Report on “How to engage in broadband policy and regulatory processes,” a four-day residential course

March 28-31, 2015
Hotel Club Himalaya, Nagarkot, Nepal
Contents
Introduction ................................................................................................................. 3
Participants .................................................................................................................. 4
Course Format and Assignments .................................................................................. 6
   Course Schedule ............................................................................................................. 6
   Day 1 .............................................................................................................................. 7
      Assignments ................................................................................................................. 7
   Day 2 .............................................................................................................................. 9
   Day 3 .............................................................................................................................. 9
   Day 4 .............................................................................................................................. 9
Media coverage ............................................................................................................. 10
Faculty ........................................................................................................................... 10
   Rohan Samarajiva, PhD ................................................................................................ 10
   Mr Babu Ram Aryal ..................................................................................................... 11
   Manohar K Bhattarai .................................................................................................... 11
   Binay Bohara .............................................................................................................. 12
   Helani Galpaya ............................................................................................................ 12
   Vignesh Ilavarasan, PhD ............................................................................................ 12
   Abu Saeed Khan ........................................................................................................ 13
   Ananda Raj Khanal ..................................................................................................... 13
   Nilusha Kapugama ..................................................................................................... 13
   Laleema Senanayake ................................................................................................. 13
Evaluations ................................................................................................................... 14
   Session Ratings .......................................................................................................... 14
   Speaker Ratings .......................................................................................................... 15
   Logistical Ratings ...................................................................................................... 15
Introduction

LIRNEasia is undertaking a multi-phase, research- and documentation-based initiative funded by the Ford Foundation to inform and engage decision makers and stakeholders in India, Nepal and Sri Lanka (Telecom Regulatory Authorities, Ministries of broadband and telecommunication, senior executives from operators, senior academics and civil-society leaders) about good practices in policy and regulatory issues affecting broadband access. The intention is to promote learning among the stakeholders and the facilitation of a policy discourse that takes into account the interests of the poor. The project is assisted by a web-based Broadband Policy Resource Centre (http://broadbandasia.info/) and a series of short courses and structured conversations among policy makers and stakeholders.

The 4-day residential course on ‘How to engage in Broadband Policy and Regulatory Processes’ held on 28-31 March 2015 in Nepal was the fourth of a series of short courses funded by Ford Foundation. This was organized by LIRNEasia in collaboration with the Internet Society of Nepal. Details about the previous courses are at: http://lirneasia.net/capacity-building/ford-broadband-policy-course/. The main goal was to enable members of civil-society groups to marshal available research and evidence for effective participation in broadband policy and regulatory processes, thereby facilitating and enriching policy discourse on means of increasing broadband access by the poor.
Participants

Out of 62 applicants, 25 participants were selected based on their potential to engage in broadband policy discourse, interest in the subject and previous experience. Diversity was also a factor that was taken into account as this course is an interactive course where participants are expected to learn from each other. The following charts show the participants according to their gender, disciplines and region.
Geographical Representation

- Kathmandu: 88%
- Pokhara: 4%
- Biratnagar: 4%
- Banke: 4%
**Course Format and Assignments**

A combination of teaching formats was used to enhance collaboration, open discussion. Lectures, panel discussions and team work were utilized as teaching tools. Following is the Course Schedule and a brief summary of the 4-day course.

