



Activity Report

2016



ENERGY REGULATORS
REGIONAL ASSOCIATION

www.erranet.org

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Chairman's Message



Mart OTS

ERRA Chairman

**General Director of the
Estonian Competition Authority**

As the Chairman of the Energy Regulators Regional Association (ERRA), I have the privilege of making introductions to the 2016 Activity Report of our organisation and it is a real honour for me.

I am very proud of our organisation as it represents countries often times with very different market design, regulation and level of competition. ERRA has been built on the principles of collegiality that is we respect each other's stage of development, other views and other regulatory practices. This basic principle has contributed to our current status and achieved results.

I take personal pride for this report because – as the following pages will reveal it – 2016 has been outstanding and exceptional in ERRA's history for many reasons. I would like to point out only a few.

ERRA realised the growing number of member applications from non-core ERRA regions and decided to eliminate differentiation among members on geographical basis thus regulators irrelevant from their region can assume full membership in ERRA. Thus, the current ERRA Presidium includes fellow regulators from Nigeria and Oman next to “old member countries” such as Estonia, Hungary, Latvia, Romania and Turkey.

2016 stands out as the Hungarian Government realised the importance that ERRA plays on the international arena by assuring us an inter-institutional legal status. A further step in institutional development has been the purchase of office space in Budapest in 2016.

The modernised ERRA website (www.erranet.org) is another important achievement of 2016. Hopefully, you can agree with me that it is on top of new design, modern web technologies and online tools.

Another highlight of the year was the 15th ERRA Energy and Investment Regulation Conference organised on October 17-18 in Bratislava, Slovakia under the patronage of the Slovak Presidency of the European Union. The Conference was one of the most successful ones ever organised by ERRA and will serve as a model for future similar events.

In terms of activities focusing on members, I would like to highlight our internal programs aimed at member organisations offering exchange programs and/or ad hoc consultancy services.

There is much more in this report and I wish you good reading! I hope you will decide either to join our activities in 2017 in person or follow us virtually through our new website, our newsletter, Twitter or Facebook accounts! It is our vision to grow in terms of activities and members, our gates are open to new ideas and to new organisations.

To conclude I would like to take this opportunity and thank all our member regulators and partners for their fidelity, enthusiasm and support. I would also like to pay a tribute to the previous ERRA Presidium chaired by Alparslan Bayraktar for their dedicated work for ERRA over the past years!

A stylized, handwritten signature in blue ink, consisting of several loops and a long horizontal stroke.

Mart Ots

Мне, как Председателю Региональной Ассоциации Органов Регулирования Энергетики (ЭРРА), выпала честь представить Отчет о деятельности нашей организации за 2016 год.

Я очень горжусь нашей организацией, поскольку она представляет страны зачастую с очень различающейся структурой рынка, с различным регулированием и уровнем конкуренции. ЭРРА построена на принципах коллегиальности, другими словами, мы уважаем друг друга, различные этапы развития, разные мнения и отличающиеся методы регулирования. Благодаря этому базовому принципу мы смогли прийти к нынешнему статусу и к достигнутым результатам.

Я лично очень горжусь этим отчетом – как это будет продемонстрировано далее – потому что 2016 год был выдающимся и исключительным годом в истории ЭРРА по многим причинам. Я хотел бы отметить лишь несколько.

В 2016 году увеличилось количество заявлений на вступление в ЭРРА от стран, не входящих в основной регион ЭРРА, а также было решено устранить дифференциацию между членами на географической основе, таким образом регулирующие органы, вне зависимости от региона, в котором они находятся, могут стать полноправными членами ЭРРА. Таким образом, в состав нынешнего Президиума ЭРРА входят представители регулирующих органов из Нигерии и Омана, наряду с представителями «старых стран-членов, таких как Эстония, Венгрия, Латвия, Румыния и Турция.

2016 год замечателен еще и тем, что правительство Венгрии признало ту важную роль, которую ЭРРА играет на международной арене, предоставив нам межведомственный правовой статус. Дальнейшим шагом в институциональном развитии была покупка офисного помещения в Будапеште в 2016 году.

Модернизированный сайт ЭРРА (www.erranet.org) является еще одним важным достижением 2016 года. Надеюсь, Вы

согласитесь со мной, что вебсайт представляет собой пример новейшего дизайна, современных веб технологий и интернет инструментов.

Еще одним важным событием года была 15-я Конференция ЭРРА по инвестициям и регулированию энергетики, организованная 17-18 октября 2016 года в Братиславе, Словакия, под патронажем Словацкого Председательства в Европейском Союзе. Конференция была одной из самых успешных конференций, организованных ЭРРА, и послужит примером для будущих аналогичных мероприятий.

Что касается деятельности, направленной на членов, я хотел бы отметить наши внутренние программы, нацеленные на членские организации, включающие программы обмена и (или) специальные консультационные услуги.

В этом отчете есть содержится гораздо больше информации, чем было упомянуто, желаю Вам приятного чтения! Надеюсь, что Вы решите либо присоединиться к нашей деятельности лично в 2017 году или будете следить за нами виртуально посредством нашего нового веб-сайта, наших информационных бюллетеней, через наши странички в Фейсбуке, Твиттере! Наша перспектива – это расширение нашей деятельности и рост количества наших членов, наши двери открыты для новых идей и новых организаций.

В заключение я хотел бы воспользоваться предоставленной возможностью и поблагодарить все наши членские регулирующие организации и всех партнеров за их преданность делу, за энтузиазм и поддержку. Я также хотел бы выразить благодарность предыдущему Президиуму ЭРРА, в котором председательствовал Альпарслан Байрактар, за самоотверженную работу на благо ЭРРА в прошедшие годы!

Март Отс

Председатель ЭРРА

Генеральный директор Агенства по конкуренции Эстонии

بصفتي رئيس الرابطة الإقليمية لمنظمي الطاقة (ERRA) أشرف بإلقاء الضوء على تقرير أنشطة منظمنا لعام 2016م:

إنني فخور جداً بمنظمنا باعتبارها تمثل أقطاراً لديها أسواق طاقة ذات تصميم وتنظيم ومستوى منافسة مختلفة جداً. لقد أنشأت ERRA على مبادئ التضامن ولذلك فإننا نحترم درجة تطور كل منا ووجهات النظر والممارسات التنظيمية الأخرى. لقد أسهم هذا المبدأ في تطورنا الحالي وحقق نتائج ملموسة.

على المستوى الشخصي فإنني فخور بهذا التقرير لأن عام 2016م كان عاماً رائعاً واستثنائياً في تاريخ ERRA وذلك لأسباب عدة سأوضح بعضاً منها.

لقد أدركت ERRA العدد المتنامي لطلبات العضوية المقدمة من أقاليم مختلفة خارج نطاق ERRA الأساسي وقررت عدم التمييز بين الأعضاء على أساس جغرافي وبالتالي فإن المنظمين بصرف النظر عن أقاليمهم يمكنهم الحصول على العضوية الكاملة في ERRA وبالتالي فإن هيئة رئاسة ERRA الحالية تضم منظمين من نيجيريا وسلطنة عمان بالإضافة إلى أعضاء الدول القدامى كإستونيا والمجر ولاتفيا ورومانيا وتركيا.

لقد شهد عام 2016م كما لاحظت الحكومة الهنغارية الأهمية التي تتمتع بها ERRA في الساحة الدولية بأن هيأت لنا الوضع القانوني الملائم. هنالك أيضاً خطوة أخرى في التطور المؤسسي في عام 2016 تتمثل في شراء وتملك مكتب ERRA في بودابست. إن موقع ERRA الإلكتروني الذي تم تحديثه (www.erranet.org) يعد إنجازاً هاماً في عام 2016م. لعلك توافقني بأنه من أفضل التصاميم الحديثة وأحدث تقنيات المواقع الإلكترونية وأدوات الإنترنت.

كما شهد عام 2016 أحد الأنشطة البارزة المتمثلة في عقد المؤتمر التنظيمي الخامس عشر للطاقة والاستثمار الذي قامت بتنظيمه ERRA في 17-18 أكتوبر 2016 بمدينة براتسلافا بجمهورية سلوفاكيا تحت رعاية الرئاسة السلوفاكية للاتحاد الأوروبي. لقد كان المؤتمر من أنجح المؤتمرات التي نظمتها ERRA وسيكون بمثابة المثال لتنظيم أنشطة مشابهة في المستقبل.

