

INTERNATIONAL CAPACITY BUILDING AND TRAINING ON REGULATION OF LOCAL PUBLIC SERVICES: THE EXPERIENCE OF THE TURIN SCHOOL OF LOCAL REGULATION

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Abstract

Regulation of local public services is a crucial field where specific training and capacity building for Public Administration and Civil Servants is needed, especially for local and regional governments and agencies.

In the last twenty years the debate on local public services constantly concentrated on liberalization and privatization. Nevertheless, local authorities still keep strong control both on strategies and on goods: furthermore, the long wave of liberalization and privatization seems fading and leaving room for a "back to public control" spread sentiment. Though public/private management of services and assets is a key issue, it leaves completely unanswered the need for a strong role of the local government in strategic decisions, regulation and control.

While for large network services (e.g. telecommunications, energy) regulation is well-established, at least in OECD countries, and it is normally operated by independent national authorities, at local level an equivalent framework for local public services does not exist or is only outlined, even though those services produce a not negligible share of the GDP and contribute significantly to people's wellbeing. Considering that local public services are provided mostly in conditions of natural monopolies and/or relevant market failures for the presence of externalities and public goods, and in a context of strong information asymmetries, regulation of these services is crucial, allowing to reach some desirable aims like, among others, the protection of consumers from market incumbents' possible abuses, equity and environmental concerns. Different sectors are at stake, e.g.: waste and water cycle, energy, transport, green and sport facilities, education, local welfare.

This paper presents an international experience, the Turin School of Local Regulation (TSLR), launched to respond to a specific and bespoke demand of education, training and research for local regulation. Indeed, local regulation shows some specific and additional issues and factors of weakness compared to regulation implemented at national level.

The TSLR is a network initiative whose activities are based on a policy-oriented approach, with the aim of spreading the culture and instruments of regulation and regulatory reform at local level, connecting academic research with local policy-makers, civil servants, professionals, local regulatory agencies. The paper presents the scientific background and the rationale of the initiative, it summarizes the history of the TSLR and it presents target beneficiaries collecting some feedbacks from participants to the training initiatives organized so far. Some pathways for future development are finally discussed.

JEL Classification

K23, L43, L51, L97

Keywords

economic regulation, utility regulation, local public services, capacity building

1. Economic Regulation of local public services: gaps in academy and in practice

1.1 Strategic dimension and peculiarities of local regulation

Local regulation is widely engaged with investment decisions, procurement, tariff setting, asset management and distributional aspects. Different sectors are at stake: generally speaking local public services refer to those sectors in which the market dimension is geographically limited by physical and technical factors like household urban waste, water and sanitation services, district heating, local public transports, green areas, sport pools and other urban services.

Considering that these services are provided mostly in conditions of natural monopolies and/or relevant market failures for the presence of externalities and public goods, and in a context of strong information asymmetries, local regulation is crucial. The potential submission to regulation of price/quality/quantity/accessibility of specific goods and services is a complex question grounded on several desirable aims like, among others, consumer protection from market incumbents' possible abuses, equity and environmental concerns. Moreover, a stable and trustful regulatory framework can strongly contribute to the attraction of investments, much needed especially in sectors where high sunk costs are required and scarcity of public funds is increasing (Guasch, 2004). This is particularly relevant for developing countries or transition economies. The case of water and sanitation services in Eastern Europe, the Caucasus and Central Asia is

emblematic: despite inheriting a well-developed network of water infrastructure from the Soviet period, since then the network has seriously deteriorated (due to lack of operation and maintenance, insufficient finance, weak institutions, as well as external factors) and faces the lack of adequate finance to improve it (OECD, 2011). Though, similar problems are observed in industrialized Countries as well. Take the case of Italy, where – again – the water and sanitation network shall be completely renewed and huge investments are required in the next years, with estimates amounting to 65.15 billion euros in the next thirty years against 38.76 billion of investments actually planned in official plans of managing authorities, of which only 8.4% will be financed by public funds (Utilitatis, 2011). Such huge financial requirements are confronted with a regulatory framework that is currently undergoing a very deep and structural reform in which investment promotion is one of the most debated issues.

In the last twenty years the international debate on local public services constantly concentrated on liberalization and privatization, in the wake of what happened with big network industries. Nevertheless, in the very last years the long wave of liberalization and privatization seems fading and leaving room for a “back to public control” spread sentiment. The debate is particularly hot with reference to the water sector, where it entwines with the ongoing wave of social thinking summarized in the motto “water as a common good”. The wave seems to date back to 1998 (Lisbon, World Water Contract) and it is animating the public opinion at international level, while its academic origins can be identified in the rich literature produced on common-pool resources and culminated in the 2009 Nobel Prize in Economics to Elinor Ostrom (Ostrom, 1990). The mobilization for the 2011 Referendum in Italy, the revolt of Cochabamba in Bolivia (Nickson & Vargas, 2002) and other initiatives in South America inspired by that event, represent some examples of this international movement. In Europe, after the launch in 2012 by the European Commission of the new instrument for legislative proposals named European citizens' initiative (ECI), the first ECI to achieve 1 million signatures in February 2013 was "Water as a Human Right" (Citizens Committee, 2013), where the exclusion of water services from liberalization is one of the key issues of the campaign. Within the international financial institutions themselves, which were the main promoters of privatizations, some skepticism or at least reflections arise on the privatization process as a panacea for enhancing economic development and improving efficiency in public service provision (Kessides, 2005). Though public/private management of services and assets is a key issue, it leaves completely unanswered the need for a strong role of the local government in strategic decisions, regulation and control. The opposition between regulation and direct public management of local public services hides a broader and deeper question: the capital of human and social resources, knowledge, information, surveillance and controls laying behind a good regulatory framework with independent agencies constitutes at the same time the basis for a good public direct management.

