments and they understood that the collapse of communism created both an opportunity and a need to finally establish free-standing planning education programmes—despite the fact that planning in the early 1990s had a negative connotation and was associated with "centrally planned, state managed economy" of the previous regime. Thus, Polish planning programmes adopted a suitable neutral name—*Gospodarka Przestrzenna*—which translates to something like "*Spatial Economics*", "*Spatial Economy*" or "*Land Economy*". And, in 1991, based on the initiative of members from the CSERP the first guidelines for planning were established at Adam Mickiewicz University Poznań and Wrocław University of Technology. Owing to the turbulent conditions at the time, the programmes were recognized and confirmed retrospectively by the Ministry of Science and Higher Education in 1992 a year after their initial implementation.

With Poland's decision to apply for EU membership, then, planning emerged as a political and economic factor associated positively with progress. Knowledge of spatial planning, spatial policy and spatial economy became vital to the successful implementation of preaccession instruments established to assist the transformation of east European countries. In response, the state actively encouraged universities to develop further planning programmes to build the required capacity and five additional institutions established traditional 4–5 year programmes between 1996 and 2001.

Programmes established post 2002 adopted the new Bologna-compliant structure. In particular, Wrocław University of Environmental and Life Sciences and the Higher School of Finance and Management in Białystok Faculty of Spatial Economics—the only private institution providing studies in planning—started Bachelor-level studies. And the University of Warsaw's Centre for European Regional and Local Studies and Poznań University of Economics (Faculty of Management) started new style Master-level programmes. Table 2 provides a list of planning schools,¹⁶ and their programmes.

^{16.} Planning studies are also being started at several of the newly established private higher education institutions – but it is as yet unclear what their focus will be; these are thus not included in the list.

	Veen	Pr			
Tertiary education institution ^a	estab- lished	First cycle (under- graduate)	Second cycle (graduate)	Long cycle	AESOP Member
Adam Mickiewicz University Poznań Faculty of Geographical and Geological Science	1991	3	2 2010 °	5 2010 ^d	Yes ^b
Wrocław University of Technology Faculty of Architecture	1991	3.5	2	5 2011 ^d	Yes
Cracow University of Economics Faculty of Finance	1996	3	2 2009 °	5 2010 ^d	Yes
University of Warsaw Centre for European Regional and Local Studies	1997	-	2	-	
Higher School of Finance and Management in Białystok, <i>Faculty of Spatial Economics</i>	1998-	3.5	2	-	
University of Łódź Faculty of Economics and Sociology	1998	3	2 2008 °	5 2011 ^d	Yes
University of Warmia and Mazury in Olsztyn Faculty of Geodesy and Land Management	1998	3.5	1.5	-	
Warsaw University of Life Sciences	1998	3.5	1.5	_	
Adam Mickiewicz University Poznań Collegium Polonicum in Słubice	2000	3	2	5 2010 ^d	Yes
Wrocław University of Environmental and Life Sciences, <i>Faculty of Environmental Engineering</i> <i>and Geodesy</i>	2002	3.5	_	-	
Poznań University of Economics Faculty of Management	2003	3 2008 °	2 2011 ^c	5 2010 ^d	
University of Warsaw Faculty of Geography and Regional Studies	2003	3	2	-	
Warsaw School of Economics	2003	3	2	-	
Warsaw University of Technology Faculty of Geodesy and Cartography in cooperation with Faculty of Architecture	2005	3.5	1.5 2009 ^c	-	Yes
Karol Adamiecki University of Economics in Katowice, <i>Faculty of Economics</i>	2006	3	2 2009 °	-	
University of Gdańsk Faculty of Biology, Geography and Oceanology	2007	3	-	-	
University of Opole Faculty of Economy	2007	3	-	-	

Table 2. Polish schools of planning in 2008

a Titles of higher education institutions in Poland are governed by the 2005 Higher Education Act, which reserves the titles as follows:

- "university" for institutions which are legally entitled to confer PhD degrees in no less than 12 scientific disciplines;
- "university of technology" for institutions which are legally entitled to confer PhD degrees in no less than 12 scientific disciplines, including no less than 8 technical disciplines;
- "university" followed by a specified area of study, for example "university of economics", "university of life sciences", "medical university" for institutions which are legally entitled to confer PhD degrees in no less than 6 scientific disciplines; and
- "technical university" or "polytechnic" for institutions which are legally entitled to confer PhD degrees in no less than 6 scientific disciplines, including at least 4 technical disciplines.

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- b AESOP offers full and associate membership to planning schools. For further details see: www.aesop-planning.com
- c Year in which programme will commence.
- d Year in which last cohort will complete this programme.
 - first-cycle programme leading to professional title of "engineer".