بالنسبة للأنشطة التي تركز على أعضاء ERRA أود إلقاء الضوء على برامجنا الداخلية الموجهة للمنظمات الأعضاء التي تقدم برامج تبادلية و/أو خدمات استشارية. هنالك الكثير في هذا التقرير أتمنى أن يكون موضع اهتمامكم كما أرجو أن تشاركوا شخصياً في أنشطتنا لعام 2017م أو متابعة برامجنا عن طريق موقعنا الإلكتروني الجديد، أو صحيفتنا الإخبارية المختصة، تويتر أو الفيسبوك. رؤيتنا المستقبلية هي التوسع في مجال الأنشطة والعضوية. أبوابنا مفتوحة للأفكار والمنظمات الجديدة. في الختام أنتهز هذه الفرصة لأقدم بالشكر لجميع المنظمين الأعضاء والشركاء لإخلاصهم وحاسمهم ودعمهم. كما أود أيضاً أن أشيد بهيئة رئاسة الرابطة السابقة برئاسة البارسلان بايراكتار (Alparslan Bayraktar) لإخلاصهم وتقانيهم أثناء عملهم في رئاسة الرابطة خلال السنوات السابقة.

مارت أوتس

رئيس الرابطة الإقليمية لمنظمي الطاقة (ERRA)

المدير العام لهيئة المنافسة الاستونية

Highlights of 2016

JAN

First
virtual Committee
meetings
organized



FEB

4th Training
Course: Renewable
Energy Regulation

MAR

2nd Training
Course:
Introduction to
Water Utility
Regulation



Member-to Member
Projects:
Georgia-Lithuania and
Macedonia-Turkey



APR

Ad-hoc Consultancy
Project for ECOWAS
Regional Electricity
Regulatory Authority
(ERERA)

MAY

Bhutan Electricity
Authority joins ERRA

New Presidium
Members elected



Energy
Regulatory
Innovation Day
(ERID)

JUN

Ad-hoc Consultancy
Project for the
Public Services
Regulatory
Commission
of Armenia

14 th ERRA Summer School organized	JUL	2 Research Papers published on Energy Storage Possibilities and Pumped Storage Hydroelectric Power Plants	
AUG	Benchmark Analysis on Dispute Settlement Practice and Complaint Handling Procedures	SEP	New Educational Workshop on Network Codes
	OCT		15 th ERRA Conference opened by Prime Minister of Slovakia, Mr. Robert Fico
ERRA Regulatory Research Award 2016 Ceremony held		New ERRA website launched	
NOV	Meeting of Regional Associations of Emerging Markets		5 th ERRA Training on Principles of Natural Gas Market Regulation
29 th CER (Certified Energy Regulator) certificate awarded	DEC	Date and Venue of the 16 th ERRA Conference published: September 25-26, 2017 in Astana, Kazakhstan	

About ERRA

The Energy Regulators Regional Association (ERRA) is a voluntary organization comprised of independent energy regulatory bodies primarily from Europe, Asia, Africa, the Middle East and the United States of America. There are now 30 full and 7 associate members working together in ERRA.

The Association's main objective is to increase exchange of information and experience among its members and to expand access to energy regulatory experience around the world.

ERRA Full Members



Albanian
Energy Regulator



Public Services
Regulatory Commission
of **Armenia**



Tariff (Price) Council of
Azerbaijan



Bhutan
Electricity Authority

NEW Member



State Electricity
Regulatory Commission
of **Bosnia and
Herzegovina**



Energy and Water
Regulatory Commission
of **Bulgaria**



Electricity Sector
Regulatory Agency of
Cameroon



Croatian Energy
Regulatory Agency



Estonian
Competition Authority



Georgian National
Energy and Water Supply
Regulatory Commission



Hungarian Energy and
Public Utility Regulatory
Authority



Committee on Regulation
of Natural Monopolies and
Protection of Competition
of **Kazakhstan**



State Agency for Fuel
and Energy Complex of
the **Kyrgyz Republic**



Public Utilities
Commission of
Latvia



National Commission
for Energy Control and
Prices of **Lithuania**



Energy Regulatory
Commission of
Macedonia



National Energy
Regulatory Agency of
Moldova



Energy Regulatory
Commission of **Mongolia**



Nigerian Electricity
Regulatory Commission



Authority for Electricity
Regulation of **Oman**



National Electric Power
Regulatory Authority of
Pakistan



Energy Regulatory Office
of **Poland**



Romanian Energy
Regulatory Authority



Federal Antimonopoly
Service of
Russian Federation



Electricity and Co-
Generation Regulatory
Authority of
Saudi Arabia



Energy Agency
of **Serbia**



Regulatory Office for
Network Industries of
Slovakia



Energy Market
Regulatory Authority of
Turkey



National Energy and
Utilities Regulatory
Commission of **Ukraine**



Regulatory and
Supervisory Bureau of
Electricity and Water of
Dubai, **UAE**

ERRA Associate Members



Regulatory Commission
for Energy in Federation
of **Bosnia and
Herzegovina**



Regulatory Commission
for Energy in
Republika Srpska,
Bosnia and Herzegovina



ERERA: ECOWAS (Economic
Community of West African
States) Regional Electricity
Regulatory Authority



Public Utilities
Regulatory Commission
of **Ghana**



Energy and Mineral
Regulatory Commission
of **Jordan**



Energy Regulatory Office of
UNMIK



National Association
of Regulatory Utility
Commissioners, **USA**

ERRA has firmly established a sustainable association focused on energy regulation. To date almost 1 billion people receive energy services from companies regulated by ERRA members.

The ERRA website (www.erranet.org) gives access to information on ERRA members, numerous issue papers and analytical documents of the standing committees, conference proceedings of the ERRA Energy Investment and Regulation Conferences, training programs and training podcasts and other useful documents and publications of international organizations engaged in the energy sector worldwide.

ERRA Presidium



Mart OTS
ERRA Chairman
Director General
ECA, Estonia



Attila NYIKOS
ERRA Vice-Chairman
Vice-President for
International Affairs
HEA, Hungary



Anthony AKAH
Presidium Member
Acting Chairman
NERC, Nigeria



Amer Saif AL HINAI
Presidium Member
Chairman & Non-
Executive Member
AER, Oman



Rolands IRKLIS
Presidium Member
Chairman
PUC, Latvia



Maria MANICUTA
Presidium Member
Director General
ANRE, Romania



Mustafa YILMAZ
Presidium Member
President
EMRA, Turkey

About ERRA

Interview with Alparslan Bayraktar - Former ERRA Chairman



Alparslan Bayraktar is a man who seems to have lived and breathed energy and regulation most of his working life. From the moment he graduated with a science degree from Istanbul Technical University, he has been involved with energy and the legal means to control and influence it. His background includes six years as the Commissioner in the Energy Market Regulatory Authority of Turkey (EMRA) and in conjunction with this a three year period as Chairman of the ERRA up until 2016. In 2015 he was elected to the position of Chairman of the International Confederation of Energy Regulators (ICER), taking over from Lord Mogg. A post he held for a year.

Currently, he is the Deputy Undersecretary of the Energy and Natural Resources Ministry in Turkey. A position he is aptly suited to given his time spent teaching energy law and policy at Bilkent Law School. Yes he also has a degree (LLM) in Law and Economics from Bilkent University and a further master's degree in International Relations from Fletcher School at Tufts University.

Nick Carter talks to Alparslan on behalf of the ERRA to get his views and experience of the Association he has been so influential in shaping.

NC: Firstly, congratulations on your position of Deputy Undersecretary of the Energy and Natural Resources Ministry. It is clear that you are well positioned to employ your experience to great advantage. In this regard, how do you see the impact of the Conference of Parties COP21/22 Agreement reached in Paris in 2015, affecting the global power sector over the next 5 to 10 years?

AB: After COP21/22 I am confident to say that something is about to really change as parties agreed on realities and corresponding targets. However, especially after the recent signals from the US, one of the countries with the most emissions, **it is fair to say that the long-awaited energy sector transformation is likely to happen slower than expected.** However, I am still optimistic considering the impressive development in the renewable energy penetration so far.