**Course Schedule**

<table>
<thead>
<tr>
<th>Time</th>
<th>Day 1 (March 28)</th>
<th>Day 2 (March 29)</th>
<th>Day 3 (March 30)</th>
<th>Day 4 (March 31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0900-1030</td>
<td>S1 Introduction (Rohan Samarajiva RS)</td>
<td>S5 Interrogating supply-side indicators (HG)</td>
<td>S10 National Broadband Networks of India, Malaysia, Indonesia and Australia: Comparative study (RS &amp;VI)</td>
<td>S15 Panel discussion on making policy &amp; doing regulation in Nepal (Babu Ram Aryal, Manohar Bhattarai, Binay Bohra, Ananda Raj Khanal)</td>
</tr>
<tr>
<td>1030-1100</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
</tr>
<tr>
<td>1100-1200</td>
<td>S2 Finding research (Nilusha Kapugama NK)</td>
<td>S6 Assessing &amp; summarizing research (NK &amp; RS)</td>
<td>S11 Demand-side stimulation (RS)</td>
<td>A2 Preparation for presentation</td>
</tr>
<tr>
<td>1200-1300</td>
<td>S3 Baseline knowledge about Nepal ICT (RS)</td>
<td>S7 Why and how of ICT policy, strategy and plans (RS)</td>
<td>S12 Challenges of implementing e-government programs (HG)</td>
<td>A2 Preparation for presentation</td>
</tr>
<tr>
<td>1300-1400</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
</tr>
<tr>
<td>1400-1500</td>
<td>A1 Group formation; Assignments explained and introduction of Broadband Website (NK &amp; Laleema Senanayake LS)</td>
<td>S8 Making spectrum available for broadband (RS)</td>
<td>S13 The significance of international backhaul (Abu Saeed Khan ASK)</td>
<td>A3 Mock public hearing (RS &amp; panel)</td>
</tr>
<tr>
<td>1500-1530</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
<td>Break</td>
</tr>
<tr>
<td>1530-1700</td>
<td>S4 Demand-side research (NK)</td>
<td>S9 Introduction to quantitative research (Vigneswara Ilavarasan VI)</td>
<td>S14 Net neutrality, zero rating and their applicability in conditions of low Internet access (HG)</td>
<td>A3 Mock public hearing &amp; critique (RS &amp; panel)</td>
</tr>
<tr>
<td>1700-</td>
<td>Group work</td>
<td>Group work</td>
<td>Certificate dinner</td>
<td></td>
</tr>
</tbody>
</table>
Day 1
The course commenced with an introductory session by Rohan Samarajiva (Director of the project and Chair of LIRNEasia) on the objectives of the course, methods of teaching, introduction of faculty and effective communication techniques. The intention was to give the grounding on the first day so that the activities of the next few days can build on the first day’s sessions. Therefore importance of Broadband/Internet to a country, basic research skills such as how to find relevant research, and an introduction into demand side research and baseline knowledge about Nepal ICT were covered in the first day.

Five groups were formed with 5 members in each group and the assignment was circulated among them two weeks before the course. These assignments were explained and the online repository on broadband policy and regulation in Asia (www.broadbandinfo.com) was introduced in the afternoon session.

Assignments
The defining feature of the draft broadband policy published by the Nepal Telecom Authority (http://www.nta.gov.np/ne/component/joomdoc/Broadband%20Policy-Draft.pdf/download) is that it is a wish list. It appears that whoever did the drafting included all the so-called best practices related to broadband with the best of intentions, without making a careful assessment of the ground situation in the country and without considering how to get from where Nepal is now to where we all want Nepal to be in a few years. Therefore, focus of the assignments will not be on the proposals in the draft policy per se, but on their feasibility. This will require the teams to spend more time looking at data and news reports about the ground situation and about the legal and political environment.

1. Assess the likelihood of success of the following elements of the Broadband Policy Draft of the NTA, by assembling evidence on the past performance of the Rural Telecommunications Development Fund (RTDF) (including disbursement efficiency (i.e., what percentage of money was spent within a defined time period) and transparency) and the actual organizational structure of the Fund:

   10.4.1 The reach of broadband network and services will be expanded to rural and remote areas by including broadband in universal service/access definition through effective mobilization of Rural Telecommunications Development Fund.

   10.4.2 Competitive supply of services beyond district headquarters and urban centers will be encouraged through a modicum of fiscal, policy and regulatory incentive schemes. Along these lines, considerations will be made to license a block of spectrum with a condition to offer free or low-cost service in that would create affordable alternatives for consumers, reducing the burden on RTDF related subsidy arrangements.

2. Assess the likelihood of having three competitive broadband suppliers in urban Nepal, in light of the government’s past track record in introducing competition. In what countries (e.g., United States, Singapore) has this aspiration been achieved? You may wish to pay attention to the technologies that can be deployed to supply broadband service and the associated economics.
8.1.3. Urban broadband users in Nepal will have a choice of at least three broadband suppliers by the end of 2015

3. Please assess the policy provisions below with the actual track record of the NTA with regard to spectrum management.

9.1 Radio frequency spectrum to expand broadband access by means of both mobile and fixed wireless technologies consistent with international standards and best practices will be released. Along these lines, prevailing spectrum management regime in Nepal will be reformed to provide for more transparent and responsive action on frequency allocation, assignment and pricing. Provisions will also be made to make some unlicensed spectrum available for rollout of wireless broadband services to unserved and underserved areas. Availability of adequate spectrum for IMT and IMT Advanced services will be ensured. Also, arrangements will be made to ensure the availability of sufficient microwave spectrum to meet current and future demand for wireless backhaul especially in prime bands below 12 GHz, in addition to higher spectrum bands.