Concerning the regulation of these services, the presence of “power-endowed” regulators is actually not so frequent. Indeed, while regulation for large network services (telecommunications, natural gas, electricity), at least in OECD Countries, is generally designed and implemented at national level with national agencies and independent authorities, at local level the regulatory framework for urban services is usually patchy, weak or not existent at all even though these services produce a not negligible quota of the national GDP and give a relevant contribution to people well-being. Nonetheless, historically, the growing medium of regulation seems to have been in the municipalities. Concessions, franchising, licenses and authorizations issued at local level have always been accompanied by mandatory provisions and rules on price, quantity, quality, accessibility, safety and so on. Scale economies, neighbor externalities and coordination needs are at the basis of regulatory take-over by central governments. Otherwise, municipalities have generally retained a regulatory role, which is played in ways that differ alongside institutional frameworks, level of development, and cultural features of local communities.

The debate on the trade-offs related to centralized or decentralized regulation of local services is still open, especially – but not only – in developing countries: while a centralized form of regulation appears to be the best response to limited capacity in these countries and might help avoiding collusion between the local regulator and the incumbent against the centralized administrations, at the same time decentralization may favour differentiation of policies in different regions, higher level of information endowment by local authorities and better enforcement thanks to the higher level of engagement and accountability of the local administrators (Estache & Wren-Lewis, 2008).

Even in cases when the centralized solution is chosen, which is increasingly the case for water and sanitation services, a need of local regulation remains and it happens that centralized authorities coexist with regulatory activities at local level. An example is the Italian case, where regulation of water and sanitation services has been centralized in 2011 (Italian Parliament, 2011), shifting from a local and single-sector form of regulation to a national and multi-sector one (with energy); notwithstanding this regulatory overhaul, the former local regulatory authorities still exist and exert some regulatory functions.

Local regulation shows some specific and additional factors of weakness compared to regulation implemented at national level. These factors lie in the existence of “improper costs” for the regulatory activity at local level, being these improper costs able to distort the well-known model of a regulator maximizing social welfare/benefits (Becchis, 2003). Examples of improper costs borne by local regulators are the psychological, human, professional costs associated with sanctioning (removing, fining, refusing accounting outcomes, ...) in a context of tight social networks and the possible loss of future income associated with hard present decisions against regulated firms and agents.

The improper osmosis among professional roles – which is an enlarged version of the well-known phenomenon of “revolving doors” – simply amplifies these improper costs: at local level the osmosis of people among roles (politics, regulation, business, consultancy, bureaucracy, lobbying and so on) seems, anecdotally, more frequent in comparison with the national level, posing a threat to the incentive structure lying behind regulatory work (Becchis, 2003).

Other factors that can weaken the local regulation are the following: first, as already mentioned, the quality of human capital engaged in regulatory-like tasks can be significantly lower, in terms of competences and experience, than that of national governments and regulatory agencies; second, the difficulty of separating public enterprises from the damaging consequences of the political cycle is particularly challenging at local level, also for the cited osmosis phenomenon and for the length of political/administrative appointments at local level. As a consequence, investment and pricing decisions can be substantially distorted. Third, the incentive structure behind public functionaries, already weakened at local level for the cited osmosis problems, seems poorly designed in comparison with more endowed central government/agencies.

At academic level, in the field of the theory of regulation when problems of control, tuning and planning under incomplete information emerge, the focus on the institutional and market peculiarities at local level is still under preliminary scrutiny and struggles to find room in the academic and policy oriented research and education.

Indeed, the academic and policy-oriented research on the national regulation of natural gas, electricity, transport and telecommunications is a well-established stream since the literature advances in the '80s and the privatization, liberalization and regulation policies after the '90s.

At the beginning of the '80s, several contributions linked regulatory theory with game theory and information theory, in particular Baron and Myerson (Baron & Myerson, 1982) and Sappington (Sappington, 1982). Indeed, the theory of incentives and mechanism design, in the framework of game theory, can provide a very useful common approach when designing a regulatory framework. A seminal stream of work came from Weitzman (Weitzman, 1978) and Loeb and Magat (Loeb & Magat, 1979). Yet research has persisted in its focus on national regulation: as a consequence, the analysis of the peculiarities of the local dimension of regulation are far more weaker and a scientific and policy-oriented approach is missing.

1.2 Theory of regulation: not tailored for developing world?

The theoretical heritage of the theory of regulation has given fruitful results mainly in the contexts where it has been generated: the developed world. It is only thanks to J.J Laffont (Laffont, 2005) that the theory of regulation has started to give attention to the specific features of service regulation in developing economies: this work has been seminal, from a global perspective. Nevertheless, its major focus continues to be on national regulation, with some hints on the water cycle at local level. Indeed the water cycle is maybe the only service that, despite having a local dimension due to physical and technical factors, is nonetheless regulated at national level in many Countries. This peculiarity is linked to the political implications of water (water as an essential good and as a human right (UN General Assembly, 2010), and to the much heavier sunk costs and larger investments to be undertaken compared to other local services (e.g. urban waste management). Furthermore, the need to manage the relationship with big foreign investors willing to enter the market is an additional peculiarity.