NC: Do you see such the COP21 Agreement having an impact on regulatory practices in the world and will or should regulatory bodies be more forceful in seeking to encourage the COP21 goals, especially when their individual governments have signed up to various nationally declared targets.

AB: I hope that regulators become more engaged with climate change mitigation efforts.

Actually, they should because the industry they regulate is the main source of emissions worldwide.

Besides, mitigation efforts can be significantly supported if market regulations and mechanisms are shaped accordingly. One simple example would be the synergy gained through the integration of emission trading mechanisms in energy exchanges. Another one can be accounting for a carbon footprint impact when designing tariffs for end users.

NC: The ERRA continues to grow in terms of scope of activities and influence. What aspects of this growth are you particularly proud to have been associated with?

AB: Indeed, **the ERRA map is becoming more and more dotted with countries from Africa, the Middle East and recently Asia, with the new comer Bhutan.** I was happy to see that after removing the regional barriers of membership many members of the ERRA immediately took the opportunity of upgrading to full member status. This showed interest in being part of shaping the Association's present and future direction.

I am very proud that regulators from developing economies find ERRA and its activities useful for their increasing needs, especially in relation to expertise and skills required to tackle ever more emerging challenges. Specifically, it is a sincere pleasure for me to see that the ERRA's well-planned agendas for various working groups address the interests of a wide range of countries with different levels of energy market liberalization.

NC: What subjects or issues do you see as being of the most importance to ERRA Members in the foreseeable future?

AB: Specifically, I believe that grid and market integration of distributed energy sources and the deployment of smart systems will be of key importance for our members, most of which are from countries with a big development potential. Consequently, increasing energy demand and the need for energy infrastructure investments ensuring efficient operation will be of high importance going forward.

NC: The Strategic Advisory Board is now well established in the ERRA. How do you feel this will develop and influence the direction the Association will take in the future?

AB: **The ERRA's well-established culture, values and prized consultation processes ensures that the different interests of our members are addressed in our discussions and working plans.**

In this regard, I believe that the Strategic Advisory Board will enable the ERRA to not only focus on the needs of its members, but also to study the challenges ahead. Hence, our regulators will be well-equipped to handle their existing and expected challenges.

NC: You have worked with the ERRA over many years and of course were Chairman for three of those years. What are your best memories and what lessons would you like to share with us?

AB: My best memories belong to the times when I saw there was a great interest in our training offerings, meaning that our expertise and willingness to share were really creating an added value for the regulatory community. Hence, we were encouraged to do more and go beyond our borders defined by our members' geographical locations. For instance, we started to provide training programmes on demand, as we did for African countries under various contracts with IRENA. The main lesson from such programmes was a verification that our shared experience created added value for the broader energy community. This was especially true for developing countries and proved to be of benefit and meaningful to their situation. Another big success, for me in ERRA, relates to the Hungarian Parliament accepting the ERRA as an inter-institutional organization and granting its existence and operations in Hungary under a specially designed

law. This achievement was the result of common efforts by the Hungarian Regulator, the ERRA Presidium and Secretariat. It shows **ERRA's growing prestige and recognition of its importance.**

NC: Having been a member of the ERRA myself, I know it is a great organisation which helps to promote energy and water regulation way beyond the shores of Europe. As it continues to grow, how would you like to influence this growth and what direction do you think the Association should take?

AB: As we all know, the energy industry, which plays a key role in the global economy, is challenged by different factors. In this regard, I believe that regulators carry a huge responsibility on their shoulders as they are the ones setting the rules of the energy markets which are expected to facilitate economic development. Therefore, I would be very pleased to see if regulators get more engaged with social and economic goals, and hence better address the requirements of working energy policies.

NC: As I live in the UAE it is great to see more and more ERRA Members coming from this Region, especially as the region seeks to introduce more regulatory practices in the future. Do you feel the ERRA should be more focused towards other regions so as to promote regulation in all its forms?

AB: I certainly believe that **ERRA should be present anywhere it can create added value**, because it is an organization dedicated to improving the quality of utility regulation towards serving social welfare needs. This is not a social responsibility, but its main reason of existence. That is basically why the ERRA's member base is geographically more diverse than any other similar organization: its membership portfolio stretches from the US to Bhutan. This may sound ambitious, but our members regulate different industries like energy, water and telecommunication, and the ERRA can help in each of these industries in accordance with its mission.

NC: The activities of the ERRA cover the regulation of water, district heating and power. Do you feel they should expand their activities into district cooling and also perhaps gas?

AB: Our working groups do not target a single industrial segment in general and if we are working on a subject

About ERRA

Interview with Alparslan Bayraktar - Former ERRA Chairman

often these cross over to many different utilities for example licensing or consumer issues cover all utilities. On the other hand, historically, the story has been mostly around the power industry, but gradually our work areas are becoming more diverse, like district cooling. It would be fair to say that the ERRA's activity topics will be much wider in the future.

NC: We are both part of the power sector and recognise that of all the utility sectors in the world this one is on the very cusp of changing beyond recognition. How do you see the ERRA's role in supporting such things as electric vehicles, smart grids, or off-grid applications and embedded generation or is this just part of the regulatory landscape to be dealt with as it arrives?

AB: As mentioned before, distributed energy sources and smart systems will be much more common than they are today, and hence our members will be spending more time on these topics in the future. Also, I believe that regulators should play a facilitating role for economic development and transformation and in this context, the ERRA is well positioned to embrace opportunities provided by electric vehicles, storage systems, smart grids, etc. This requires having a solid understanding about technical challenges and changing business models introduced in parallel with the mass deployment of such technologies. Consequently, this

understanding needs to evolve into increasing capacity building activities for our members. In a nutshell, the ERRA should be proactive.

NC: How will your future work in Turkey be influenced by your work with the ERRA and the ICER and what advice would you like to give to existing Members on how they could maximise their membership of the Association?

AB: I believe that my previous experience in energy regulation is invaluable. During this time, I gained a deep knowledge about the energy industry's components and learned how to construct a balance between the interests of policy makers, investors and consumers. In addition, I observed the importance and benefits of co-operation at a national and international level.

Therefore, I hope to utilize my regulatory experience wearing the hat of a policy maker and increase the existing coordination between the policy and decision makers and seek ways to foster international co-operation. In this regard, **my primary advice to existing members would be to work closely and continue to share knowledge and experience, be it about a success or a failure.**



Interview was made by Nick Carter

Nick Carter is a Director with Baringa Partners LLP, a highly knowledgeable management consultancy with a large energy practice based in London and more recently Abu Dhabi, UAE where Nick is based. He has lived in the Middle East for nearly 20 years and was part of the water and power restructuring team which brought a large degree of privatisation to the Abu Dhabi utilities Sector. He has served as the MD of Abu Dhabi distribution company and his last Government post was that of Director General for regulation. He was educated at University College London and is a Fellow of the Institution of Engineering Technology.

Member Activities

Tariff/ Pricing Committee

Chair
Andrijana
NELKOVA-CHUCHUK
ERC, Macedonia

Vice-Chairman
Viesturs KADIKIS
PUC, Latvia

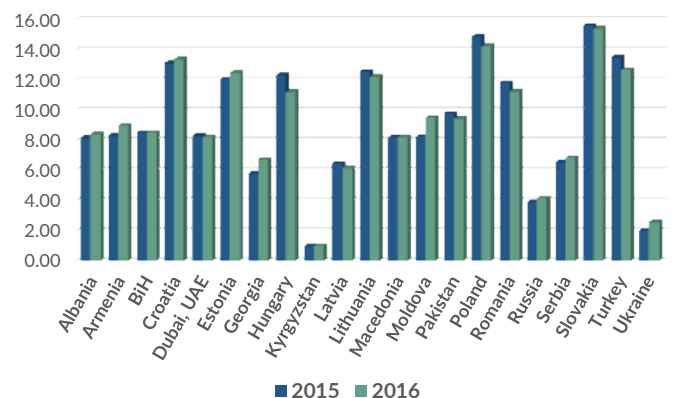
Topics discussed in 2016:

- Incentive price regulation (X factor determination). Introduction of the results of the Efficiency Analysis Questionnaire
- Possible volume adjustments during tariff setting process (Liberalization of electricity markets)
- Regulatory aspects of the introduction of EU Gas Network Codes with special focus on tariff setting/pricing method consequences - Benchmarking among committee members - Introduction of the results
- Potential tariff elements, as barriers of cross border trade
- Conditions to publish tariff and price information supporting customers during the switching process (changing supplier)
- Potential amendments of the renewable support schemes
- Status of the energy industry (electricity and gas) in Kyrgyzstan with special emphasis on tariff regulation
- Feed in tariffs application in member countries
- The changing role and tariff setting practice of regulators on the liberalized markets (Liberalization of electricity markets)
- The changing role and tariff setting practice of regulators on the liberalized markets - cost allocation among network activities and commodity related cost elements
- Transmission Tariffs in Electricity Market and in Natural Gas Market
- Setting Loss Target Rates for Distribution Companies
- Investment costs in new natural gas transmission and distribution networks
- Weighted Average Cost of Capital (WACC) Calculation
- Market structure, experiences and process of reforms in Oman and Saudi Arabia
- Experiences with electricity tariff reforms

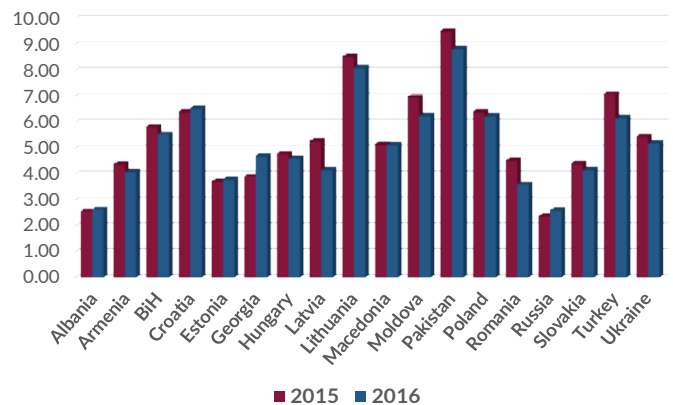
Tariff Database

- Official electricity and natural gas data of the ERRA members countries from 1998
- Last updates: Q1-Q2 2016
- Available at: <http://tdb.erranet.org>

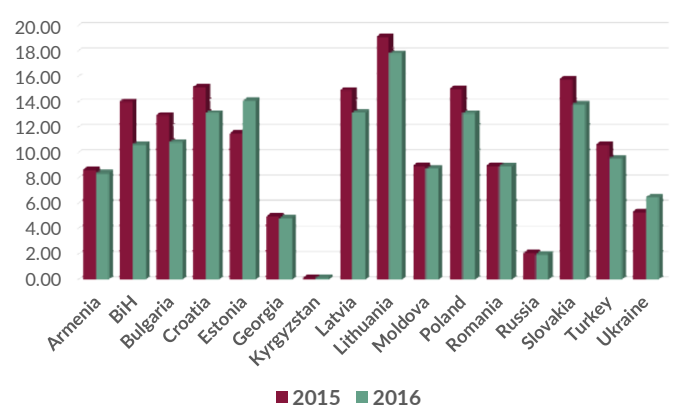
Average Electricity Residential Prices in EURCENT/KWH



Average Electricity Wholesale Prices, EURcent/kWh



Average Gas Residential Prices in EUR/GJ



Member Activities

Licensing/ Competition Committee

Chairman
Saša ŠČEKIĆ
SERC, Bosnia and Herzegovina

Vice-Chairman
Mustafa GOZEN
EMRA, Turkey

Topics discussed in 2016:

- Smart metering (cost benefit analysis of potential dissemination and results of Pilot Projects)
- Conditions and method to publish tariff and price information supporting customers during the switching process (changing supplier) on the free market
- Security of supply measures in electricity and gas system - operation of critical infrastructure during extreme weather conditions
- Regulatory support of the electricity market liberalization; retail electricity market - Effective DSO unbundling. Shared services between the unbundled companies (information and different infrastructures) - Regulation, implementation, and monitoring
- Proposal for simplified procedure licensing wholesale traders in ERRA member states
- Regulatory monitoring of network companies and suppliers - Methodology, best practices and recommendations
- System Effects of Intermittent Renewable Generators – Balancing
- Overview of the Energy Storage Possibilities to Support the Electric Power System
- Regulatory support of the electricity market liberalization; retail electricity market - Procedure determining/ designation of the supplier of last resort
- Wind Energy Legislation
- Regulatory tasks supporting the deployment of E-Mobility
- Pumped storage hydroelectric power plants: Issues and applications
- **+Benchmarking Analysis:** Ancillary services and Balancing markets - market models, responsibilities, experiences and regulatory aspects
- **+Database** on Operating Wholesale Market Monitoring Network

Customers and Retail Markets Working Group

Chairman
Margus KASEPALU
ECA, Estonia

Vice-Chairman
Romulus TATAR
ANRE, Romania

Topics discussed in 2016:

- Regulatory Practices Handling Illegal Consumption (Consumption Without Contract) – Case Studies from Pakistan and non-ERRA countries (India, Brazil and South Africa)
- Calculation of the Connection Fee for End-Users of Electricity, Prescribed by the Rule Book on Methodology on Determination for the Fee for Connection to the Distribution Network
- Water Regulation in NRAs: Similarities and Differences between Energy and Water Supply Related Customer Complaint Handling Issues and Practices – Case Studies from Hungary, Lithuania and Moldova)
- Antimonopoly and Tariff Regulation in the Public Utilities Sector in Russia
- Identifying the Different Categories of Suppliers with Public Obligations – Case Study of Macedonia and discussion of the Benchmark Analysis
- Typical Content of Proposed Contract Between End-Users and DSO – Case Study of Saudi Arabia
- Alternative Dispute Settlement and How Contract Disputes are Solved – Real cases from Slovakia and Lithuania
- Mechanisms of Connecting End-Users – Case Study of Georgia
- Elements, Steps and Time-Frame of the Switching Process. Handling Payment Obligations during the Switching Process – Case Study of Moldova and discussion of the Benchmark Analysis
- Energy Cartels and their Impact on Consumers – Case Study of Russia
- Customer Care at EVN Macedonia. Managing the Customer Needs of an Emerging Electricity Market
- **+Publication:** Benchmark Analysis on Dispute Settlement Practice and Complaint Handling Procedures in ERRA Countries

Member Activities

Interview with Andrijana Nelkova-Chuchuk - Chair of the ERRA Tariff/ Pricing Committee



Andrijana Nelkova-Chuchuk is currently the Deputy Head of the Economic Department as part of the Energy Regulatory Commission (ERC) of the Republic of Macedonia. She has lived and worked in the capital city of Skopje for over 20 years. It is the city of her studies, firstly obtaining a Bachelor of Accounting and then later her Masters in Economics both from the University of Ss 'Ciril and Methodius'. Consequently, armed with these excellent qualifications it is no wonder that Andrijana works in the field of economics as applied to energy regulation. Her challenge is particularly wide as the ERC is responsible for regulating electricity, water, wastewater, natural gas, district heating and oil and the oil derivatives sector. Despite this wide spectrum of responsibilities, Andrijana still finds time for work with the ERRA as Chair of the Tariff and Pricing Committee.

Nick Carter, on behalf of the ERRA, speaks to Andrijana about her challenges and responsibilities.

NC: *I would like to start with a challenging question to you Andrijana. How do you manage to deal with so many different products from a regulatory and economic perspective and what cross-over strategies do you employ in this regard?*

ANC: It's true that ERC Macedonia has many responsibilities in regulating quite a long list of sectors and from 2016 also water services. Having in mind that the foundation of the regulatory body is based on economic theory, then such regulation is the field where economists can do their best. However, it requires a multidisciplinary approach and I can say that our joint work with engineers and lawyers is what makes the best strategy for successful work. Well organized teamwork is the answer to this challenge.

NC: *Your work for the ERC is unquestionably varied so how has the ERRA as an organisation helped to support your work areas?*

ANC: ERC Macedonia has been a full ERRA member from May 2004 and since then has been represented in the ERRA Presidium, Standing Committees, Working groups, Summer Schools, Workshops and many conferences. The variety of events that the ERRA offers gives an opportunity for member organizations to exchange experiences and learn from each other about all topics which they are facing on a daily basis.