9.4 Roadmap for availability of additional spectrum for every 5 years will be prepared beginning the year 2014.

4. Assess the prospects for e-government services being rolled out in Nepal as envisaged in the draft policy. Please make explicit reference to what Nepal has achieved in terms of e-government so far and to the UN ranking (see reference list).

10.3.5 Use of broadband services by government agencies will be promoted by formulation of specific programs both at the central as well as local government levels to make electronic transactions, including eGovernment services accessible to citizens and businesses,

10.3.6 Steps will be taken to promote the take-up of electronic transactions and marketing by small and medium sized businesses.

5. Will the provisions of the policy pertaining to content and applications be adequate for improving internet use? Which entity within the Nepal Government has the authority to implement them?

10.3.8 Measures will be taken to ensure fair compensation for creators of digital content and the protection of their rights.

10.3.9 Excellence in content development, application development, rural communications development, innovative services and broadband readiness will be publicly recognized through a program of national awards that will attract popular interest and attention.
Day 2
Building from the previous day, supply-side data and quantitative research were examined, and the importance of assessing and summarizing research was discussed. Why and how of ICT policy, strategy and plans and making spectrum available for broadband was also covered in day 2.

Day 3
Day 3 started with an introduction of the National Broadband initiatives of India, Malaysia, Indonesia and Australia. The next session on demand side stimulation generated a fruitful discussion explaining apps and local content in Nepal. The discussion was linked to the next session on challenges and implementing government programs, a real world experience explained by Chief Executive Officer of LIRNEasia, Helani Galpaya.

The significance of international back haul and Asian Information Superhighway was explained during the afternoon session followed by a session on net neutrality and zero rating.

The certificate distribution was organized by LIRNEasia in collaboration with ISOC. Babu Ram Aryal, President of ISOC, Nepal introduced ISOC to the participants and conveyed his gratitude to LIRNEasia for organizing a course on broadband policy in Nepal. He emphasized the importance of acquiring knowledge on broadband. The panelists of the panel discussion on the next day participated at this event. Certificates were distributed to the participants by Director of Nepal Telecommunication Authority Mr. Ananda Raj Khanal, ICT4D expert Mr. Manohar K Bhattarai, Mr. Abu Saeed Khan, Dr. Vignesh Illavarasan, Ms. Nilusha Kapugama, CEO of LIRNEasia Ms. Helani Galpaya and President of ISOC Nepal, Mr. Babu Ram Aryal.

Day 4
Day four started with an engaging discussion on making policy and doing regulation in Nepal. Rohan Samarajiva moderated the session and started it with asking a few questions on national broadband policy in Nepal. A fruitful discussion on internet freedom, infrastructure, local content and right to information among the participants and the panelists followed.

The next two time slots were given to the preparation for the presentation. Participants submitted the presentation and policy briefs on time. The mock public hearing was conducted after lunch. The judges of the mock public hearing were Mr. Abu Saeed Khan, Dr. Vignesh Illavarasan and Ms. Nilusha Kapugama. All four groups were given 10 minutes to present their findings. Ten minutes of questions by the judges followed. The teams’ adhered to time and the findings were based on current data in Nepal.

Overall comments by the judges for the group were, more focus on the question, preparation of the presentation in a way that the essence of the study delivered in the first few minutes of the presentation, introducing realistic goals and targets based on country context and international experience and improving presentation skills of the presenters so that they can deliver the message for the policy makers.
Rohan concluded the workshop commenting that this is promising group with a potential to influence policy makers. He suggested the participants to start working together on broadband policy issues of their country and influence the decision makers to make better decisions regards to broadband policy.

Media coverage
The information gathered through the first assignment of the course on assessing the likelihood of the success of the broadband policy draft by the NTA was published by the Himalayan News Service in Nepal.