From the start, academics interested in planning education engaged in a dialogue about pedagogy and programme administration with their European counterparts. In 1993, AESOP's (Association of European Schools of Planning) annual congress was hosted in Łódź, and Professor Zipser, head of the Department of Spatial Planning in Wrocław University of Technology—became vice-president of AESOP. In 2008, Lódź hosted AESOP's heads of planning schools meeting.

By 2002, sufficient programmes existed to sustain a national level dialogue about common problems and challenges in planning education provision. One key issue was the fragile position of Polish planning schools within their home universities. This can be attributed to the subject being new, less established and less well understood than the classic academic disciplines, which in turn was problematic in terms of student recruitment. The schools' interdisciplinary nature and consequent preference to cooperate with other planning schools rather than subject areas at their respective universities further weakened their level of influence. The goal of the meetings was to a) promote planning as an independent academic discipline, b) promote new programmes, c) ensure authorities that planning and land economy is very important for development, d) improve curricula and programmes, e) exchange experiences, and f) facilitate the restructuring of programmes as required by the Bologna process. As a result the CSERP set up an official task force on "Planning Education and Career Development" in 2003 to promote planning as an academic discipline.

Guidelines for Planning Education

Higher education provision in Poland is fairly regulated. For example, Poland's Higher Education Act¹⁷ defines organizational and scientific requirements for institutions to be fulfilled in order to provide degree programmes in a specific area and level of study, including the minimum number of academic teachers. There is also state level guidance and standards for each of the 118 state recognized fields of study. The latest guidelines for planning education were completed in July 2007 and ratified by the Ministry of Science and Higher Education. The standards define the name of the field and degree programmes; they also prescribe a) the number of semesters and hours¹⁸ of study, b) a graduate's profile in terms of skills and competencies, c) required course content and learning outcomes, d) minimum number of hours and ECTS for specified groups of courses, e) additional requirements, and f) recommendations. The guidance distinguishes between Bachelor and Master level programmes and a comparison of learning outcomes (Box 1 and Box 2) shows an anticipated progression to higher level skills and greater depth of knowledge from undergraduate to the Master level.

Bachelor in Planning

Bachelor/Undergraduate degree requirements vary depending on the conferring institution. At non-technical universities a minimum of six semesters of study (3 years) and 2200 hours

^{17.} Polish Higher Education Act, 2005.

^{18. &}quot;Hours" refers to contact or teaching hours.

Box 1. Key learning outcomes and competencies for the Bachelor of Planning degree

- acquisition of essential skills from a variety disciplines including economics, sociology, law, engineering as well as environmental and cultural studies;
- acquisition of fundamental knowledge of spatial structure of socio-economic development;
- competencies in spatial analyses;
- capability to develop human's spatial environment according to their needs and technical demands with the respect to sustainable development;
- ability to cooperate in the preparation of planning documents such as local plans, development plans, local strategies, infrastructure development plans, environmental protection plans, regional plans;
- capability of interacting with other built environment specialists;
- ability to cooperate in urban and regional management;
- competencies in real estate management; and
- ability to implement urban regeneration strategies and plans.

(equivalent to 180 ECTS) are required, leading to a professional title of "licentiate" (*licencjat*). At technical universities, a bachelor in planning requires a minimum of seven semesters (3.5 years) and 2500 hours (equivalent to 210 ECTS) leading to the professional title of "engineer" (*inzynier*).

In addition, the guidelines define two groups of courses, which are compulsory for a BA programme (Table 3). The first group (fundamental sciences) contains general background subjects (*mathematics, statistics, economics, sociology, physics*) as well as subjects that provide a theoretical base for specialized courses (*economic geography, technical and planning drawing, urban history, introduction to law*). The standard defines a minimum number of hours and ECTS for each course from this group. Two courses (*engineering graphics* and *physics*) are required only in technical universities.

The second group (specialized courses) provides essential planning knowledge and skills. These courses constitute a sort of "canon", because they have to be implemented in each planning school in Poland. The standard demands only the total number of hours and ECTS for this group as a whole. For technical universities additional courses are required in *geodesy and cartography, civil engineering, design* and *urban regeneration*.

Planning education providers are obliged to offer no less than 50 per cent of the total number of hours as seminar, design studio, project, or exercises. Students also need to complete a minimum of four weeks of work experience when studying at a technical university and three weeks when studying at a non-technical university.

In addition, all undergraduate students are required to take courses, which foster a wellbalanced education amounting to minimum levels of studies in sports (60 hrs, 3 ECTS), foreign languages (120 hrs, 5 ECTS), information technology (30 hrs, 2 ECTS) and in a humanities subject (60 hrs, 3 ECTS). Students must also be introduced to the concept of intellectual property rights.