Topics covered within ERRA are the latest in the work of regulators and at the same

time the association is giving an opportunity for learning from the most prominent professionals in the field of regulation, both on theoretical and practical field. Also, ERRA has created a Tariff Database which is a valuable source of data from all member countries. It can be used by all members; and we all take advantage of this.

NC: *I understand you have attended several ERRA training courses. Do you feel the Association is now an intrinsic part of a regulators career development?*

ANC: Quality management of human resources means investing in the knowledge of employees from which the regulators gain multiple benefits. In this sense, attendance of the ERRA Summer Schools, Training programmes and Workshops has become a standard in the process of building successful personnel in the national regulatory bodies. I have attended a number of ERRA events, which I consider an intrinsic part of my personal career development.

NC: *What subjects or issues do you see as being of the most importance to ERRA Members in the foreseeable future?*

ANC: Among many other important issues and subjects that are coming from the regulated sectors, I think the two most important ones that ERRA Members will face include; the public visibility of the work of the

Member Activities

Interview with Andrijana Nelkova-Chuchuk - Chair of the ERRA Tariff/ Pricing Committee

national regulators and the second one is their independence. These two issues, in my opinion are closely related to each other and need to be addressed in a systematic way.

In this sense, I see the issue of independence of the regulators from an employee's point of view. I think that the regulators will be challenged to focus on finding solutions to strengthen the positions of their employees, in order to prevent a drain of personnel in which they have invested for years.

NC: *Your employer the ERC has recently taken over the responsibility for the regulation of water. How do you feel the ERRA can assist in this new challenge?*

ANC: **Regulation of water services has become a field of work for many regulators within the ERRA. ERC Macedonia gained this authority at the beginning of 2016. Since then, we have been in a process of learning about the water services sector and preparation of the secondary legislation. We have attended ERRA Water Regulation Training seminars and ERRA Water Regulation Workshops which we consider a valuable experience.** I hope that this issue will continue to be in the focus of ERRA in the next period, and we'll use the opportunity of the assistance that ERRA is giving to member organizations. Establishing a Working group for water regulation can be one way for continuous cooperation among water regulators within ERRA.

NC: *From your own perspective, do you feel that regulators should start to factor in renewable energy targets as support mechanisms in the structuring of tariffs or is this something that should be dealt with as changes happen?*

ANC: Renewable energy targets as support mechanisms in the structuring of tariffs are different from country to country. The Macedonian experience at the moment is that ERC Macedonia is licensing the producers from renewable energy sources, granting the privileged producer status and keeping the Registry of Privileged Producers, while the Government is setting the quotas and the feed-in tariffs of renewables.

Since the end users prices are influenced by these mechanisms, I think that the regulators should participate in setting the renewable energy targets.

NC: *What are your greatest challenges in your work environment at the moment and are they general regulatory challenges or specific to your organisation?*

ANC: At the moment, there are two big challenges for ERC Macedonia. The first is the water services regulation, adoption of the bylaws and setting the first regulated tariffs, starting from 2018. The second challenge that other ERRA countries, which are also part of the Energy Community, are facing, is transposition of the Third Energy Package of EU Directives and Regulations into domestic legislation, aiming for integration into regional and EU internal energy markets.

NC: *Please tell me about your Twinning Project under the Ad Hoc ERRA member projects framework. I understand this involved your organisation (ERC) working with the Energy Market Regulatory Authority of Turkey?*

ANC: ERC Macedonia and EMRA Turkey were approved a Twinning Project in the framework of ERRA Member-to Member project. We exchanged experiences, learned from each other about good regulatory practices and focused on specific issues that were of highest importance at that moment for the two institutions.

For us, it was a unique opportunity to have this project with the experienced professionals that EMRA Turkey has and we are happy that we learned a lot about their institution and the energy markets in Turkey.

These kinds of projects are an excellent opportunity to enhance member-to-member collaboration and to develop regulatory capacities of individual regulators. Therefore, I strongly recommend ERRA members to apply for this type of project.

NC: *ERRA Committees are a great way of helping energy regulators from different countries, but what other lessons would you like to share with us, especially as you are Chair of the Tariff and Pricing Committee.*

ANC: It's a real pleasure to work together with other members of the Tariff and Pricing Committee which

are all experienced professionals in their own institutions. **Participation on meetings of the Committee is an opportunity that brings not only knowledge, but also good friendships. Apart from building personal and professional capacities it also offers lessons of different cultures, customs and habits.**

NC: *How has being Chair of the Tariff and Pricing Committee helped in the delivery of your duties in the ERC?*

ANC: I was elected as Chair of the Committee in October 2016 and since that first Committee meeting as Chair, I've had the opportunity to help the ERRA Secretariat in organizing the Joint Virtual meeting of the Tariff/ Pricing and Licensing/ Competition Committees. Being a Chair of a Committee is an incentive for my further professional development and I think that it will also help me advance my organizational skills.

NC: *Overall, the ERRA is a perfect example of an organisation that reaches out to other global regions. How do you see the Association developing over time?*

ANC: Since its establishment, the ERRA as an association has grown in many ways; the number of member organizations, events and the most importantly, **the quality of output is growing year by year. Having members from different regions is an advantage for the Association and I think that it will bring new perspectives from which we will all benefit. In the future I see the ERRA as a big family of regulatory bodies reaching towards our common goals.**



Interview was made by Nick Carter

Nick Carter is a Director with Baringa Partners LLP, a highly knowledgeable management consultancy with a large energy practice based in London and more recently Abu Dhabi, UAE where Nick is based. He has lived in the Middle East for nearly 20 years and was part of the water and power restructuring team which brought a large degree of privatisation to the Abu Dhabi utilities Sector. He has served as the MD of Abu Dhabi distribution company and his last Government post was that of Director General for regulation. He was educated at University College London and is a Fellow of the Institution of Engineering Technology.

New Projects

In order to promote the exchange of technical information and best practices among its Members and to expand the in-house consultancy, research and advisory capacity of the organization, in 2015 ERRA established limited number of subsidies for the ERRA Ad Hoc Member Projects and Ad Hoc Consultancy Projects, as part of the ERRA Workplan. ERRA offered subsidies for select programs in its 2015/2016 Workplan period. The program was entirely funded by ERRA.



Expert Exchange Project

Georgian National Energy and Water Supply Regulatory Commission (GNERC)

National Commission for Energy Control and Prices of Lithuania (NCC)

Main areas of cooperation:

- Natural gas market structures and main players in Lithuania and in Georgia
- Investment evaluation and adjustment in Lithuanian natural gas sector
- Regulation on Wholesale Energy market Integrity and Transparency (REMIT).
- Pricing in Georgian and Lithuanian natural gas sector, WACC setting: principles and rules.
- Licensing rules and monitoring of licensed activities in Georgia and in Lithuania.
- TSO (Amber Grid) profile, activity and projects.
- Ensuring technical safety in natural gas sector: roles and responsibilities
- Overview of district heating regulation
- Connection to the transmission and distribution network

Twinning Project

Energy Market Regulatory Authority of Turkey (EMRA)

Energy Regulatory Commission of Macedonia (ERC)

Main areas of cooperation:

- Investment costs in natural gas market
- Loss target rates for DSO's in Electricity
- Market Weighted Average Cost of Capital (WACC) Calculation

For more details and project reports please visit:

<http://erranet.org/member-activities/member-to-member-projects/>

Ad-hoc Consultancy Projects

for ECOWAS Regional
Electricity regulatory
Authority (ERERA)

Consultant:
William H. Smith, USA

Objective:

- To support ERERA with technical assistance/ expertise for adapting **Administrative Procedures for Regulation (APR)**

Scope:

- Applicability
- Description and Operation of ERERA
- Reference to the Administrative Procedures for Regulation
- Filings and Service
- Rulemaking and Public Consultation Initiated by ERERA
- Proceedings Initiated by Application or Complaint
- Hearing Process
- ERERA Decisions
- Confidential Information

The document “Proposed Administrative Procedures for Regulation for ERERA” and the online presentation of the final conclusions of the project by William Smith – available on the ERERA website.

for the Public Services
Regulatory Commission
of Armenia (PSRC)

Consultant:
Igor Zakharov, France

Objective:

- Improvement of the effectiveness regarding the **connection of new consumers** in Armenia

Scope:

- Analysis of Legal Aspects
- Analysis of Operational Aspects
- Guiding Principles for the Connection Procedure
- Recommendations for Optimisation of the Connection Procedure in Armenia

The study was written in Russian with an executive summary in English, all published on the ERERA website.