The extraordinarily low disbursement rate of the Rural Telecommunications Development Fund caught everyone’s attention during the course. Given the presence of journalists, it was not surprising that it made the news:

The government has spent only 2.6 per cent of the money accumulated in Rural Telecommunications Development Fund (RTDF) in the last 17 years. This shows that a huge amount of resources has remained idle in the fund, which was supposed to be utilised for extending telecom services to rural areas.

As of March-end, Nepal Telecommunications Authority (NTA) collected a total of Rs 10.22 billion for RTDF from income of its licensees till last fiscal. Each licensee of NTA contributes two per cent of their annual income from services in RTDF that was established as per a provision in Telecommunications Act 1997.

The Act says the fund has to be used for making telecom services available in ‘rural areas’. So far, Rs 265.69 million has been paid to Nepal Telecom (NT) and Rs 2.95 million to Subisu Cable Net from the fund for their involvement in service expansion to rural and remote areas.

“NT was provided the sum from the RTDF based on a Cabinet decision,” said Director of NTA Ananda Raj Khanal, addressing a panel discussion organised as a part of the workshop ‘How to engage in broadband policy and regulatory process’ on Tuesday. He said that NT had expanded telecom services at the village development committee level under a five-year campaign launched in 2059 BS (2002-03).

Faculty
Rohan Samarajiva, PhD
Rohan Samarajiva, was the founding CEO (2004 - 2012) and is Chair (2004 –) of LIRNEasia. Previously he was the Team Leader at the Sri Lanka Ministry for Economic Reform, Science and Technology (2002-04) responsible for infrastructure reforms, including participation in the design of the USD 83 million e Sri Lanka Initiative. He was Director General of Telecommunications in Sri Lanka (1998-99), a founder director of the ICT Agency of Sri Lanka (2003-05), Honorary Professor at the University of Moratuwa in Sri Lanka (2003-04), Visiting Professor of Economics of Infrastructures at the Delft University of


**Babu Ram Aryal**

Mr Aryal is President, Internet Society Nepal. He is a practicing lawyer with focus on Telecommunication, Cyber Security, Cyber Crime, Media Laws and Intellectual Property laws. He is also Chairman and co-founder of Centre for Law and Technology Private Limited, a law firm that specializes in Information Technology Laws in Nepal. As a law and policy consultant Mr Aryal has led various ICT and Media law related law and policy-making initiatives at national and International level. He was lead researcher on the Affordability Index for the Web Foundation; "Drafting Unified Information Technology Bill-2013" (2013), "Reviewing Information Technology Laws in Nepal" (2013), "Analysis of Nepali Legal System from E-Governance perspective and Drafting E Governance Bill, 2011" and "Information, Education and Communication strategy for Local Government and Community Development Project, 2009". He was Lead Researcher in the research "Use of Criminal Laws to Curb Freedom of Expression Online in Nepal" (2012)", and advisor to the research "Mapping Position of Internet and Freedom of Expression in Nepal with reference to UN Special Rapporteur's Report to UN General Assembly" (2012). He is legal advisor to Internet Service Provider’s Association of Nepal, an umbrella organization of ISPs in Nepal, leading ISPs of Nepal and major ISPs, software and hardware companies having business in Nepal e.g. Google Inc, Samsung India Private Limited, Pure Software, Yomari Incorporated Private Limited, Websurfer Nepal Communication System Private Limited, Broadlink Communication and Network Private Limited and others.

**Manohar K Bhattarai**

Mr Bhattarai is former Vice Chair, High Level Commission for Information Technology, Government of Nepal. Mr. Bhattarai’s involvement in the Information and Communication Technology sector spans nearly three decades encompassing varying responsibilities in various functional and leadership roles. Mr. Bhattarai led the drafting of the Broadband Policy recently approved by Nepal Telecommunication Authority and due for final approval from the government. Mr. Bhattarai also played a lead role in drafting Nepal's first IT Policy in the year 2000 as part of a team formed by National Planning Commission. Mr. Bhattarai is credited with the initiative to usher in the concept of rural telecentres in Nepal as a means of bridging digital divide and expanding community access to Information and Communications Technologies. Mr. Bhattarai has also been instrumental in preparing revised IT Policy of the Government of Nepal which has since been announced, as well as drafting 3-year integrated action plan (IAP) for the development of ICT sector in Nepal. In addition, he also played a key, leadership role in formulating e-Government project which has since culminated in a comprehensive eGovernment project being executed by Government of Nepal. Mr. Bhattarai is also credited with the achievement of having provided leadership on delivering on one of the key, foundational components of

