Market Structure and Innovation Policies in Luxembourg

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1 Market Structure and Media Ownership

The Grand Duchy of Luxembourg (Luxembourgish: Lëtzebuerg) is one of Europe's smallest, but at the same time one the world's richest countries (Global Finance Magazine, 2015). It is located between Germany, France and Belgium. Luxembourg has a population of about half a million people, of which about 40% are foreigners (biggest community are the Portuguese) and many cross-border commuters. Luxembourg is officially tri-lingual. The national languages are Luxembourgish, German and French. The multilingualism is reflected in the availability and consumption of mass media as well. According to a survey from Eurobarometer (2014) around 89% of Luxembourgers feel as citizens of the EU whereas on the average in EU only 63% of the citizens have this feeling.

Freedom of speech and the press have a long tradition as constitutional rights. Freedom of speech and press was introduced in 1869. Luxembourg ranked No. 19 in the 2015 World Press Freedom Index (Reporters without Borders, 2015). It felt 15 places in a single year. The legal proceedings against the journalists who have been involved with the so-called "LuxLeaks" disclosures exposing Luxembourg's advance tax ruling deals with multinationals in late 2014 was the main reason for this development. Furthermore, the country is renowned for its liberal media policy. Although it has a long tradition of providing radio and television services to European audiences, the written press also plays an important role in getting news on (European) political matters.

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Luxembourg has an attractive media market for national and international media companies due to its regional economic policy, the highly skilled workforce and the multilingualism. The Grand Duchy is a mainly service-based economy. It hosts a renowned international finance centre and important EU institutions. It also offers an attractive investment climate for multinational companies from different industries for instance, finance and the information and communication technologies (ICT). European headquarters of international companies like Amazon.com, Ebay, Skype and iTunes are located in Luxembourg. Furthermore, Europe's biggest broadcaster *RTL Group* (*RTL* stands for: *Radio Télévision Luxembourg*) has its roots in Luxembourg. Its headquarter is still based in Luxembourg. Also *SES*, one of the world-leading satellite operators, is based in the Grand Duchy as well. It provides satellite communications solutions to broadcast, telecom, corporate and government customers, reaching 99.0 % of the world's population.

1.1 Newspapers

Given the number of inhabitants, Luxembourg has a surprisingly high number of daily and weekly newspapers. Five paid and one free sheet daily newspapers are published in the Grand Duchy. These newspapers have supposedly close ties to political parties or trade unions. They receive support from the state. The government provides a generous public aid scheme both in a direct and an indirect way to support all daily and weekly newspapers. The daily newspapers are mainly published in Luxembourgish, German and French, and one weekly newspaper is published in Portuguese. Another feature of the newspapers in Luxembourg is that they combine a local, national and European approach. Newspapers are very popular in Luxembourg: The daily newspapers reached daily on average 66.5 % of the population 12 years and older in 2014–2015 (was 68.8 % in 2013–2014) whereas the readership of weekly newspapers consists of 60.4 % of the population. I

Considering different publishing houses, Groupe Saint-Paul Luxembourg is the owner of Luxembourg's oldest and most popular newspaper Luxemburger Wort (founded in 1848) with a daily reach of almost 36.0% of the population 12 years and older. It is mainly published in German and also appears as e-paper (reach: 3.1%) and a website (reach 17.0%). The media company belongs to the Catholic Archbishop of Luxembourg and is has a close link with the conservative party, called CSV (Christian Social Party). In 2011, Groupe Saint-Paul Luxembourg

¹A characteristic of the media research in Luxembourg is that the main publication is a yearly study which is called Plurimedia (conducted by TNS Ilres) and focuses on the daily/weekly reach of newspapers, magazines, radio and TV channels. It offers competitive results across different media types which is especially important for this small market with limited competition in specific media sectors. Therefore the market share within the different media types which is an important market indicator in other markets does not play a big role and is not even officially published in Luxembourg.

discontinued its French newspaper La Voix du Luxembourg after 10 years. The company is also the publisher of the most successful weekly publication Télécran (weekly reach: 20.0%).