Training Courses

Learning from Peter Kaderjak



Dr Peter Kaderjak is a person who knows a great deal about the subject of energy regulation, as not only has he practiced regulation in a variety of forms, but researches and teaches it as well. Peter is currently the Director of the Regional Centre for Energy Policy Research (REKK) based in Hungary at the Corvinus University of Budapest. He has a PhD in Management and Business and an MSc in Economics also from the same University. However, in between his graduation and return he held the office of Chief of Cabinet of the Ministry of Economic Affairs for the Government of Hungary and following this he served as the President of the Hungarian Energy Office as the national regulator. His involvement with the ERRA goes back to this period when he was made the first Chairman of the Association. His work continues to this day with the ERRA where he oversees a wide range of the in-house energy regulatory training programmes.

Nick Carter seeks to learn from Peter on behalf of the ERRA.

NC: Peter, I would like to start our discussions on how you helped shape the ERRA in the past, especially as you were its first Chairman. Consequently, looking back how do you feel the Association has developed and what are the great success stories you take from this development?

PK: The primary objective of the ERRA in 2000, was the promotion of the exchange of knowledge regarding good energy sector regulatory practices among its members who initially were countries from the former Soviet bloc. Their main concerns were transforming their sectors to being more market oriented and competitive. My own home country, Hungary was preparing for energy sector liberalization and determining the role that regulators had to play in the transformation process such as, price and tariff reforms, company unbundling, licensing and market rule preparations.

Overall, ERRA members were struggling with the tremendous task of creating secure, financially and environmentally sustainable energy sectors so we provided several ways to promote the needed exchange of regulatory knowledge, including thematic committee meetings, workshops, a regular annual investment conference and in-house training for member regulatory authorities' staff. I am proud that this happened under my presidency and due partly to my personal initiative that the Presidium and the General Assembly of ERRA concluded in 2002 that **training should be a central product the Association provides to its members.**

Today, the ERRA has grown from 12 to 30 full members with 7 associate members, including energy regulators from Central and South Eastern Europe, CIS countries, Africa and the Middle East. Over the last 15 years, more than 2,000 key personnel, including Commissioners of

regulatory authorities have completed different ERRA courses. Consequently, **the Association has helped create a common understanding of principal regulatory issues across the geographic region it covers.**

In addition, training activities are now available for non-ERRA member regulatory staff as well so **the Association can claim to be a leading hub of regulatory knowledge for emerging economies from around the world.** I consider this development as the single most important success of the Association.

NC: Your work continues with the ERRA, especially in the field of short-course training so where do you see training focusing on in the future?

PK: Beyond keeping and further improving our training programmes on core regulatory tasks related to tariff and price, electricity and gas sector regulation, we should develop new training products reflecting on the regulatory challenges posed by the ongoing low carbon transition of the energy sector. Regulatory challenges to assist with the integration of renewables, improving the flexibility of the electricity markets and promoting innovation should be increased and better use made of online training techniques in the future.

NC: During your time as Training Director for the ERRA what feedback have you received in terms of the influence or impact on the way past students have benefited from attending ERRA training courses.

PK: Participants' on-site course evaluations are very positive and convincing. Training tends to help both

the performance of the individual plus the organisation they work for and the amount of positive feedback I receive from my fellow regulatory colleagues (I still consider myself to be part of the community) is very encouraging and is the most important reward for my ERRA training directorship.

NC: *In a linked question regarding training courses, what are your views about perhaps expanding them to be part of a modular system which might count towards some form of academic qualification?*

PK: I am highly supportive of this idea and have been promoting such a strategy whereby an upgrade of the training programme in conjunction with an appropriate academic institution could be highly beneficial. I am convinced that the possibility to, for example, earn MBA credits by successfully completing our courses could improve their attractiveness. I hope one day this proposal will succeed.

NC: *I assume there is a degree of cross over between your work for the ERRA and the Regional Centre for Energy Policy Research (REKK), so what are the key lessons in terms of academic study interacting with practical regulation?*

PK: The lessons I have learned both as a practicing regulator and a training director is the same in this regard, they perfectly interact. Theory without practice is useless for practicing regulators. Practical examples or “case studies” without sound theory behind regulatory action teaches nothing useful. **I always enjoy that ‘awakening’ moment, when our attendees suddenly make the link between theory and practice or the why and the how.**

In addition, my colleagues from REKK have developed several interactive games and exercises which allow the participants to learn how the theories and laws underlying the regulatory environment affect daily regulatory practice. For example, how incentive schemes will lead to cost efficiency improvements in regulated monopolies.

NC: *It is clear that energy regulation is at the centre of your working life and your involvement from a training and academic research perspective is highly respected, so in your view, what are the key enablers that promote successful utility regulation?*

PK: **The most important factor in successful utility regulation is the human quality of the**

regulator: their dedication to the public interest; being incorruptible and being able to resist political and business pressures. Training helps to reinforce these qualities by demonstrating the importance of sound argument and transparency. It provides substance to regulators when they need to defend a certain position.

NC: *The activities of the ERRA have expanded into the regulation of water and district heating so far. Do you feel they should encompass the regulation of other utilities such as gas or perhaps district cooling?*

PK: Gas sector regulation is already covered by a popular course. District heating and cooling are important energy sector activities with the involvement of our regulators for some of the ERRA members. Some specialized workshops could serve as pilots to test whether there is sufficient demand out there for such training courses.

NC: *I know from your work with ALTEO Zrt, which is a renewable energy company based in Hungary, that you recognise the importance of clean energy generation so do you see the COP21 Paris Agreement as having an impact on regulatory practices in the world?*

PK: Definitely and despite the partial resistance I feel from some in the regulatory community against dealing with this subject, regulators will need to become more involved with renewables, energy efficiency, Co2 markets, innovative technologies and innovative regulatory solutions in the future.

NC: *In addition, should regulatory bodies be more forceful in seeking to encourage various COP21 goals, especially when their individual governments have signed up to a range of nationally declared targets?*

PK: Regulatory bodies are well placed to get additional tasks and powers in this regard. However, legislators should not forget about providing additional financial support to help in this regard.

NC: *We both work in the power sector and are aware of the major changes that this sector will face in the coming years. How do you see the ERRA helping to support such changes, for example the introduction of electric vehicles or far more embedded generation?*

PK: Sector transition including de-carbonisation, renewables, innovative technologies and related

Training Courses

Learning from Peter Kaderjak

regulatory innovations are already on the ERRA agenda. Last year the Association organized a separate “innovation conference” on these issues and many of the above topics are now standard elements of ERRA investment conferences. In this regard, we already organise courses on renewable energy and energy efficiency and I expect this trend will get stronger in the future.

PK: The Association has just recently commissioned a study on successful demand response programmes. While it is beyond the reach of ERRA to teach customers to use already available options to optimize their energy use, the **ERRA could look to promote customer oriented thinking within the regulatory community in the future.**

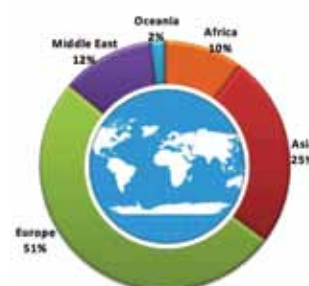
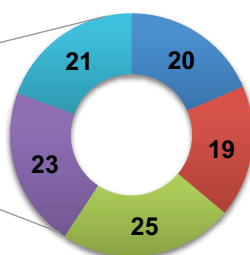
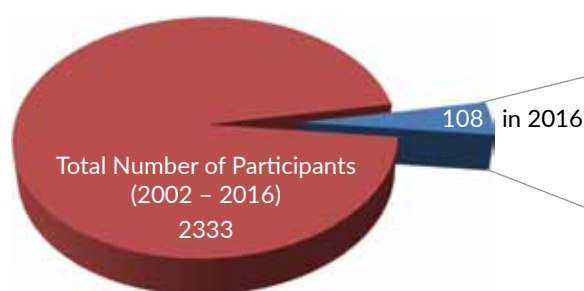
NC: Often, we tend to think in terms of how a sector meets the growing needs of its customers. However, looked at another way, how do you see regulation promoting a per capita reduction of utility consumption in the future and is there a role for the ERRA in promoting the concept of optimised consumption?