Amongst the specific features of service regulation in developing countries, the role of institutions is surely a relevant one and among the most recent literature we can recall Acemoglu and Robinson (Acemoglu & Robinson, 2012). When institutions are missing or they are not strong enough under the point of view of law enforcement, markets encounter difficulties in setting up. In general, a low level of development encompasses missing markets, a situation that results in incompleteness in contracts. Contract parties suffer from limits in the capacity of rationally designing the current and especially future contract framework: in fact contracts loose relevance when unexpected circumstances arise and the distribution of present/expected weights and revenues is radically modified, leaving room to renegotiation or litigation. The institutional framework in many developing countries makes it impossible to rely on contracts (Laffont, 2005) (Estache & Wren-Lewis, 2008) (Acemoglu & Johnson, 2005). In this context, it is more difficult to establish and to enforce a regulatory framework.

In the analysis of the specific features of regulation in developing countries we should mention also the lack of human capital in the Public Administration (Estache & Wren-Lewis, 2008) (Eberhard, 2007) (Turin School of Local Regulation, 2012), trust problems and weak commitment among institutional players, as well as difficulties to enforce accountability and redistribution.

As far as redistribution is concerned, it is worth recalling the stream of research on poverty and regulation, debated by, amongst the others, Kirkpatrick and Parker (Parker, et al., 2005) and by Trillas and Staffiero (Trillas & Staffiero, 2007), which raises the question about the trade-offs between allocative and technical efficiency (as suggested by the economic theory) and accessibility/affordability issues with distributive concerns especially in lower income countries that miss a pervasive welfare state.

Finally it is important to mention that accounting standards in developing countries are frequently very poor, with consequences on cost/tariffs analysis and the prevalence of negotiations on calculations. The weak role of calculations,

due to poor accounting standard and accountability, shift the balance of decisions on negotiations and bargaining. In a poor institutional context this easily ends up in regulatory capture or corruption.

2. The Turin School of Local Regulation

2.1. International Capacity building and training on local regulation

In a global survey of economic regulators commissioned by the World Bank in 2005 (Trémolet & Shah, 2005), the lack of specialized skills in utility regulation was the most frequent constraint mentioned by respondents. The survey involved mainly energy, telecommunications and multi-sector regulators established at the central Government level. Experience shows that the quality of human capital engaged in regulatory-like tasks at local level can be even lower, in terms of competences and experience, than that of national governments and regulatory agencies. This is common to many situations and especially relevant in developing Countries (Trémolet & Shah, 2005) (Eberhard, 2007) (Estache & Wren-Lewis, 2008) (Turin School of Local Regulation, 2012) and transition economies (OECD, 2011).

Some international training and capacity building programmes at international level exist, promoted, to cite some examples, by the Public Utility Research Center at the University of Florida (<http://warrington.ufl.edu/centers/purc/>), the Florence School of Regulation (<http://fsr.eui.eu>), the Management Programme in Infrastructure Reform and Regulation at the Graduate School of Business at the University of Cape Town (<http://www.gsb.uct.ac.za/mir>), the US National Association of Regulatory Utility Commissioners (<http://www.naruc.org/international/>) and the South Asia Forum for Infrastructure Regulation (<http://www.safirasia.org/>). Nonetheless, as shown in Table 1, these programmes focus mainly on big network services (with sometimes the exception of water and sanitation services) and address central government regulatory authorities or departments. On the contrary, tailored programmes for officials from local public authorities and focusing specifically on local services are still not wide-spread. The mission of the Turin School of Local Regulation (TSLR) is to contribute to fill this gap, with a specific focus on policy-oriented research and training and on the local dimension, both in terms of sectors and target participants.

Table 1. A selection of international training and capacity building programmes on utility regulation

		PURC University of Florida	Florence School of Regulation	Management Programme in Infrastructure Reform and Regulation, University of Cape Town	NARUC International Programs	South Asia Forum for Infrastructure Regulation
Sectors	Energy	X	X	X	X	X
	Telecommunications and Media	X	X	forthcoming		X
	Transports		X			X
	Water	X		X		X
Activities	Training Courses	X	X	X	X	X
	Tailored / specialized courses; capacity building programmes	X	X	X	X	X
	Roundtables / Policy events	X	X		X	X
	Publications	X	X	X		X
	Research	X	X	X		X

Source: own processing of information collected from the programmes official websites.

2.2. The roots of the Turin School of Local Regulation

The roots of the TSLR, officially set up in 2012, dates back to 1997 when Foundation for the Environment organized the first edition of the Summer School on regulation of local public services in Torino. It was a two-week full immersive training experience intended for graduate students and officials from the Public Administration (municipalities, counties, regional bodies) and regulatory agencies. Due to the interest demonstrated to the initiative, the Summer School was replicated year by year. The real cornerstone was its internationalization made in 2009. In the four editions of the International Summer School (ISS) organized in the period 2009-2012, the organizers received more than 1,000 applications from nearly 70 different Countries (Fig. 1 and 2). 25 participants per year were selected out of them, equal to about 10% of total applications. This was the first big push for a more ambitious initiative, raising a concern on how to respond to this increasing demand of training on these topics.