Overall, the number of hours for compulsory subjects required per the guidelines for planning education will make up about 50 per cent of the total number of hours required for a first cycle degree, leaving institutions considerable freedom to develop optional courses that match their institutions' specialization and staff research interest.

	BA Level			
Courses	Non-tee	chnical	Tech	nical
	Hrs	ECTS	Hrs	ECTS
Group: Fundamental Sciences: Total:	240	26	360	34
Mathematics	30		60	
Statistics	30		30	
Economics	30		30	
Economic Geography	30		30	
Technical and Planning Drawing	45		45	
Sociology	30		30	
Urban History	30		30	
Introduction to Law	15		15	
Engineering Graphics ^a	-		45	
Physics ^a	-		45	
Group: Specialized courses: Total:	540	57	510	49
Introduction to Spatial Economics				
Socio-cultural Aspects of Planning				
Environmental Aspects of Planning				
Legal Aspects of Planning and Environmental Protection				
Urban and Regional Economics				
Territorial Self-Government				
Urban Design				
Spatial Planning				
Transportation and Infrastructure Planning				
Geographic Information System and Land Information System	stem			
Local Development Policies				
Real Estate Economics				
Geodesy and Cartography*				
Civil Engineering*				
Design*				
Urban Regeneration*				

Table 3. Compulsory courses (minimum number of hours and ECTS) for the first-cycle in planning

a Required courses only for technical higher schools.

Master in Planning Education

For the second-cycle graduate programmes (Master's degree) guidelines require a minimum of four semesters (2 years) and 1000 hours (equivalent to 120 ECTS) for those who hold a Bachelor's degree from a non-technical university, and a minimum of three semesters (1.5 years) and 900 hours (equivalent to 90 ECTS) for students with a professional title "engineer". Graduate programmes in planning are open to students with a non-planning background as long as they have completed 60 per cent of all compulsory courses of an undergraduate planning degree. This is relatively easy to achieve for students in environmental studies, geography or architecture.

Courses	MA Level	
Courses	Hrs	ECTS
Group: Basic courses:	75	8
Systems Theory	15	
Environmental Science	30	
Management	30	
Group: Specialized courses:	210	22
EU Spatial Policy		
Marketing Places		
Regional Policy		
Techniques of Plan Preparation		
Town Planning		
Models in Spatial Planning and Spatial Economics		

Table 4. Compulsory courses (minimum number of hours and ECTS) for the second-cycle in planning

Again, a number of courses are compulsory (see Table 4). Basic/general courses provide education in systems thinking and complexity (*systems theory, environmental science*) as well as prepare students for leadership (*management*). Specialized courses provide planning specific knowledge and focus on policy making (*town planning, regional policy, EU spatial policy* and *marketing place*) as well as planning law and plan preparation (*techniques of plan preparation*) to prepare students for the complicated process of plan development. Courses in *models in spatial policy and spatial economics* seek to equip students with methodological tools for spatial analysis and scenario development.

Box 2. Key learning outcomes and competencies for a Master in Planning degree

- acquisition of profound theoretical knowledge which allows to conceptualize sustainable development and planning cities, regions and national spatial structure;
- scientific attitude to planning;
- acquisition of new methodological tools and techniques in planning, including specialized models;
- in-dept acquisition of social and cultural aspects of planning;
- capability to analyze complex planning problems;
- ability to create urban and regional spatial development strategies;
- capability to create urban, regional policy and specialized policies (transportation, environmental, urban regeneration);
- high competencies in local, urban, regional planning;
- capability to create international spatial policy;
- ability to co-ordinate multi-disciplinary teams and team leadership;
- acquisition of legal procedures in planning;
- ability to communicate concept and ideas to a larger public;
- skills in urban management; and
- advanced technical competencies in data analysis and GIS.

These compulsory courses make up only 30 per cent of the total minimum number of hours necessary leaving institutions considerable room to develop a unique programme profile and degree specialization.

A Master thesis (which can take the form of a professional project, plan or strategy) must be produced as a final part of any second-cycle programme. The final dissertation has to be presented in both written and oral form to a committee of academics for examination.

Interestingly, a higher education institution that wants to offer a Master degree must employ no less than six full professors and six assistant professors (awarded PhD degree), who conduct research in planning and form the core of the academic teaching staff. This requirement limits the institutions that can legally offer such a degree in planning.

Doctorate in Planning

The number of individuals engaged in doctoral studies at present is not known, as they are not considered students in the classical sense, but rather are employed as support staff or teaching assistants. It is estimated that there are around 20 PhDs graduating in the planning field each year and for most teaching positions a PhD is now a requirement.