Interview was made by Nick Carter

Nick Carter is a Director with Baringa Partners LLP, a highly knowledgeable management consultancy with a large energy practice based in London and more recently Abu Dhabi, UAE where Nick is based. He has lived in the Middle East for nearly 20 years and was part of the water and power restructuring team which brought a large degree of privatisation to the Abu Dhabi utilities Sector. He has served as the MD of Abu Dhabi distribution company and his last Government post was that of Director General for regulation. He was educated at University College London and is a Fellow of the Institution of Engineering Technology.

ERRA Training Statistics



- 4th Training Course: Renewable Energy Regulation
- 2nd Training Course: Introduction to Water Utility Regulation
- 14th Summer School: Introduction to Energy Regulation
- 1st Educational Workshop on European Network Codes
- 5th Training Course: Principles of Natural Gas Market Regulation

ERRA Certified Energy Regulatory Programme (CER) acknowledges those ERRA training participants who have successfully participated in minimum 3 training programs within 3 years organized by ERRA.

The total number of CER diploms issued until December 2016: 29.



15th Energy Investment and Regulation Conference

Snapshots

October 17-18, 2016 • Bratislava, Slovakia

Host: Regulatory Office for Network Industries of the Slovak Republic (URSO)

Under the Patronage of the Slovak Presidency on the Council of the European Union

Keynotes by: Robert Fico, Maroš Šefčovič, László Varró

204 participants from **36** countries

25 sponsors and supporters - **RECORD**

46 speakers in **4** sessions

Topics

Session I: Status of the Energy Industry in Slovakia

Session II: Impact of Climate Change Mitigation Efforts on Energy Markets

Session III: SMART Regulation for Evolving Energy Markets

Session IV: Providing and Maintaining Access to Reliable Energy

Conclusions by the Host



Jozef HOLJENČÍK
Former Chairman
of the Regulatory
Office for Network
Industries, Slovakia



Since the ultimate decision was taken that RONI will host 15th ERRA Energy Investment and Regulation Conference, I wanted to make this event extraordinary. To organize a ground-breaking conference in October 2016 in Slovakia that sets a new standard and level of meetings for ERRA members, as well as guests of this important organization. Based on the feedback from satisfied participants highlighting in particular the professional and organizational level of the event, I can state today with joy and satisfaction that we managed to do so. I appreciate in particular the letter I received from top ERRA representatives. Your words of appreciation confirm that RONI once again represented Slovakia and its energy sector before our international partners and friends with dignity.

Certainly to a large extent, the success was a result of an extremely favourable social constellation, as the conference enjoyed the prestigious patronage of the Slovak Presidency of the Council of the European Union. Moreover, for the first time in ERRA

history the conference was opened by the Prime Minister of the host country, which I believe was also expression of recognition and respect for all delegates. We have also managed to attract all the key players in both Slovak and international energy markets to the conference. The gala evening was organized in one of Bratislava's historic buildings, the Reduta, and as I was told by several international guests, the original performances of Slovak artists will remain in their memory as another of the pleasant memories of the conference. Of course, my thanks go to RONI staff who through their extraordinary work effort and involvement made this conference so unique event. The success, however, is mainly the result of cooperation between ERRA and RONI. We did not underestimate anything, we listened to each other and understood what we expect from the conference. Therefore, I would like to thank ERRA staff, and especially its chairman Mr. Märt Ots for the confidence he put in us and which we, I believe, did not disappoint.

15th Energy Investment and Regulation Conference

Take Aways

Keynote

- Importance of “sensitive, transparent, strong efficient and effective regulation” reaching policy targets.
- Paying attention on grid-scale battery storage investment.
- Energy network investment has been stagnating internationally.
- A well-functioning internal energy market can compensate for our vulnerability on the global scale.
- Instead of being importers we can actually export our experience, expertise, and know-how.

Session I

Sound regulation should be future proofed.

Markets need to be able to walk before they can run.

Session II

Energy efficiency must come first.

Regulatory risk is a part of business in the renewable energy.

Session III

The demand side has tremendous potential providing flexible services to system operators.











Smart grid is not enough, you need smart utility, smart regulation, and smart person to implement it.

Session IV

National solutions vs. regional optimum.

Energy is a market and should be regulated as any other market.

Exceptional and Exclusive

	<p>The Conference was opened by the Prime Minister of Slovakia, Mr. Robert Fico</p>		<p>The Conference enjoyed the Patronage of the Slovak Presidency in the Council of the European Union</p>
<p>Keynote speaker: Maroš Šefčovič, the Vice-President for Energy Union of the European Commission</p>		<p>Keynote speaker: László Varró, Chief Economist, International Energy Agency</p>	
	<p>The Conference featured the ERRA Regulatory Research Award Giving Ceremony, the Awards were handed over by Maroš Šefčovič</p>		<p>2 anniversaries in one event: 15th birthday of ERRA and URSO</p>
<p>A special country report called „Energy in Slovakia” was issued for the purposes of the Conference</p>		<p>An exciting discussion on: Energy Union: Focus on cooperation of the Visegrad Four countries</p>	
	<p>Delegates paid a site-visit to NAFTA's gas storage in Gajary, one of the most state-of-the-art constructions of its kind in Europe</p>		<p>A mobile App helped delegates to navigate between conference sessions, search for speakers, and stay social</p>

ERRA Award

The **ERRA Regulatory Research Award** was established in 2014 to encourage, reward and expand energy regulatory research and analysis and contribute to improve regulatory practices among ERRA energy regulators.

During the 15th ERRA Energy Investment and Regulation Conference the 2016 Award Winners were announced by Maroš Šefčovič, the Vice-President for Energy Union of the European Commission and Gábor Szörényi, General Secretary of ERRA.



Award Winner #1

“Regulatory Approaches to Reliable Electricity Grids in the Kingdom of Saudi Arabia” produced by a team from the Electricity and Co-generation Regulatory Authority of Saudi Arabia. Team members are: Fayez AL-JABRI, Shareef AL-BARRAK, Nasser AL-DAHMAHI.

The overall objective of ECRA paper is to present a thorough review of the power system performance and establish regulatory measures to reduce both the frequency and duration.

ECRA paper focuses on the key points from the current ECRA KPIs regulatory framework, benchmarking, KPIs analysis and presents Network Reliability improvement Plan (NRIP) focusing on the regulatory measures that enable ECRA and service providers to drive system improvement measures. The approach taken has been to identify the key areas for improvement which will give the greatest return in enhancement terms. It shows that implementing NRIP and the incentives scheme in near future will significantly improve the overall reliability.



Award Winner #2

“A Regulatory Guide for Affordable Utility Service” prepared by Kenneth COSTELLO of the National Regulatory Research Institute, USA (in Bratislava President Kavulla received the Prize on behalf of Kenneth Costello).

This paper identifies criteria that regulators can use to assess the effectiveness of energy assistance (EA) programs directed at making utility service more affordable for low-income households. It discusses features of EA initiatives that are likely to determine their success. Regulators can refer to these features when judging specific actions taken or proposed in their countries. This paper overriding statement is that good regulation aims to achieve the highest possible benefit-cost ratio. Regulators should strive to assure that each dollar expended returns the maximum dividend, because improving effectiveness has the same effect as increasing the amount of money expended on EA.



Award Winner #3

“Implication of Competition Law Enforcement in the Electricity Sector: Comparative Analysis of the UK and the US” prepared by Francisca KUSI-APPIAH from the University of Dundee, Centre for Energy, Petroleum and Mineral Law and Policy, UK.

This research examines how the introduction of competition policies and laws within an electricity market enhance electricity security. The comparative analysis of the competition legal regimes as exist in the electricity markets of the UK and US establish a direct link between the introduction of competition policies and laws in the electricity sector and the generation capacity of electricity. However, no direct link is established between competition policies and laws, affordability of electricity and the use of clean fuels but regulatory interventions were needed to enhance the use of clean fuels and to make electricity affordable.