Fig. 1. Trend of applications to the ISS since 2009 (first international edition)

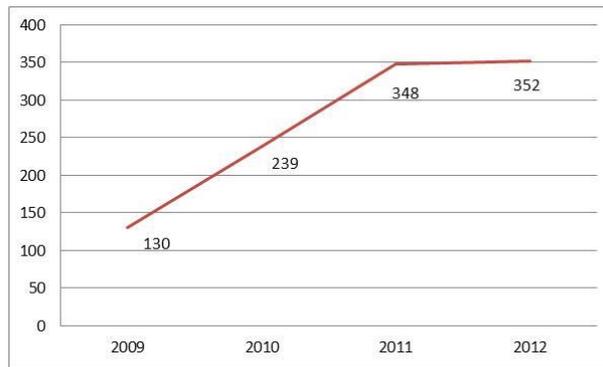
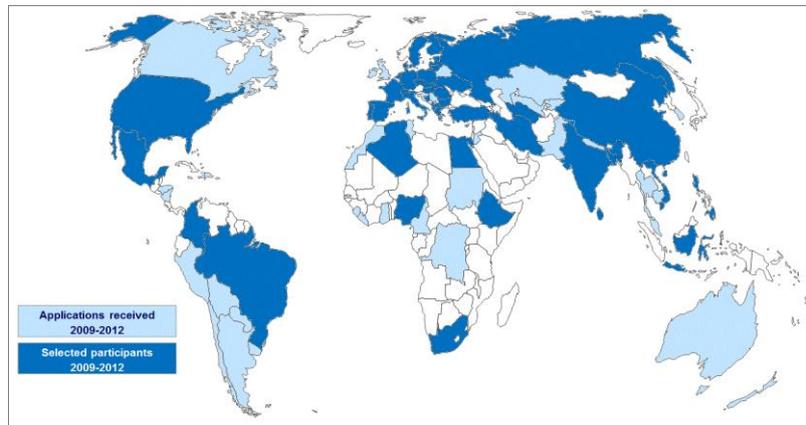


Fig. 2. Geographical distribution of ISS applicants and of selected participants in the period 2009-2012



Besides the Summer School, Foundation for the Environment developed other initiatives in the domain of regulation of local public services, in particular research activities, capacity building for local authorities and regulatory agencies and dissemination event. Moreover, in order to capitalize the rich network of researchers, experts and professionals collaborating and participating to the Summer School, in 2010 “LO.RE.NET. – Local Regulation Network of experts” was launched. In the framework of this network, some international comparative analysis on the regulatory framework of six local public services (Turin School of Local Regulation, 2012) was designed and developed (water and sanitation, urban solid waste, local public transport, district heating, distribution of electricity and distribution of gas), with the involvement of 16 Countries so far (from the NISPAcee area the following Countries participated: Armenia, Azerbaijan, Bulgaria, Czech Republic, Latvia, Slovakia, Turkey, Turkmenistan).

In this context, the TSLR was officially launched in 2012 in order to capitalize the abovementioned experience raised by Foundation for the Environment in around 15 years of research, training and capacity building on regulation of local public services.

2.3. Mission, governance and activities

The TSLR intends to contribute to the development of knowledge and instruments to:

- empower local public service administrators, and other interested actors, with the culture, the analytical instruments and the implementation opportunities of the theory of regulation that is usually known at academic level only;
- achieve a stronger and more educated human capital in the public administration, which is a condition for good regulatory practices;
- improve the supply of teaching modules on local regulation and local regulatory reform;
- support and enhance research on regulation of local public services and regulatory reform and facilitate the dissemination of the research results amongst different organisations and Countries.

The TSLR is meant to have a light structure and a lean governance. It is managed by Foundation for the Environment, in partnership with other institutions at local, national and international level. A wide partnerships with different types of entities (institutional actors, international organizations, universities and research centers, public authorities networks) is under development. The scientific mission, the education offer and the research programme is developed in accordance with the Scientific Committee, grouping international experts on local regulation and related topics.

The TSLR potentially covers all services managed at local level, namely water services, urban waste, urban public transports, district heating / cooling and energy markets, management of green areas and sport facilities, public housing and other municipal services, local welfare, finance and accountancy for local services.

Its activities are addressed to civil servants of local government bodies and consortia, local regulatory agencies / authorities, post-degree and doctoral students, researchers, financial officers, media and communication experts, utility managers, law service officers, NGOs functionaries.

Besides the International Summer School on regulation of local public services and the Local Regulation Network of Experts (LO.RE.NET.) described above, the TSLR promotes other activities, in particular: executive and professional short training sessions, on-demand training and capacity building, international seminars and round tables, in order to disseminate the culture of regulation and stimulate the policy debate, policy-oriented research papers and policy briefs, prizes and awards for researchers and practitioners. A permanent web-platform for surveys, data collection, blogging on regulation of local services and regulatory reform is under development. The School methodology adopts a policy-oriented approach, in order to allow the transfer of academic knowledge to policy makers and local stakeholders.

2.4. The networking dimension

The idea of launching LORE.NET. project, now flown into the TSLR framework, was mainly based on the awareness that there is a lack of networking initiatives at international level on research and dissemination regarding regulation of public services at local level, and more generally of management and tendering of urban services. The network intends to gather researchers, decision-makers, research and education institutions, enterprises, and other stakeholders, to promote applied research on regulation of local public services, build up an international framework and produce guidelines on regulation of local public services, enhance and facilitate exchange of information, data and best practices and allow comparison on different specific aspects of local regulation.

