Training Course Outline

ITU and National Institute of Telecommunications

Online Training Course on

Strategic Aspects for Internet Governance and Innovations
31 January – 7 February 2022

Title	Strategic Aspects for Internet Governance and Innovations
Modality	Online training course
Dates	31 January - 7 February 2022
Duration	8 days
Registration deadline	31 January 2022
Training fees	USD 150
Description	This course covers the strategic aspects of Internet governance and innovations, regarding the technology, regulatory and business aspects. The transition of telecom networks and services to all-IP networks has been completed almost everywhere in the first two decades of the 21st century. Such convergence in telecommunications towards IP networks and services and use of the Internet technologies is driven by the development of broadband across the globe. The development of broadband networks is targeted mainly for Internet access service therefore this course covers the Internet standardization and policy. Further, network neutrality in Internet provides basis for speedy innovations in telecom/ICTs via the so-called OTT (Over The Top) services. Then, course compares Google model vs. Apple model for innovations. Further, the course also includes mobile QoS-enabled voice, based on NGN and IMS (IP Multimedia Subsystem), and Internet telephony (e.g., Skype, Viber. WhatsApp). Then it continues with IPTV innovations, including IMS-based IPTV, mobile TV (evolved MBMS), and OTT (Over The Top) television. Finally, the course also covers innovative services and applications on Internet (based on clouds and Internet of Things - IoT), network neutrality for open Internet, as well as regulatory issues related to IP/Internet governance.
Course code	22OI27801EUR-E

1. LEARNING OBJECTIVES

This course covers the strategic aspects of Internet governance and innovations, regarding the technology, regulatory and business aspects. The transition of telecom networks and services to all-IP networks has been completed almost everywhere in the first two decades of the 21st century. Such convergence in telecommunications towards IP networks and services and use of the Internet technologies is driven by the development of broadband across the globe. The development of broadband networks is targeted mainly for Internet access service therefore this course covers the Internet standardization and policy. Further, network neutrality in Internet provides basis for speedy innovations in telecom/ICTs via the so-called OTT (Over The Top) services. Then, course compares Google model vs. Apple model for innovations. Further, the course also includes mobile QoS-enabled voice, based on NGN and IMS (IP Multimedia Subsystem), and Internet telephony (e.g., Skype, Viber. WhatsApp). Then it continues with IPTV innovations, including IMS-based IPTV, mobile TV (evolved MBMS), and OTT (Over The Top) television. Finally, the course also covers innovative services and applications on Internet (based on clouds and Internet of Things - IoT), network neutrality for open Internet, as well as regulatory issues related to IP/Internet governance.

2. LEARNING OUTCOMES

At the end of the training, the participant should have gained an understanding of the key aspects of:
- Convergence in telecommunications towards Internet
- Broadband strategies and Innovations
- Internet standardization and policy
- Innovation management in ICT
- Google model vs. Apple model for innovations
- Mobile and Internet telephony
- IPTV innovations
- Innovative services and applications
- Network neutrality
- Regulatory issues related to IP/Internet governance

3. TARGET POPULATION

The course is targeted to corporate executives and managers, policy makers, regulators, i.e. middle-level managers, administrators, officials and engineers dealing with planning, development, implementation and management of current and future IP/Internet networks. Other institutions and individuals that are dedicated in building their capacity related to Strategic Aspects for Internet Governance and Innovations are also welcome to participate.

4. ENTRY REQUIREMENTS

No prior knowledge or qualification is required to register for this course, considering the given target population.

5. TUTORS/INSTRUCTORS

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Prof. Toni Janevski	tonij@feit.ukim.edu.mk

6. TRAINING COURSE CONTENTS

There are in total eight days of training. Over the first 5 days (3-7 February), two recorded video lectures will be given per day, or total of 10 video lectures throughout the whole course. The lectures are on the following subjects:

Lecture	Subject
Lecture 1	Convergence in telecommunications toward Internet
Lecture 2	Broadband strategies and innovations
Lecture 3	Internet standardization and policy
Lecture 4	Innovation management in ICT
Lecture 5	Google model vs. Apple model for innovations
Lecture 6	Mobile and Internet telephony
Lecture 7	IPTV innovations
Lecture 8	Innovative services and applications
Lecture 9	Network neutrality
Lecture 10	Regulatory issues related to IP/Internet governance

7. TRAINING COURSE SCHEDULE

Days	Topic	Exercises and interactions
Day 1	Lecture 1. Convergence in telecommunications toward Internet Lecture 2. Broadband strategies and innovations	Watching and listening to video lectures 1 and 2. Answering on questions asked by the tutor, and possibility to ask questions to him via course forum.
Day 2	Lecture 3. Internet standardization and policy Lecture 4. Innovation management in ICT	Watching and listening to video lectures 3 and 4. Answering on questions asked by the tutor, and possibility to ask questions to him via course forum.

Day 3	Lecture 5. Google model vs. Apple model for innovations Lecture 6. Mobile and Internet telephony	Watching and listening to video lectures 5 and 6. Answering on questions asked by the tutor, and possibility to ask questions to him via course forum.
Day 4	Lecture 7. IPTV innovations Lecture 8. Innovative services and applications	Watching and listening to video lectures 7 and 8. Answering on questions asked by the tutor, and possibility to ask questions to him via course forum.
Day 5	Lecture 9. Network neutrality Lecture 10. Regulatory issues related to IP/Internet governance	Watching and listening to video lectures 9 and 10. Answering on questions asked by the tutor, and possibility to ask questions to him via course forum.
Day 6-7	Consolidation of knowledge	Possibility to watch all video lectures once again with possibility to ask questions to the tutor.
Day 8	Final Quiz	Solving the Final Quiz.

8. METHODOLOGY

This course will be delivered using instructor-led online learning. The course methodology will be as follows:
- Each day from 31 January to 4 February 2022 there will be made available two recorded video lectures, which are recorded in the face-to-face ITU Centre of Excellence workshop organized by National Institute of Telecommunications in Poland. In total there are 10 video lectures during the course.
- Discussion forum will be organized based on discussion topics given on a daily basis, where students are highly encouraged to participate and interact with instructors and other students.
- Quiz test will be assigned on the last day of the course, 7 February 2022.
- All announcements for all events (lectures, quiz and forum) will be given in a timely manner (prior to the event) by the course tutor.

9. EVALUATION AND GRADING

On the last day of the course a quiz test will be assigned. It will consist of 20 questions (multiple choices) which should be solved in 90 minutes, with at least 12 correct answers (60%).

The course evaluation for obtaining the certificate at the end is based primarily on the results from the Quiz, however, replies to the raised discussion topics may also be considered in the evaluation process.

10. TRAINING COURSE COORDINATION

Course coordinator:	**ITU coordinator:**
Name: Sylwester Laskowski Email address: S.Laskowski@il-pib.pl	Name: Jaroslaw Ponder Email address:

11. REGISTRATION AND PAYMENT

ITU Academy portal account

Registration and payment should be made online at the ITU Academy portal.
To be able to register for the course you **MUST** first create an account in the ITU Academy portal at the following address:
https://academy.itu.int/index.php/user/register

The instructions for course registration and payment are given in a separate file, which accompanies this Course Outline.

12. CERTIFICATES

Each fully registered participant who successfully completes the course, based on the evaluation, will receive an ITU Certificate for this course.