Profile of Polish Schools of Planning

In order to gain an understanding of the profile of planning schools and their curricula, a survey was conducted in April 2008. A questionnaire (Appendix B) was emailed to all 17 planning schools identified in Table 2. Schools were asked to provide information on the number of students in undergraduate and graduate programmes as well as the number of full-time staff involved in their delivery. In addition, information was collected on the number of teaching hours for core courses and the topics and hours of other courses. Data was analyzed by clustering all non-core areas into six areas of specialization:¹⁹

- social sciences;
- design as an ability to create and transform places and formulate spatial policies;
- economic sciences;
- environmental issues;
- legal framework of planning; and
- other optional courses (e.g., Bachelor's and Master's seminars, computer techniques in planning, spatial simulations, advanced analytic methods, etc.).

Ten responses were received. Additional information was derived by the authors for the programmes from Warsaw University of Technology and Warsaw University of Life Sciences from course descriptions published on their respective web pages. Table 5 shows the wide variation across planning schools in terms of student intake and the number of full-time staff involved in teaching on planning courses. In those planning schools that started their programmes before the implementation of Bologna the long-continuous 5 year programmes are still offered alongside the newer two-cycle ones. However, the former will be phased out shortly.

Data on course specializations for first-cycle, undergraduate planning programmes are presented in Table 6. All institutions fulfil the requirements for compulsory courses prescribed by the educational standards (column 1), and only Karol Adamiecki University of Economics in Katowice and Warsaw University of Life Sciences are currently not fulfilling

^{19.} This framework was derived from the RTPI Education Commission's report (Royal Town Planning Institute, 2003).

	Year	Number 2007/20	of stude 008 acros cohorts	nts in s all	Total number of	Num acader	ber of nic staff
Tertiary education institution	or estab- lishment	first cycle	second cycle	long cycle	student graduated since 1991	Pro- fessors	Assistant pro- fessors (PhD)
Adam Mickiewicz University Poznań Faculty of Geographical and Geological Science	1991	65 (1)	2010 ^a	261 (4)	504	13	41
Wrocław University of Technology Faculty of Architecture	1991	28 (1)	130	171 (4)	501	14	40
Cracow University of Economics Faculty of Finance	1996	164 (2)	- 2009 ^a	284 (3)	367	18	42
University of Warsaw Centre for European Regional and Local Studies	1997	-	50	-	138	11	7
Higher School of Finance and Manage- ment in Białystok Faculty of Spatial Economics	1998	с	c	с	640	7	10
University of Łódź Faculty of Economics and Sociology	1998	149 (1)	2008 ^a	417 (4)	405	12	50
Adam Mickiewicz University Poznań Collegium Polonicum in Słubice	2000	55 (1)	- 2010 ^a	131 (4)	118	13	41
Wrocław University of Environmental and Life Sciences, <i>Faculty of</i> <i>Environmental Engineering and Geodesy</i>	2002	160 (3.5)	-	-	268	8	11
Poznań University of Economics Faculty of Management	2003	- 2008 ^a	- 2011 ^a	46	41	7	8
Karol Adamiecki University of Economics in Katowice Faculty of Economics ^b	2006	263 (2)	2009 ^a	-	-	8	с

Table 5. Number of students and academic staff in Polish schools of planning

Professor = full professors and associate professors (habilitated doctors).

a year this programme will have its first intake of students.

b second cycle programme at this university not yet approved.

c No response.

(x) number in brackets indicates cohorts enrolled in the cycle.

the required minimum total number of hours by falling short in amount of optional, specialist courses they provide. As these programmes were established prior to the ratification of the new standards of education, there has not been sufficient time to bring their programmes into line with the new requirements. By contrast, Warsaw University of Technology offers a very intensive programme of 3000 hours, exceeding requirements by 20 per cent (500 hrs).

Schools offer a refreshing variety of planning specializations based on their provision of group 2 (specialized) courses and options. Not surprisingly, the three universities of economics as well as the Higher School of Finance and Management in Białystok focus heavily on economic aspects of planning, while most others offer more balanced programmes. Interestingly, only one or two institutions offer a design focus while a similar number place emphasis on environmental issues. Several universities offer additional specializations thus they provide large number of optional courses or even a separate track including regional and rural planning or European policy and instruments (Cracow University of Economics, Karol Adamiecki University of Economics in Katowice, University of Łódź).

