



## RTU Course "Telecommunications Marketing"

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General	data
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Code	RAE419
Course title	Telecommunications Marketing
Course status in the programme	Compulsory/Courses of Limited Choice; Courses of Free Choice
Responsible instructor	Jurģis Poriņš
Academic staff	Elmārs Lipenbergs Alīna Stafecka
Volume of the course: parts and credits points	1 part, 2.0 Credit Points, 3.0 ECTS credits
Language of instruction	LV, EN
Annotation	The introduction of the study course covers the overview of electronic communications network and service technologies and challenges they offer in conditions of network, service, and terminal equipment convergence leading towards the development of next-generation networks and services. The markets of electronic communications services are reviewed, the main participants of the electronic communications market are identified, the regulatory environment and regulations of the industry are described, the conditions, requirements, rights, and obligations of merchants to enter the electronic communications market are considered. Separately regulatory measures for interconnection tariff and international roaming tariff regulation are outlined. The study course also outlined to the universal service in the electronic communications sector. The study course finishes with an overview of the challenges and consequences of the regulation of next-generation networks and services.
Goals and objectives of the course in terms of competences and skills	The aim of the study course is the theoretical and practical preparation of masters of telecommunications studies for starting and successfully conducting innovative business in the field of electronic communications. Tasks of the study course: - to provide the necessary preliminary knowledge for the registration of the activities of an electronic communications merchant, for the acquisition and use of the rights to use limited resources (radio frequencies and numbering), for concluding agreements on the interconnection of communications networks and equipment, and for preparing regulatory information; - to provide knowledge of the principles of inter-operator payment principles and the cost models applied by regulators, as well as the concept of universal telecommunications service.
Structure and tasks of independent studies	During the study course the following assignments should be acquired: registration of undertakings as an electronic communications network or service provider, obtaining of usage rights of numbers, obtaining of usage rights of radio frequencies, analysis of requirements of interconnection and access reference offers, preparation of information for regular submission to regulatory authorities. The scenarios with hyperlinks to necessary web-sites are provided.

Recommended literature	<ul> <li>Obligătă/Obligatory: <ol> <li>Elektronisko sakaru likums.</li> <li>E Karnītis, A. Virtmanis. Platjoslas sakari Latvijā: attīstība un perspektīvas. LU Akadēmiskais apgāds, Rīga, 2015, 152.lpp.</li> <li>Journal of Telecommunications Management. Vol.3, Henry Stewart Publications, UK, 2010.</li> <li>S. Hampling. Presaide or Lead? The Atributes and Actions of Effective Regulators (2nd edition). National Regulatory Research Institute, USA, 2013, 265 pp.</li> <li>M.Maier. Optical Switching Networks. Cambridge University Press, 2008. 324 p.</li> <li>Wood. Next-Generation Network Services. Cisco Systems, Inc., 2006. 600 p.</li> <li>L. Goleniewski. Telecommunications Essentials. 2nd ed. Addison-Wesley, 2007. 865 p.</li> <li>Ed. H.Intven. Telecommunications Regulation of Telecommunications Carriers. Artech House, Inc., 1999. 735 p.</li> <li>J. J.K.Shaw, Telecommunications deregulation and the information economy. 2nd ed. Artech House, Inc., 1099. 735 p.</li> <li>J. S. Strother. Telecommunications cost management. Artech House, Inc., 2002. 323 p.</li> <li>F. Ghys, M.Mampaey, M. Smouts, A. Vaaraniemi. 3G multimedia network services, accounting and user profiles. Artech House, Inc., 2003. 318 p.</li> <li>J. A.Manner.Spectrum Wars. The Policy and Technology Debate. Artech House, Inc., 2003. 186 p.</li> <li>J.Jordana, D.Levi-Faur (eds.) The Politics of Regulation. Institutions and Regulatory Reforms for the Age of Governance. Edward Elgar Publishing, Ltd., 2004. 335 p.</li> <li>Papildu/Additional:</li> <li>Aktuāli tirgus pētījumi, nozares normatīvie akti, BEREC, IRG, CEPT ECC darba grupu projekti, SPRK analītiskie dati, citi avoti.</li> <li>Citi informācijas resursi/Other information resources:</li> <li>http://www.ig.eu</li> <li>http://www.ig.eu</li> <li>http://www.ig.eu</li> <li>http://www.ig.eu</li> <li>http://www.ig.eu.int</li> <li>http://www.ig.eu.int</li> <li>http://www.ig.eu.int</li> <li>http://www.ig.eu.int</li> <li>http://www.eds.org</li> </ol></li></ul>
Course prerequisites	Basic knowledge about core and access network technologies, network architecture, signalling systems, capabilities of technologies for provision of different services, network interoperability requirements, technical requirements, standards, computer technology applications in telecommunications, intelligent networks, network management and support, next generation networks and services.