The following key aspects of the network deserve particular attention:

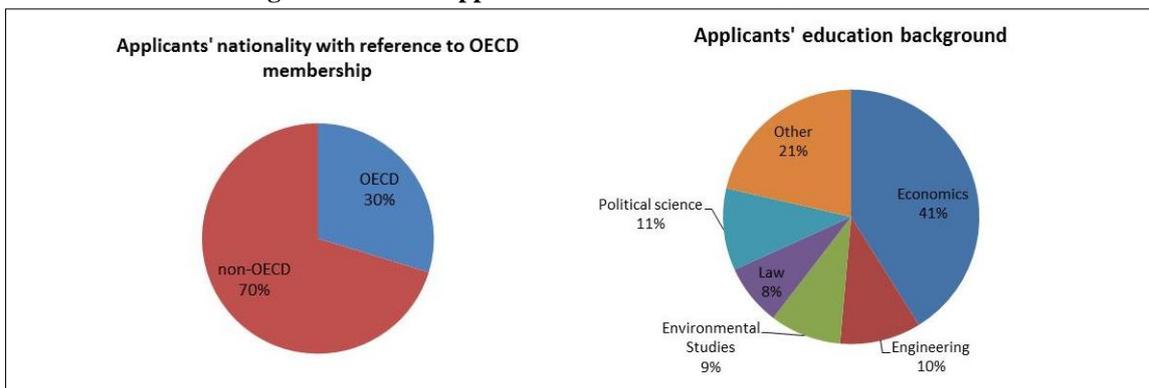
- Worldwide geographical coverage: despite recognizing the value of regional networks, which can better understand and focus on specific regional challenges and problems and design ad-hoc activities (Eberhard, 2007), the aim of the network is to reach in the future a well-spread worldwide geographical coverage. The assumption laying behind the TSLR is that mayors and local regulators, wherever they are located, face a lot of similar challenges when dealing with local investment decisions, tariff setting for local services, public procurement, asset management, distributional aspects and local welfare policies and share a common need of regulatory culture.
- Trans-disciplinary and trans-sector approach: there is growing awareness about the fact that the instruments (in terms of economic theory) applied to e.g. the study on the way a municipality manages the water service through a water utility are to some extent the same that we can apply when regulating the provision of swimming pool services, or managing sport facilities, or even dealing with welfare policies and the provision of aid and subsidies to poor people. This is linked to the fact that the design of incentives and of mechanisms that lead to make policies more effective and to stimulate reactions is a key task in all these domains. Therefore it seems to be more fruitful to keep a large scope for the TSLR in terms of sectors / topics covered while concentrating on instruments that can support regulation. In this context, multidisciplinary and interdisciplinarity are one of the most peculiar and promising characteristics in the mission of TSLR. The different background of the network participants provide very inspiring hints on possible cross-fertilization amongst different disciplines (e.g. behavioral economics, law aspects of regulation and alternative dispute resolution tools, consumer protection, competition economics, science and technology, climate change, ...) (Turin School of Local Regulation, 2012).
- Multi-stakeholder nature: the TSLR is not intended as a network of economic regulators but it aims to connect local policy-makers, public officials, professionals and consultants, academy, utilities and service providers, local regulatory agencies, NGOs, consumers' associations, chambers of commerce.
- Continuous enrichment of the network with new joining members and through osmosis with the International Summer School (ISS) Alumni network. Indeed, according to a standard survey made amongst ISS participants one year after their attendance (response rate equal to 52% for the editions 2009-2011), 25 interviewed participants out of 34 (68%) kept in touch with TSLR staff and / or with the other ISS Alumni, to develop some kind of exchange and cooperation.

2.5. A snapshot of target beneficiaries: profiles, experience, feedbacks

The International Summer School (ISS) on Regulation of Local Public Services is definitely the most well-established training activity offered by the Turin School of Local Regulation and its long experience allow to provide some statistics and some data about target beneficiaries of capacity building and training activities on local regulation. As already mentioned, in the last four international editions (2009-2012) more than 1,000 applications were received from nearly 70 different Countries. Fig. 3 shows the profiles of applicants in terms of belonging to OECD and non-OECD Countries and in terms of education background. The interest from non-OECD countries (70% of applications) is

evident. Concerning education background, the programme attracts different profiles, even though economic background constitutes the major share.

Fig. 3. Profiles of applicants to the 2009-2012 ISS editions



A share of 45% of these applications came from NISPAcee Countries. 92 selected applicants effectively participated to the School: 23% of them were NISPAcee Countries nationals (their provenance is described in Table 2 and Fig. 4). The strong decrease in the percentage of selected participants compared to applications is mainly due to the need of guaranteeing a balanced geographical distribution in the classroom (see selection criteria in the ISS homepage www.turinschool.eu/iss). Nonetheless, the rate of applications demonstrates the high demand of training on these topics coming from the area. Table 3 finally presents the education and professional profile of participants selected from NISPAcee Countries.