The second largest newspaper Tageblatt is published by the publishing house Editpress. This publishing house is owned by socialist trade unions. It has a close tie with the Socialist Party (LSAP). It has a daily reach of 10.6 % among the readers of 15 years and older. The third newspaper Le Quotidien focuses mainly on the French speaking population. In 2001, Le Quotidien with a daily reach of 6.1 % has replaced the Luxembourg edition of Républicain Lorrain. It belongs to Lumédia which is a joint venture between the publisher of the Lorraine newspaper and Editpress, the parent company of Tageblatt. The forth daily newspaper is the Lëtzebuerger Journal with a daily reach of 1.5 %. This newspaper is owned by the Liberal party (DP). The Communist Party (KPL) owns The Zeitung vum Lëtzebuerger Vollek. It has a daily reach of 0.6 %. Finally, Green party founded the weekly newspaper *Woxx* with a weekly reach of 1.0 %. Table 1 presents an overview of the newspapers in Luxembourg.

In 2007 two free sheet newspapers were launched in Luxembourg of which only L'Essentiel owned by Editpress is still existing. It has a daily reach of 28.4 %. The

Table 1 Overview of daily newspapers in Luxembourg 2014–2015

	Main language	Publisher	Readers 12 years and older	Percentage of the population
Daily navananava	language	Publisher	oldei	the population
Daily newspapers Printed version				
Timited (Cloton	C	C C.:t D1	169.700	25.0
Luxemburger Wort	German	Groupe Saint-Paul Luxembourg	168,700	35.9
Tageblatt	German	Editpress SA	50,000	10.6
Le Quotidien	French	Editpress SA	28,700	6.1
Letzebuerger Journal	German	Editions Lëtzeburger Journal S.A.	7200	1.5
Zeitung vum Lëtzebuerger Vollek	German	Communist Party of Luxembourg	1900	0.4
e-Paper version				
Luxemburger Wort	German	Groupe Saint-Paul Luxembourg	14,700	3.1
Tageblatt	German	Editpress SA	4100	0.9
Le Quotidien	French	Editpress SA	1700	0.4
Daily freesheet				
Printed version				
L'Essentiel	French	Editpress SA	133,000	28.4
e-Paper version				
L'Essentiel	French	Editpress SA	6700	1.4
Others				11.3

Source: Plurimedia TNS Ilres 2014/2015

other free sheet Point 24 published by Groupe Saint Paul was discontinued in late 2012.

Gross advertising revenues of the daily newspapers accumulated to 69.76 million euros. Their advertising revenue corresponds with a market share of 49.7% of the advertising market in 2014. Although, the predominance of the newspapers has been declining, it is still high.

1.2 Television

Luxembourg is a pioneer of commercial broadcasting in Europe. It established the roots for commercial radio and TV in several other European countries. Unlike most other European countries the Grand Duchy has never established a general public TV broadcaster. Already in 1929, the Compagnie Luxembourgeoise de Télédiffusion (CLT) was granted a broadcasting monopoly first for radio and later for television as well. In 1955, CLT started its first TV broadcasting station and established RTL Télé Lëtzebuerg. The RTL Télé Lëtzebuerg media family has been in a predominant position as a market leader in radio and TV. It also owns the website www.rtl.lu. It has been the most popular website of the country for many years. RTL Télé Lëtzebuerg's activities in radio, TV and online reach 82.0 % of Luxembourgers aged 12 years of older on a daily basis (RTL Group, 2014). RTL Télé Lëtzebuerg became the nucleus of different TV stations among them the most popular private German TV station RTL Television (formerly RTL Plus) and Belgium's first commercial TV station RTL-TVI. Today, RTL Télé Lëtzebuerg is part of the RTL Group. This group holds interests in 55 television channels and 29 radio stations in ten European countries. Since 2001, its major shareholder is the German multimedia company Bertelsmann AG which ranks among the ten biggest media companies worldwide. It owns 75.1 % of the RTL Group.

In 2016, the flagship of RTL Télé Lëtzebuerg is the 30-min news bulletin called *De Journal* which is broadcasted in Luxembourgish. The gross advertising revenue for television in Luxembourg was 12.6 million euros in 2014. Tracing back to the high significance of the press in Luxembourg the TV market share within the total gross advertising revenues is only 9.0%, whereas the daily newspapers share is 49.7%.