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Table 6.	First-cvcle	programmes in	planning i	n Polish	schools of	planning
Lable 0.	I HBC Cycle	prosiumnes m	Pranning in		Senioons of	pramma

Tertiary education institution	Standard hours 1080 ^a or 1170 ^b	Social Issues [hrs]	Design Issues [hrs]	Economic Issues [hrs]	Environmental Issues [hrs]	Legal Issues [hrs]	Others [hrs]	Total [hrs] 2200 ^a or 2500 ^b
Adam Mickiewicz University Poznań Faculty of Geographical and Geological Science	1175	35	75	315	110	40	514	2264
Wrocław University of Technology Faculty of Architecture	1455	120	480	30	60		405	2550
Cracow University of Economics Faculty of Finance	1425			120			655	2200
Higher School of Finance and Management in Białystok <i>Faculty of Spatial Economics</i>								
non-tecnical – licentiate (<i>licencjat</i>) Technical – engineer (<i>inżynier</i>)	1360 1520		140	420 390		30	390 450	2200 2500
University of Lódź Faculty of Economics and Sociology	1260	150		225		75	687	2397
Adam Mickiewicz University Poznań Collegium Polonicum in Słubice	1310	35	200	170	45	30	514	2304
Warsaw University of Life Sciences	1625		45	150	270	30	245	2365 °
Poznań University of Economics Faculty of Management	1290			570	30		315	2205
Wrocław University of Environmental and Life Sciences Faculty of Environmental Engineering and Geodesy	1440		60	120	105	12	763	2500
Warsaw University of Technology Faculty of Geodesy and Cartography in cooperation with Faculty of Architecture	1770	30	165	30	270	75	660	3000
Karol Adamiecki University of Economics in Katowice Faculty of Economics	1350						600	1950 ^c

first-cycle programme lead to engineer professional title.

a for first-cycle programme leading to licentiate professional title.

b for first-cycle programme leading to engineer professional title.

c tertiary educational institutions not fulfilling the required minimum total number of hours have the total number of hours marked in red.

At present, there are only three institutions presently running Master-level (second-cycle) planning programmes (Wrocław University of Technology, Faculty of Architecture and University of Warsaw, Centre for European Regional and Local Studies, and Warsaw University of Life Sciences), however, four more have their programmes ready (i.e. the programmes and curricula have been approved and accredited) to start between 2008 and 2011 (Table 7). And, while Karol Adamiecki University plans to start a Master programme in 2009—the curriculum content and specialization areas are not yet approved and published Table 5). All programmes fulfil the requirements set out by the guidelines for planning education in terms of programme hours and core courses, except for the one offered by the *Centre for European Regional and Local Studies* at Warsaw University. This well-established planning education provider has offered diverse, wide ranging programmes for 10 years and has not adjusted its curriculum to the new standards. University of Warsaw and Wrocław University of Technology exceed the required programme hours. Three of the institutions offer significant levels of specialization in economic aspects of planning and one each seem to

Tertiary Education Institution	Standards [hrs]	Social Issues [hrs]	Design Issues [hrs]	Economic Issues [hrs]	Environmental Issues [hrs]	Legal Issues [hrs]	Others [hrs]	Total [hrs]
Wrocław University of Technology, ^b Faculty of Architecture	345	30	345	15	15	90	300	1140
University of Warsaw, ^b Centre for European Regional and Local Studies	150	270	30	270	30	60	390	1200
Warsaw University of Life Sciences ^{a, b}	255			70	190		390	905
Cracow University of Economics, ^c Faculty of Finance	435	75		90			405	1005
Higher School of Finance and Management in Białystok, ^c <i>Faculty of Spatial Economics</i>	460	60	30	60			390	1000
University of Łódź, ^c Faculty of Economics and Sociology	285			300			432	1017
Poznań University of Economics, ^c Faculty of Management	375	30	90	195		45	270	1005

Table 7. Second-cycle programmes in planning in Polish schools of planning

a 1.5 years programme (programme information taken from university website).

b programme currently running.

c programme approved for commencement.

offer specialist courses in design and environmental planning, respectively. University of Łódź organized its courses into specialized separate tracks with a common economic "core". A similar solution is implemented by Cracow University of Economics.

Conclusion

Independent planning education programmes in Poland are a relatively new, post 1989 phenomenon. Since then, a significant number of independent, interdisciplinary planning programmes were created to develop the planning knowledge and skills under Poland's new market-driven regime.