**Binay Bohara**

Mr Bohara is President, Internet Service Provider's Association of Nepal. He is President of ISP Association of Nepal and Managing Director of Vianet Communications Pvt Ltd, a leading ISP. He completed his higher studies in India from Bangalore University in 1995 in Computer Engineering. After his education in Bangalore, he joined Mercantile Communications, the first ISP in Nepal. While working for three years at Mercantile, he developed the confidence to do something on his own. The knowledge Bohra gained in the classroom was juxtaposed with the experience collected via his work. Vianet Communications was established in 1999. He is also a past Chairman of Nepal Internet Exchange (NpIX), the first internet exchange keeping local internet traffic local with local content for local customers and subsequently saving international bandwidth consumption. Mr. Binay is member of the advisory committee for development of ICT to Federation of Nepalese Chambers of Commerce and Industry, SANOG (South Asian Network Operators Group) and Internet Society Nepal.

**Helani Galpaya**

Helani is LIRNEasia’s Chief Executive Officer. Helani led LIRNEasia’s 2012-2014 IDRC funded research on improving customer life cycle management practices in the delivery of electricity and e-government services using ICTs. She recently completed an assessment of how the poor in Bangladesh and Sri Lanka use telecenters to access government services. For UNCTAD and GTZ she authored a report on how government procurement practices can be used to promote a country’s ICT sector and for the World Bank/InfoDev Broadband Toolkit, a report on broadband strategies in Sri Lanka. She has been an invited speaker at various international forums on topics ranging from m-Government to ICT indicators to communicating research to policy makers. Prior to LIRNEasia, Helani worked at the ICT Agency of Sri Lanka, implementing the World-Bank funded e-Sri Lanka initiative. Prior to her return to Sri Lanka, she worked in the United States at Booz & Co., Marengo Research, Citibank, and Merrill Lynch. Helani holds a Masters in Technology and Policy from the Massachusetts Institute of Technology, and a Bachelor’s in Computer Science from Mount Holyoke College, USA.

**Vignesh Ilavarasan, PhD**

P. Vigneswara Ilavarasan (PhD – IIT Kanpur) is Associate Professor at the Dept. of Management Studies, Indian Institute of Technology Delhi. For the last ten years, he is researching and teaching production and consumption of information and communication technologies (ICTs) with a special focus on India. His specific research interests are Information and Communication Technologies & Development (ICTD) [Use of Mobiles & other ICTs by women microentrepreneurs in India]; Information Technology Industry in India [Labour, R&D Centers of MNCs, Inter-firm linkages, Clusters & Sub-national Policy]; and ICTs & Government [Electronic Governance]. Dr. Ilavarasan is a recipient of the Outstanding Young Faculty Fellowship Award at IIT Delhi and Prof. M.N. Srinivas Memorial Prize of the Indian Sociological Society. He is also a recipient of research grants from IDRC (Canada), Ministry of Labour and Employment (India), Ministry of Science and Technology (India), Oxford Analytica (UK), and IdeaCorp. (Philippines).
Abu Saeed Khan
Abu is a Senior Policy Fellow of LIRNEasia. At LIRNEasia, Abu has conducted research into the replicability of a microfinance approach to extending rural connectivity in Bangladesh. He is now engaged in an original research on how to reduce the internet bandwidth costs across Asia. He has been persuading the construction of a terrestrial optical fiber link alongside the transcontinental system of roads network known as the “Asian Highway”. It is being dubbed as the Longest International Open-access Network or LION. Abu worked in the Association of Mobile Telecom Operators of Bangladesh (AMTOB) as its Secretary General from 1st of August, 2010 to 31st of July, 2012. Earlier he was a Strategy Analyst at Ericsson’s Southeast Asian head office in Malaysia until June 2010. Abu has a bachelor’s degree in Bengali language and literature from Titumir College, Dhaka. He is a member of the IEEE.