## Course contents

Content	Full- and part-time intramural studies		Part time extramural studies	
	Contact Hours	Indep. work	Contact Hours	Indep. work
Introduction. Goals, content and scope of the discipline. Specification of lectures, test work and exam.	2	1	0	0
Electronic communications networks, dominating network technologies, next generation networks.	2	3	0	0
Development of technologies for provision of telecommunication services. Electronic communication services.	2	3	0	0
Participants of electronic communication market, their interests and relations. Market segmentation.	2	3	0	0
Regulation of electronic communications. Regulation models. European regulatory frameworks.	2	2	0	0
Licensing in telecommunications. Types of licences. Rights and obligations of undertakings.	2	3	0	0
Scarce resources. Global and national numbering plans. Administration of numbers.	2	4	0	0
Planning and supervision of radio frequencies. Effective use of spectrum, spectrum monitoring.	2	4	0	0
Role of competition. Ex ante and ex post regulation. Service and infrastructure competition. Ladder of investment.	2	3	0	0
Asymmetrical regulation. Wholesale and retail services. Definition and analysis of relevant markets.	2	4	0	0
Significant market power (SMP) of undertakings. Specific obligations applied to undertakings with SMP.	2	4	0	0
Interconnection of telecommunications networks. Access services, their classification and regulation. Access obligations	2	3	0	0
Universal service in telecommunications. Application of universal service obligations.	2	3	0	0
Principles of tariff setting for electronic communication services. Regulation of service tariffs. Cost allocation.	2	4	0	0
Principles and order of inter-operator payments. Actual remuneration models between operators.	2	3	0	0
Regulation of next generation networks and services. Regulatory risks and challenges. Summary.	2	1	0	0
Total:	32	48	0	0

Learning outcomes and assessment							
Learning outcomes	Assessment methods						
Is able to assess and analyse situations in the electronic communications market.	Examination of knowledge in the exam.						
Is able to register undertakings for entrepreneurship in electronic communications and are able of preparing the information to be provided to regulatory authority on a regular basis.	Written test after demonstration of real applications.						
Is able to assess the necessity of numbering resources for commercial use and to apply for usage rights of this resource.	Written test after demonstration of real applications.						

The second	Written test after demonstration of real applications.
Is able to assess conditions for interconnection of public electronic communications networks and to analyse interconnection, shared use of equipment, unbundled access to the local loop and bit-stream access reference offers for concluding those agreements.	Examination of knowledge in the exam.
Is able to analyse the application of the European regulatory framework in electronic communications and to evaluate development of regulatory requirements for next-generation network technologies and services.	Examination of knowledge in the exam.

## Evaluation criteria of study results

Criterion	%
Exam	30
Tests	70
Total:	100

## Study subject structure

Part	СР	Hours per Week			Hours per Week Tests			Tests (free choice)		
		Lectures	Practical	Lab.	Test	Exam	Work	Test	Exam	Work
1.	2.0	2.0	0.0	0.0		*			*	