Although the country's planning academics could build on a rich tradition of planning-related research, planning theory and spatial economic modelling which is comparable to other developed nations, this achievement is remarkable. Considering the circumstances of having to develop entire planning education programmes in a climate of uncertainty with rapidly changing legal requirements and economic conditions, planning academics in Poland have managed exceptionally well to establish these programmes. Their level of entrepreneurship in using innovative mechanisms such as working closely with the CSERP and using this organization as an effective support mechanism to help establish its programme and a forum for dialogue is admirable. Schools have adopted a cooperative model in garnering support for their programmes with an annual meeting to discuss problems and issues in planning education provision. There is also an active student body with their own conference. Academics also derived considerable support from established networks such as the Association of European Schools of Planning (AESOP), with which they established connections very early on making significant investments to underline their commitment and interest (such as hosting a conference).

Unlike in other countries, a considerable number of planning programmes were established not only in design and engineering oriented schools but were built up from specializations in economics and environmental sciences. This means Poland has a rather broader spread of planning schools foci and backgrounds, which is unusual but helpful in addressing the issues that the nation has been facing in the past decade during its economic transition.

While the current provision is certainly quite developed there is however room for improvement and more work to be done. At present, there are still considerable problems to establish a common system of accreditation of university courses. As the present national quality assessment framework is based on traditional disciplines it cannot be easily applied to the interdisciplinary planning programmes. The interdisciplinary nature of planning poses problems when applying for research and educational programme funding creating ambiguity in where to apply. Planning programmes face issues with marketing as there is no clear profile of planners as an independent profession (despite the fact that the Polish Society of Town Planners exists since 1923). It is perhaps indicative of the complexity and difficulty to offer education in an interdisciplinary degree that only one private institution has established an undergraduate planning degree and planning provision at other private schools of higher education remains ephemeral to date.

Planning is by many—including the state—still regarded as an obstacle rather than a means to retain and improve the quality of life and environment.²⁰ The state-supported body that certifies planners—who then gain the exclusive right to be allowed to prepare plans—is the Chamber of Town Planners (established in 2000). Membership in this professional body is rather expensive at 70 PLN²¹ per month of an average monthly income of 3000 PLN (before taxation) and its membership is currently dominated by architects. As a result, planning schools' relationship with this body is strained which is not helpful.

There are currently no established guidelines or requirements for continued professional development for practicing planners (i.e. Members of the Chamber of Town Planners), however, members are offered seminars and training on legal changes in the Polish planning system. Moreover, due to the demand to improve the skills of the existing workforce, some schools such as Wrocław University of Technology and Poznań University of Economics offer post-graduate studies in planning (for professionals holding already a Masters degree) leading to a certificate in spatial planning or Local and Regional Development respectively.

In sum, Poland's planning education provision has developed quite rapidly post 1989 and there is a relatively solid provision in interdisciplinary planning. Yet, there is a need to further progress and develop the planning education programmes in the country and an improvement of the relationship between professional societies and planning schools would be a valuable step forward to enhance the dialogue.

^{20.} See also Hirt and Stanilov, 2008.

^{21. 70} PLN is equivalent to approx. 35 US\$ (26/06/2008).

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Appendix A: Detailed profiles of Polish planning schools

Adam Mickiewicz University Poznań (Faculty of Geographical and Geological Science) is one of the oldest Polish Planning schools (established in 1991). At present, the school offers a 3 year undergraduate (Bachelor) degree in planning. And, as soon at the long 5 year programme will be phased out in 2010, the school will also offer a 2 year Master (secondcycle) programme. The school provides a thorough theoretical grounding in geography and spatial planning (*Regional Science, Spatial Structure of Poland, Settlement Systems, Service Sector—Structure and Planning, Location Theory*) as well as a balanced interdisciplinary course selection covering social, design, economic, environmental, legal and a host of other planning related topics, such as European Integration, Tourism and Rural development. Student can choose to specialise in Regional Development but can opt to remain generalist planners. There is a strong focus on research methods, e.g., *Methodology of Scientific Research, Planning, Physical Geography, Remote Sensing*).

Adam Mickiewicz University Poznań (*Collegium Polonicum in Slubice*) is a tertiary educational institution that is joined with the Europa-Universität Viadrina in Frankfurt (Oder). The universities offer an undergraduate (3 year) programme in planning. The 2 year Master (second-cycle) programme will commence from 2010, after the last cohorts of students have completed the 5 year long cycle planning programme. The school's teaching focuses on policy creation in border regions and transition countries. The programme also emphasises regional level planning (*Regional Development, EU Regional Policy, Spatial Economics in Border Regions*) and strategic planning in respect of urban and rural regeneration and development. The school offers also courses in *Heritage Protection and Regeneration of Historic Monuments*.