Table 2. Applications received for the ISS and selected participants to the from NISPAcee Countries in the period 2009-2012

Period: 2009-2012	Country	Applicants	Selected participants
1. New EU member countries	Czech Republic	17	1
	Bulgaria	31	3
	Estonia	2	0
	Hungary	4	0
	Latvia	5	1
	Lithuania	8	2
	Poland	8	1
	Romania	58	2
	Slovakia	4	1
	Slovenia	0	0
2. Non EU member countries in Eastern Europe	Belarus	3	0
	Ukraine	41	1
	Republic of Moldova	6	0
	Russian Federation	40	1
	Turkey	12	1
3. Countries in the West Balkans	Macedonia	17	1
	Croatia	11	0
	Bosnia and Herzegovina	17	0
	Serbia	12	0
	Albania	97	3
	Montenegro	13	0
4. Countries of Central Asia	Kazakhstan	1	0
	Kyrgyzstan	4	0
	Uzbekistan	4	0
	Turkmenistan	3	1
	Tajikistan	1	0
5. Countries in the Caucasus	Armenia	28	1
	Georgia	11	0
	Azerbaijan	24	1
Total from NISPAcee region		482	21
Total for ISS 2009-2012		1069	92
% from NISPAcee region		45,1	22,8

Fig. 4. Distribution of applications for the ISS from NISPAce countries in the period 2009-2012 (total = 482)

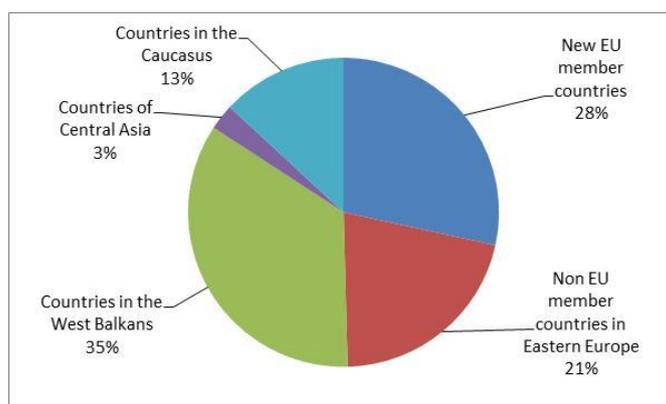


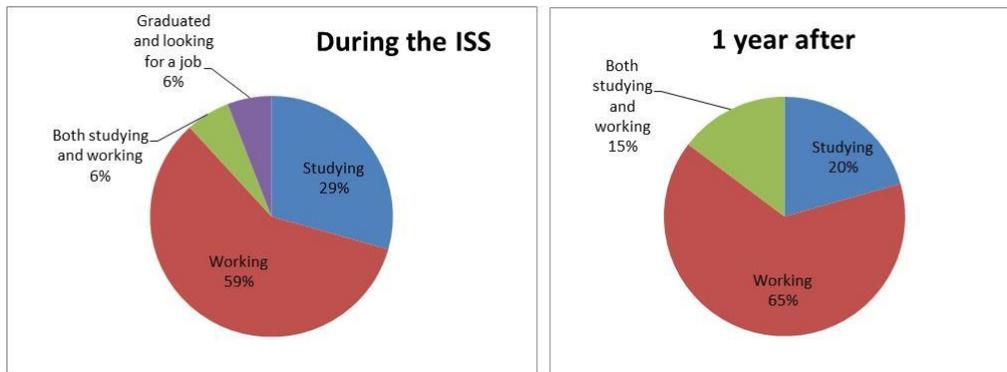
Table 3. Education and professional profile of ISS participants from NISPAce countries (editions 2009-2012)

Country	Education	Working experience	Current position (if changed)
Albania	PhD in Urban and Regional Planning, Berlin University of Technology M.Sc., Urban Management, Berlin University of Technology	Several working experiences in marketing	Researcher at Jena University of Applied Sciences (Ernst-Abbe-Fachhochschule Jena)
Albania	PhD in Public (Economic) Law, co-organised by University of Pavia, University of Turin and Luarasi University of Tirana	Attorney, Chamber of Commerce and Industry of Tirana; Researcher of European Law and Administrative Law: Public Investments, International Trade Law, Local Government and Energy Resources.	Lecturer of Public Economic Law, Luarasi University, Tirana, Albania
Albania	MSc in Environmental Engineering at Polytechnic University of Tirana	Specialist at Tirana Municipality Water supply and Sewerage Sector, Municipality of Tirana; Specialist at Inspectoriat of Urban Environmental Sector, Municipality of Tirana	
Armenia	MA in Law at American University of Armenia	Chief Specialist at State Commission for the Protection of Economic Competition of the Republic of Armenia Senior Expert at State Commission for the Protection of Economic Competition of the Republic of Armenia Department of Methodology and Analysis	
Azerbaijan	MA in International Relations, Ankara University – Turkey	Senior Advisor, Investment Policy Department, Ministry of Industry and Energy of Azerbaijan Republic	
Bulgaria	PhD in Infrastructure, energy and utilities and MA in Energy Economics and Management at Sofia University	Managing Editor and Partner in the B2B media, trainings and consulting company www.publics.bg; previously Program Manager and Managing Editor of the monthly “Utilities” Magazine	Assistant professor in FEBA, Sofia University, as well as the secretary for the Master Programme “Economics and Management in Energy, Infrastructure, and Utilities”.
Bulgaria	MA in International Business at University of Prague	Expert at Finance Control and Regulation Department, CEZ Distribution Bulgaria JSCo (Power Distribution firm)	Finance Analyst, Pricing at Brown-Forman
Bulgaria	MA in Economics and Management in Energy, Infrastructure and Utilities Sectors at Sofia University	Financial and Economic Expert at Municipality of Yambol and Hayredin, projects related to the construction of sewerage, wastewater and waste treatment plants.	Financial Advisor at Infraproject Consult
Czech Republic	MSc in Waste management at University of J.E.Purkyně	Waste management officer at Regional Authority Environmental and Agriculture Department	