Special Prize

“Impact of Price Regulation Methodology on the Managerial Decisions of the Electricity DSO”. Authors are: Märt OTS, Estonian Competition Authority; Arvi HAMBURG, Tallinn University of Technology; Tarmo MERE, Elektrilevi; Tiit HÖBEJÕGI, Elektrilevi and Einari KISEL, World Energy Council (in Bratislava Märt Ots represented the Team).



2016 ERRA Award Giving Ceremony

The Papers and their video summaries by authors are available at:

<http://www.erranet.org/knowledge-base/erra-regulatory-research-award/>

Advisory Committee of the ERRA Award 2016

- Robert ARCHER – Chair of the Advisory Committee, USA
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- Vitaliy KOROLEV – Federal Antimonopoly Service (FAS), Russian Federation
- Konstantin PETROV – DNV-GL Energy & Sustainability, Germany
- Gábor SZÖRÉNYI – Energy Regulators Regional Association (ERRA)
- Zlatko ZMIJAREVIC – Croatian Energy Regulatory Agency (HERA), Croatia

Submission is open for the ERRA Regulatory Research Award 2017!



Proposed Research Fields:

- electricity system regulation
- gas system regulation
- district heating regulation
- water supply utility regulation
- regulatory governance

For more information please refer to the Call for Paper available at the above mentioned link.

**We encourage candidates to submit publications
for the ERRA Award by May 31, 2017!**

Cooperating, Partnering

Energy Regulatory Innovation Day in Poznan

ERRA co-organized the Energy Regulatory Innovation day together with the Poznan International Fair Company on 12–13 May, 2016 in Poznan, Poland.

The ERRA Energy Regulatory Innovation Day was designed as a platform for the exchange of experience and information between energy regulatory authorities, utilities and research institutions. Under the broad umbrella of the program, the management and the staff of regulatory agencies, research institutions, energy companies and members of the financial sector interested in development and innovation came together in Poznan. The Forum was opened by Michał Kurtyka – Minister, Ministry of Energy, Poland and Abdullah Mohammad Al-Shehri – Governor, Electricity & Cogeneration Regulatory Authority (ECRA), Saudi Arabia.

On the occasion of the Forum ERRA published a publication called **Innovation and Energy Regulation** aiming to introduce the industrial tendencies, the required new smart technologies and innovative operation models together with their necessary regulatory support. The main focus is on new innovative technologies (e.g. smart metering, smart grids, storage, e-mobility and demand side response) with the potential challenges of deployment and the benefits of using them.

The report also introduces the results of the ERRA internal survey-questionnaire on the present position of ERRA members regarding innovation, regulatory support of development and implementation of new innovative technologies.



Southeast European Electricity Roadmap (SEERMAP)

ERRA with the Regional Centre for Energy Policy and Research (REKK) participates in a project called Southeast European Electricity Roadmap (SEERMAP).

The project is jointly funded by the Austrian Ministry of Environment and by the European Climate Foundation. The aim is to create a South-East Europe 2050 Electricity Roadmap and build capacities in the SEE region amongst think tanks and policy makers on long term energy planning and modelling through 4 workshops with 2 focus areas: renewable deployment and necessary transmission network developments.

4 workshops were successfully implemented:

- on Renewables in Podgorica, Montenegro and in Sofia, Bulgaria
- on Network Assessment in Tirana, Albania and in Athens, Greece



Joint project with TENVA on Distributed Generation

ERRA with the Turkish Energy Foundation (TENVA) jointly implemented a project on **License Exempted Electricity Generation** (co-funded by the European Union and the Republic of Turkey) with the aim to enhance awareness about license exempted electricity generation in Turkey and to educate possible local investors. An E-learning platform was developed for modular education on legal issues, financial planning and technology choice of unlicensed electricity generation investments (<http://lisanssizenerji.neting.hu>).



High Level Meeting of Regional Associations in Milan

ERRA and MEDREG invited Associations representing regulators of emerging economies for the fourth time, at a high-level meeting in Milan on 3 November 2016, to develop cooperation and exchange experiences in several areas of energy regulation.

The 2016 roundtable hosted by MEDREG provided updates on the most recent activities of regulators and focused on access to energy and investment environment. It gathered the following regional regulatory associations: ARIAE (Latin American and Iberian countries), ERERA (West Africa), ERRA, MEDREG (Mediterranean) and RERA (Southern Africa).

The platform addressed critical issues such as barriers to sustainable energy investments, the role played by RES in supporting off-grid solutions, the main policies enacted to increase energy access and how regulators balance the investors' and consumers' needs in the different emerging regions of the world represented by the participating regulators.

With the perspective of the World Forum on Energy Regulation (WFER) VII due to take place in Mexico in 2018 and in order to consolidate cooperation, the need to meet more often was stressed. Participants agreed that they could work together to identify a topic of common interest to be included in the WFER VII program.

The possibility of allocating an activity to each regional regulatory association in an area where they are particularly strong was envisaged, as a way of driving change in developing energy markets. This attribution of activity could result in a joint Memorandum of Understanding to be signed in early 2017.



Budapest Water Summit

ERRA was proud to support the Budapest Water Summit hosted by the Hungarian Government in cooperation with the World Water Council, under the patronage of János Áder, President of Hungary.

The Budapest Water Summit 2016 served as a strategic platform to link political decision-makers closer to technology development, financing and public perceptions. A further objective of the event was to give a momentum to the practical implementation of sustainable development goals adopted for the period of 2015 to 2030 and the Paris Climate Agreement within the UN 21st Climate Conference in terms of water management including the institutional framework reforms as necessary.

For more information please visit: <http://www.budapestwatersummit.hu/>



Cooperation with the Eurasian Economic Commission

ERRA met with Mr. Adamkul Zhunusov, Member of the Board, Minister in charge of Energy and Transport of the Eurasian Economic Commission (<http://www.eurasiancommission.org/en/>). The objective of the meeting was to discuss cooperation between the two organizations with special emphasis on ERRA's 16th Energy Investment and Regulation Conference to be organised in September 2017 in Astana, Kazakhstan.

Publications

Report prepared for the ERRA Regulatory Innovation Day,
May 12-13, 2016 in Poznan, Poland:

- **Innovation and Energy Regulation**

Editors: Gábor SZÖRÉNYI and Mariusz SWORA

Benchmark Analysis by the Licensing and Competition Committee:

- **Ancillary Services and Balancing Markets**

Authors: Péter TILESCH and Dániel SZENDY (HEA, Hungary)

Benchmark Analysis by the ERRA Working Group:

- **Dispute Settlement Practice and Complaint Handling Procedures in ERRA Countries**

Authors: Elza BERGMANE (PUC, Latvia) and
Dilek CIVAK ERDAS (EMRA, Turkey)

Position Papers by the ERRA Intern, István TÁCZI:

- **Smart Metering: Cost Benefit Analysis of Potential Dissemination and Results of Pilot Projects**
- **System Effects of Intermittent Renewable Generators (Wind, Solar) – Balancing**
- **Overview of the Energy Storage Possibilities to Support the Electrical Power System**
- **Pumped Storage Hydroelectric Power Plants: Issues and Applications**

Within the framework of Ad Hoc Consultancy Project:

- **Proposed Administrative Procedures for Regulation for ECOWAS Regional Electricity Regulatory Authority (ERERA)**

Prepared by Consultant, William H. SMITH, Jr.

Brief introduction of member organisations and their markets:

- **ERRA Members' Profile**

ERRA aims to record **video podcasts** on different regulatory topics for easy access. For the full list please refer to its dedicated webpage at:

<http://erranet.org/knowledge-base/video-presentations/>

- **Access to Gas Infrastructures: Russian Regulatory Approach**
by Anatoly GOLOMOLZIN – Federal Antimonopoly Service (FAS Russia)
- **Distributed Generation Technology**
by Luis MUNUERA – International Energy Agency (IEA)
- **The Economics and Financing of Distributed Generation Investment**
by Arnaud HENIN – Gommyr Power Networks Ltd
- **Regulatory Approaches to Reliable Electricity Grids in Saudi Arabia**
by Shareef ALBARRAK – Electricity & Cogeneration Regulatory Authority (ECRA), Saudi Arabia





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