Cracow University of Economics (*Faculty of Finance*) is the first university of economics to establish studies in planning. The school offers an undergraduate programme in planning (3 years, first^t cycle). The Masters programme will start in 2009 (offering the progression for the BA which started in 2006). The traditional (long-cycle) programmes will be phased out in 2010. The programmes offer two separate specialization routes: a) Urban Management, and b) Regional Development Strategies. Economic aspects of planning are emphasized heavily, including courses in *Management, Finance, Accountancy*. The Masters programme also offers courses in social and legal issues and skills training for planners such as *Public Relations, Negotiations*.

Higher School of Finance and Management in Białystok (*Faculty of Spatial Economics*) is the only private institution amongst the "old" schools of planning. Two undergraduate programme routes are offered: a technical one (3.5 years) and non-technical (3 years). Regardless what route student chose, they have to select one of 3 possible specializations: a) EU Funds and Programmes, b) Regional Governance and Economics, or c) Tourism. There are a relatively large number of hours of required urban design instruction including project-based instruction; paradoxically more hours are required in the non-technical programme than in the technical one. The programmes place considerable emphasis on policy and management education such with courses in *Regional Development Management, EU Cohesion Policy, Public Services Management, Human Resource Management, Economic and Spatial Policy.* The technical programme also includes courses on *Transport, Farm Tourism, Design of Public Buildings, Rural Planning.* The Masters programme runs for 2 years and offer 3 specializations—Local and Regional Economics, Real Estate Management or Tourism Economics. There is a social science focus ranging from courses in *Psychology in*

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Management to *EU* and *Polish* Social Policy and European Regional Integration, for example.

Karol Adamiecki University of Economics in Katowice (*Faculty of Economics*) is a relatively "young" school of planning offering currently a 3 year BA in Planning (Licenciat). Aside from the core planning subjects prescribed in the standards for education, students must select one of three different specializations: a) Land-use Planning and Real Estate Economics; b) Urban and Regional Economics; and c) Environmental and Spatial Management. However all options have a strong economic focus with courses on economics, managements and valuation for each specialization. There is an emphasis on quantitative analysis methods (*Spatial Simulations, Research Methods and Techniques in Local and Regional Markets*) and tools for urban and environmental management (GIS). Design is focused on rural planning and students have to do 1–2 weeks of practice. Intake for the second-cycle (Master) programme will start in 2009.

University of Lódź (*Faculty of Economics and Sociology*) has historically a scientific orientation focusing on research practice and skills. Graduates have a strong strategic planning and "policy making" (*Economic and Social Policy, Local Development Policy*) profile. The 3 year BA in planning offers a choice between specializations: Investments and Real Estate, Computing Methods in Regional Science, Public Sector Management, Strategies of Human Capital Development in the Region and Urban and Regional Management. There is also a strong focus throughout all programmes on European Aspects in Planning (*European Regional Policy, Economic and Political Aspects of European Integration*). Students also need to engage in 72 hours of exercises.

The 2 year Master in planning programme is very flexible featuring 4 specializations: Human Capital in Innovative Economy, City and Region in Global Economy, The Real Estate Market and Public Sector Management. There is a focus on regional policy making and emphasis on spatial management and strategic planning. A host of high-specialized economic courses are offered: *Managerial Economy, Regional Knowledge-Based Economy, International Economic Relationship, Human Resources, Economic Analysis of Public Sector*), 72 hours practice.

Poznań University of Economics (*Faculty of Management*) used to have a programme specialization in spatial economics for economic students during the 1990s but then started its full 5 year planning degree programme in 2003. The faculty started its 3 year undergraduate programme in 2008 and its second-cycle Master programme will start in 2011.

Graduates of the BA in planning specialize in management issues and spatial economics. Three specializations are offered: Global and Local Economy, Local government and Business and Urban Development. Within these specializations, curricula are prescriptive leaving student little choice. Students study topics such as *Management*, *Econometrics*, *Strategic Management*, *Location Theory*, *Marketing*, *Market and Marketing Research* as well as *World Economic Regions*,

The Master programme offers a specialization in Global and Local Economics in the context of urban regeneration and housing. Courses include *Concept of Management*, *Strategic Management*, and *Economic Analysis*. Students can also opt to study a foreign language as part of the degree.

University of Warsaw (*Centre for European Regional and Local Studies*) provides only a 2 year Master programme in planning. The programme has a strong theoretical-analytical focus, offering courses on *European Spatial Problems*, *Sociology of Organizations*, *Economics and Politics*, *Political Aspects of Development* and *Theory of Spatial Economics and Spatial Planning*, for example.

Warsaw University of Life Sciences was the first agricultural university that developed independent planning degrees. Programmes are provided through inter-faculty collaboration and consist of a 3.5 years undergraduate and 1.5 years Master.

The curriculum in the undergraduate programme is completely compulsory and allows for no options. It specialises on environmental and economic aspects of planning. Students study rural and agricultural issues (*Forestry*, *Agricultural Science*) as well as real estate management and valuation.