Latvia	MA in Law, University of Latvia	Head of Municipal regulation division of the Legal department at the Public Utilities Commission of Latvia; Chief Legal Officer at the Public Utilities Regulator of Latvia	
Lithuania	MA in Fundamental quality management at Kaunas University of technology	Chief Manager at Economic development and project management department, Utena district municipality administration	
Lithuania	BA in Economics at Klaipeda University MA in Economics and Management of Public Sector at Free University of Bôzen	Economist at UAB “Kretingos vandenys”, Lithuanian Public water provider	
Macedonia	MA in Law at State University of Skopje	Lawyer for OSCE - Spillover Monitor Mission to Skopje and for private law firms	Coordinator of the OSCE Municipal Governance Teams of three municipalities located in West of Kosovo
Poland	Postgraduate studies in Market Research and Economic Analyses at University of Warsaw MSc in Economics	Internship at Ministry Of Finance, Warsaw, Department of Financial Institutions	Chief Specialist, Economic Information Department, at Polish Information and Foreign Investments Agency (Invest in Poland)
Romania	PhD in Environmental Sciences, University of Oradea Post-graduate studies in International Law, University of Bucharest	Lecturer at University of Oradea	
Romania	MA in Public Policy at Hertie School of Governance - Berlin, Germany	Teaching and Research Assistant at Hertie School of Governance in Berlin	Public policy and evaluation expert at the French Ministry of Economy and Finances
Russian Federation	Post graduate studies in Economics at Lomonosov Moscow State University MA in Economics at Vladimir State University	Economist at Property Management Company (Russian local public company)	
Slovakia	PhD in Economics of Transport and Communications at University of Žilina MA in Operation and Economics of Transport and Communications at University of Žilina	University teacher at the University of Žilina, Faculty of Operation and Economics of Transport and Communications	
Turkey	Ph.D. Economics and MA in Economics, Yildiz Technical University	Teaching Assistant - Department of Economics, Yildiz Technical University, Istanbul, Turkey	
Turkmenistan	MSc in Public Economic Management at University of Birmingham MBA at Economics Institute, Boulder, Colorado MSc in Automation of Management Systems at State Oil and Gas Academy, Moscow	Economic and environmental consultant/advisor for WB, USAID and several programmes under the UN umbrella (UNDP, UNEP, UNOPS)	Consultant, UNEP-Caspian Environment Program, EU project on support of Tehran Convention (Caspian Littoral States), Responsible for coordination of development of National Convention Action Plans by five Caspian countries
Ukraine	MSc/DIC in Environmental Economics and Policy - Imperial College London MA in Ecology and Environmental Protection - Dnipropetrovs'k National University	Support to Energy Market Integration and Sustainable Energy in NIS (SEMISE) - Junior Sustainable Energy Expert; Senior Specialist, Department on Development National Emissions Trading Scheme	Sustainable Energy Expert at the World Bank

A standard survey is regularly made amongst ISS participants one year after their attendance. 34 alumni participated to the survey so far for the editions 2009-2011, resulting in a response rate equal to 52%. The survey intends to monitor the occupational status of participants, the results of their participation to the Summer School in terms of contribution to their studies or their professional development, the satisfaction toward the programme attended. As shown in Fig. 5, in terms of occupation status, at the time of the ISS attendance the majority of participants were working (65% considering also those who worked and studied at the same time). This percentage rose one year after the programme attendance to 80% of the respondents.

Fig. 5. Participants status during the ISS (34 participants interviewed from 2009-2011 editions)



Regarding the relevance of ISS attendance for their education or professional career, out of 12 alumni interviewed who were still studying one year after their participation to the ISS, 8 declared that their studies were connected in some way to the issues of the Summer School and that they produced a thesis, paper or article on the topics connected to ISS, for which the set of knowledge acquired was useful. For those who were working at the time of the interview (27 respondents), 22 currently work in the field of regulation of local public services or their job is connected to this field in some way. 5 participants who were employed in their current position after the participation to the ISS are convinced that the Summer School influenced positively the selection of their profile for the job position, and other 9 participants think that it maybe had some positive effects.

3. Future scientific developments

Some pathways for future scientific developments have been identified by the scientific direction, thanks to the contributions of the Scientific Committee. Three of them will be described in this section. Their peculiarity is their cross-sector relevance and the strong trans-disciplinary approach laying behind their design and development.

A major investment in policy-oriented research in these domains is expected in the next three years, with the aim of transferring the results of this research in training and capacity building activities for local civil servants, local administrators and other relevant stakeholders.

3.1 Information, incentives and mechanism design in local regulation

Alongside with a rich literature on industrial production costs of services, research and the policy-oriented debate on player incentives, information distribution, information shortage/asymmetry, information flows between politicians, regulators and service providers are still weak. Nonetheless, the identification of these peculiar features for services that are provided in the constraint of a local market is a preliminary condition to the design of institutional mechanisms and individual incentive schemes for the implementation of an effective local regulatory framework, especially where this framework does not exist yet or it is very recent (like in developing countries and transition economies).