Ananda Raj Khanal
Born in September 1970 in Nepal, Mr Khanal received his bachelor’s degree in electronics and communications in 1996 from Karnataka Regional Engineering College, Surathkal, India, and his master’s degree in optical communications in 2000 from Anna University, Chennai, India. He also completed his LLB degree from Tribhuvan University, Nepal in 2009. From 1997 to 2005, he was a lecturer at Kathmandu University, serving as Assistant Professor (2000-05) and as the Head of the Department of Electrical and Electronics Engineering for a year. He joined the Nepal Telecommunications Authority, the telecom regulator of the government of Nepal, in April 2006, and now serves as the Director and Secretary. He has participated as a panelist and speaker in a number of conferences and seminars related to telecommunications policy and regulation issues in South Asia.

Nilusha Kapugama
Nilusha Kapugama is a Research Manager at LIRNEasia and manages the electricity component of the 2012-2014 IDRC Project on ‘Achieving e-inclusion by improving government service delivery & exploring the potential of “big data” for answering development questions.’ She is also working on a systematic review looking at the economic impacts of mobile phones. Previously she managed the Knowledge Based Economy project at LIRNEasia, which looked at the information and knowledge gaps in agriculture supply chains. She also worked on CPRsouth, LIRNEasia’s capacity-building initiative to develop Asia-Pacific expertise and knowledge networks in ICT policy regulation. She has also done research on broadband quality indicators and national regulatory authority (NRA) website indicators. She has also worked on LIRNEasia’s Virtual Organization Project. She has experience organizing international conferences and training courses. She holds a master’s degree in development economics and policy from the University of Manchester, UK.

Laleema Senanayake
Laleema is a Junior Research Manager at LIRNEasia and is the project manager of the Ford Funded Project on ‘Increasing Broadband access to the poor in Asia’. Laleema’s research interests are participatory planning, urban development, climate change and public policy. Prior to joining LIRNEasia she worked at International Water Management Institute as an intern and the Project Consultancy Unit (PCU) of the University of Moratuwa as a research assistant. She holds a
Bachelor of Science degree in Town and Country Planning from the University of Moratuwa and is an Associate member of the Institute of Town Planners Sri Lanka.

**Evaluations**

The course evaluations were positive as can be seen from the diagram below. The rating was based on a 5 point scale ranging from 1-abysmal to 5-excellent. All the topics, speakers and logistical arrangements were rated as being satisfactory.

**Session Ratings**

<table>
<thead>
<tr>
<th>Session</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>S15 Panel discussion on making policy &amp; doing regulation in Nepal</td>
<td>4.26</td>
</tr>
<tr>
<td>S14 Net neutrality, zero rating and their applicability in conditions of low Internet access</td>
<td>4.25</td>
</tr>
<tr>
<td>S13 The significance of international backhaul</td>
<td>4.21</td>
</tr>
<tr>
<td>S12 Challenges of implementing e government programs</td>
<td>4.22</td>
</tr>
<tr>
<td>S11 Demand-side stimulation</td>
<td>4.00</td>
</tr>
<tr>
<td>S10 National Broadband Networks of selected countries</td>
<td>4.09</td>
</tr>
<tr>
<td>S9 Introduction to quantitative research</td>
<td>4.36</td>
</tr>
<tr>
<td>S8 Making spectrum available for broadband</td>
<td>4.14</td>
</tr>
<tr>
<td>S7 Why and how of ICT policy, strategy and plans</td>
<td>4.09</td>
</tr>
<tr>
<td>S6 Assessing &amp; summarizing research</td>
<td>3.86</td>
</tr>
<tr>
<td>S5 Interrogating supply-side indicators</td>
<td>4.14</td>
</tr>
<tr>
<td>S4 Demand side research</td>
<td>4.04</td>
</tr>
<tr>
<td>A1 Group Formation and Explanation of Assignment</td>
<td>4.14</td>
</tr>
<tr>
<td>S3 Baseline knowledge about Nepal ICT</td>
<td>4.04</td>
</tr>
<tr>
<td>S2 Finding Research</td>
<td>3.88</td>
</tr>
<tr>
<td>S1 Introduction to the course</td>
<td>4.35</td>
</tr>
</tbody>
</table>
Speaker Ratings

Logistical Ratings