The Masters programme is considerably more flexible. It also has a clear emphasis on environmental planning including environmental engineering, and environmental economics. Courses such as *Sustainable Development of Rural Areas* are offered.

Warsaw University of Technology (*Faculty of Geodesy and Cartography* in cooperation with *Faculty of Architecture*) was the second significant Polish university of technology in which studies in planning started. Two-cycle programme in planning consist of 3.5 years first-cycle (leading to engineer professional title) and 1.5 years second-cycle, which will start in 2009. Aside from a grounding in fundamental sciences such as maths, physics, computer science and ecology, students gain a thorough urban design education. Students have advanced courses in geodesy, cartography, GIS and LIS (Land Information Systems). Studies include also soil science, environment protection and ecological aspects of local development. The programme hours which exceeds education guidelines significantly 3000 hours. Students also have to secure a 2 week long internship.

Wroclaw University of Environmental and Life Sciences (*Faculty of Environmental Engineering and Geodesy*) was the second agricultural higher education institution in which 3.5 years undergraduate programme in planning was established. The programme offers students considerable choice—with one-fifth of the programme hours being optional courses; required courses stress social sciences and technical aspects of planning such as the use of financial development instruments and EU funding. Students also focus on rural planning issues, including agricultural issues (*Agriculture and Ecology, Agricultural Production* and landscape planning.

Wrocław University of Technology (*Faculty of Architecture*) is one of the oldest Polish schools of planning (established in 1991). Two-cycle programme in planning consist of 3.5 years first-cycle programme (leading to engineer professional title) and 2 years second-cycle. Master studies are accessible not only for engineers but also for students with licentiate professional title. Graduates have profile in spatial planning and design offering a balanced range of courses in design and planning: *Design and Spatial Forms, Rural Planning, Urban Design, Local Plans, Landscape Architecture, Transportation Planning, Spatial Planning, Urban Regeneration.* The school's socio-cultural approach to planning is evident in courses such as *Urban History, History of Art and Architecture,* and *Settlement Processes.* Students also develop skills in *Computer-Aided Design* and *Spatial Analysis Methods.* Students also have to secure a 4 week work experience.

The Master programme has a flexible structure allowing students to develop their own specialization. Overall there is a strong emphasis on all aspects of planning practice including a *Introduction to Creating Places, Development Plans, Town Planning, Regional Planning, Planning in 20th Century.* Students have in depth instruction in legal issues in planning, advanced GIS and are taught quantitative modelling and forecasting techniques for spatial development.

Appendix B: Questionnaire

- 1) rok rozpoczęcia kształcenia na kierunku gospodarka przestrzenna
- 2) programy kształcenia, jakie Państwo realizujecie w swoich uczelniach (nazwy przedmiotów, liczby godzin, rodzaj zajęć) w miarę możliwości w wersji angielskiej
- 3) specjalności, w jakich Państwo kształcicie w zakresie gospodarki przestrzennej: gospodarka przestrzenna
- 4) liczba studentów na poszczególnych stopniach studiów i specjalnościach
 - a) studia I stopnia
 - b) studia II stopnia,
 - c) studia jednolite jeśli jeszcze są prowadzone,
 - studia stacjonarne i niestacjonarne,
- 5) liczba absolwentów od początku uruchomienia kierunku,
- 6) współpraca z instytucjami i organizacjami zewnętrznymi (TUP, Izba Urbanistów, samorządy lokalne, inne),
- 7) informacja o miejscach pracy absolwentów (w miarę posiadanych informacji)
- 8) informacja o stopniach i tytułach naukowych uzyskanych przez absolwentów kierunku gospodarka przestrzenna na waszych uczelniach,
- 9) informacja o kadrze: o ilość samodzielnych pracowników nauki z zaznaczeniem
 - a) profesorów i doktorów habilitowanych zaangażowanych w kształcenie na kierunku gospodarka przestrzenna oraz wskazanie ich specjalności naukowej uczestnictwa w ciałach profesjonalnych i naukowych,
 - b) ilość niesamodzielnych pracowników nauki zaangażowanych w kształcenie na kierunku gospodarka przestrzenna,
- 10) ilość studentów na studiach doktoranckich z gospodarki przestrzennej,
- 11) studia podyplomowe związane z gospodarką przestrzenną
- 12) współpraca z uczelniami zagranicznymi (nazwy uczelni, formy współpracy)
- 13) ilość studentów zagranicznych kształcących się na kierunku gospodarka przestrzenna w poszczególnych latach w ramach programu wymiany studenckiej (SOCRATES/ERASMUS).

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