In this context, the Turin School of Local Regulation has recently launched a research focussing on the collection of data from different Countries in order to build an international comparative survey offering a description of the state of the art of the main players involved in the local regulatory agenda, their relationship, the incentive system that drives their choices and identifying some obstacles that this situation poses to the implementation of the regulatory agenda. Pilot tests on a specific matrix have been made in three capital cities, two located in CEE countries (Belgrade in Serbia and Sofia in Bulgaria) plus Cairo in Egypt (Becchis & Vanin, 2013). The pilot phase called for future improvements, that can be summarized as follows:

- enlarging the geographical scope of the survey;
- improving the matrix developed during the pilot phase through some fine-tuning, especially to limit different interpretation of some fields proposed and to help collecting more uniform data;
- overcoming the high degree of subjectivity in information provided and turning the methodology into a practical tool to be used in policy and regulatory reform processes contexts a method for more structured data collection will be built. One of the possible solutions identified is the submission of the refined matrix to several actors, institutional and non-institutional ones and operating at different levels of governance, in order to obtain results which are the closest to the real situation.

Moreover, this stream of research may be integrated by an in-depth analysis on the phenomenon of osmosis amongst professional roles in local regulation, in order to better define its nature and its characteristics, provide statistical evidence, estimate the effects on regulation effectiveness and contribute to the design of specific incentive schemes to overcome it or to mitigate such effects.

3.2 Affordability of tariffs of local public services

Innovation interesting main local public services in the last twenty years mainly concerned attempts of partial liberalization, increasing importance of environmental policies and weakening of institutional links between public utilities and municipalities. While pursuing primarily industrial, environmental and governance objectives, none of these tendencies addresses the problems of the most vulnerable social groups of the population, for which specific local welfare policies seem to be fragmented and patchy. To make an example we can refer to the lack of a Europe-wide definition, indicators and shared methodologies on energy poverty, a priority issue for the European Union in the last years in order to develop specific measures to protect vulnerable consumers (European Commission, 2010). Other efforts in this direction are promoted by international organizations, such as the World Bank through their Output-based aid (OBA) programme (World Bank, 2012), an innovative approach to increasing access to basic services – such as infrastructure, healthcare, and education – for the poor in developing countries, and the UNDP initiative named Global Water Solidarity (UNDP, 2013) and aiming at developing an international platform for the promotion of decentralized solidarity mechanisms for access to water and sanitation services. Nonetheless, these initiatives are still far from having a widespread impact on local policies.

Since 2010 Foundation for the Environment / Turin School of Local Regulation has analyzed the issue of affordability of tariffs of main local public services, in particular energy-environment related services, identifying the factors of change and the impacts on vulnerable groups. This in order to provide local policy makers and stakeholders with the necessary knowledge and instruments to face a topic that, considering the macroeconomic context, is likely to attract more and more attention.

The basic research question is related to the fact that consumption of goods with periodic payments involves an important basket of goods and services and, besides rents, loans and mortgages, a relevant share of consumers' disposable income is allocated to services with clear social and environmental implications such as natural gas, electricity, district heating, water and waste. The provision of some of these goods is characterized, for technical or social/legal limits, by a weakness of perfect excludability condition that, in most markets, is able to prevent opportunistic behaviour and free riding. Unlike goods for which there is almost perfect simultaneity between purchase occasions and payments, the perception of goods for which a periodic payment is expected suffer some distortions that obstruct market's functioning and prevent the use of traditional incentive mechanisms. Such distortions need alternative instruments compared to those generally used for standard economic approach, such as behavioral economics, experimental economics and cognitive economics.

In this context of the research on affordability, one of the outputs developed by the Turin School of Local Regulation developed is an Index (Turin-Index) to define different levels of arrearage intensity. Through the use of this measure it is possible to provide a dynamic view of the phenomenon of arrears in local public services based on the history of payments for each household, the intensity of delays and an "emergency effect". The Turin-Index shows the great potential to become a bridge for the exchange of information and the identification of critical situations to monitor and to revise between public and private sector; a synthetic indicator able to offer decision makers a snapshot of the phenomenon of arrears and a strong basis to build specific energy and welfare policies upon so as to support users who experiences deprivation. Further investigation and modelling is currently being carried out in order to use the Turin-Index as an effective tool to forecast arrears. Indeed, the further research question pertains to the possibility of using billing data to derive a signal of vulnerability.

The instrument can be potentially applied both to industrialized and developing / emerging countries. In the latter, it is expected to contribute to the ongoing debate on poverty and regulation already cited in Section 1.2, concerning the trade-offs between allocative and technical efficiency and accessibility/affordability issues with distributive concerns especially in lower income countries that miss a pervasive welfare state.

3.3 Local welfare policies

In the last thirty years, the share of income got by the top 1% of citizens has doubled in the US from 10 to 20% and roughly the same has happened in other countries. Gini Index (measuring the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution) is raising in the last decades (World Bank, 2013). Notwithstanding, internal growing inequality, globally speaking the world is less unequal because poorest countries grow at a faster pace than richer ones. Therefore, nowadays it is inequality within borders that raises political concerns and ask for welfare policies that are mainly enforced at local level. At the same time, the crisis of welfare public expenditure, in particular at local level, calls for a fresh rethinking on the way money is allocated for services and distributed to families and individuals for welfare subsidies and aid.

In this field, the TSLR is exploring some specific streams of work, in particular:

- microeconomic analysis of specific local welfare sectors (e.g. an analysis on early-childhood public services was launched in 2012);
- analysis of players' incentives in the context of aid policies (e.g. in 2012 a seminal international conference on conditional cash transfer instruments was organized in Torino) (Turin School of Local Regulation, 2012);
- application of game theory and mechanism design to local welfare policies;

- innovative instruments to finance local welfare (e.g. social finance instruments and social impact bonds) (Social Finance, 2009).

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