Since 1991 there have been different attempts to establish other national TV stations targeting the audience in Luxembourg independently from RTL. Due to the small market size and the therefore limited advertising expenditure all these initiatives to failed. Furthermore, the early adoption of cable TV in Luxembourg and the availability of a many foreign TV stations also reduced the opportunity to enter the market successfully. According to figures from TNS Ilres Plurimedia study from 2014/2015, RTL Télé Lëtzebuerg attracted about 23.8 % of the population as viewers daily, whereas TF1 from France ranked second with 13.3 %. German programs are popular as well: The German public broadcaster ARD reached 11.2 % of the population as viewers on a daily basis and RTL Television

TV channels	Land of origin	Public or private	Number of viewers of age 12 years and older	Viewers 12 years and older as percentage of the population
RTL Télé Lëtzebuerg	Luxembourg	Private	116,300	23.8
Den 2.ten RTL	Luxembourg	Private	10,000	2.1
TF1	France	Private, formerly public	65,100	13.3
ARD	Germany	Public	54,600	11.2
RTL Television	Germany	Private	49,200	10.1
ZDF	Germany	Public	48,100	9.9
PRO 7	Germany	Private	47,400	9.7

Table 2 Overview of most popular TV broadcasters in Luxembourg in 2014–2015

Source: Plurimedia TNS Ilres 2014/2015

10.1 %. Table 2 presents an overview of the most popular television broadcasters in Luxembourg.

In 1996, two regional licenses have been granted for two initiatives Uelzechtkanal and Nordliicht. They offer their programs via cable and only broadcast a few hours a month. In 2001, Chamber TV was established. It broadcasts live and recorded parliamentary debates from the Chamber of Deputies, the Luxembourg parliament. Other broadcasters are the Open Channel DOK—den Oppene Kanal (founded in 2004) and 'paperJam.TV' (founded in 2011) focusing on financial and economic news (Hirsch, 2015).

1.3 Radio Broadcasting

Whereas the first radio broadcasts were aired in Luxembourg in 1924, already in 1929 the CLT—Compagnie Luxembourgeoise de Télédiffusion (today RTL Group) was granted a broadcasting monopoly for radio. In 1933, it started to broadcast in French, German, Dutch and English language on long wave and went on air in 1959. The long wave service was discontinued in late 1991. Radio Luxembourg has been the most popular radio station in Luxembourg for decades, and has written European radio history. It was the biggest commercial radio station in Europe for a long time and had a formative influence on generations of listeners and radio programmers.

Today Luxemburgish is the language of choice for most radio broadcasters in the Grand Duchy. RTL Radio Lëtzebuerg which is owned for 100 % by RTL Group is the undisputed market leader with a daily reach of 37.6 %. The second radio station which is also owned for 100 % by RTL Group is known as RTL Radio 93.3 & 97.0. It has a daily reach of 8.8 %. It RTL Radio is the successor of the German Radio

	Language	Public or private	Listeners age 12 years or older	Daily reach (in percent)
RTL Radio Lëtzebuerg	Luxembourgish	Private	183,500	37.6
Eldoradio	Luxembourgish	Private	109,000	22.3
RTL Radio 93.3 & 97.0	German	Private	42,800	8.8
Radio 100,7 (Radio socioculturelle)	Luxembourgish (mainly)	Public	22,700	4.7

Table 3 Overview of most popular radio broadcasters in Luxembourg in 2014–2015

Source: Plurimedia TNS Ilres 2014/2015

Luxembourg station and was based in Luxembourg until summer 2015 and is now produced in Berlin. Another popular radio station in the Grand Duchy is Eldoradio with a daily reach of 22.3 %. It uses a contemporary hit radio format. The owners of Eldoradio are the RTL Group and Editpress.

In 1991, new legislation was introduced. This law made new frequencies available to other broadcasters. In 1993, the only public radio station entered the radio broadcasting market in Luxembourg. The public socio-cultural Radio 100,7 received a license. The Établissement de Radiodiffusion Socioculturelle du Grand-Duché de Luxembourg (ERSL) is operating this public radio station. Its daily reach is around 4.7 %. Furthermore, the Grand Duchy's biggest publishing house Groupe Saint-Paul Luxembourg owns the radio station Radio Latina with a daily reach of 3.8 %. In May 2015, RadioLux SA, a consortium of Edita SA (publisher of free sheet L'essentiel) and the owners of the Belgian radio station Must FM, was granted a license for a French radio station called L'essentiel Radio to replace Radio DNS which was operated by Groupe Saint-Paul Luxembourg. Table 3 presents an overview of the radio broadcasters in Luxembourg.

The high importance of radio within the advertising market is displayed by the gross advertising revenue market share of 16.9 %, which is significantly higher than in the other European countries (Source: Nielsen & Espace PUB, 2015).

2 Regulations

The Luxembourg's media regulation style especially for broadcasting is characterized as "minimalist liberal" which means that the government is very reserved in establishing and enforcing regulation. Ownership or cross-ownerships regulations do not exist in Luxembourg. According to Arnold (2015) the reason for a lower priority for ownership restrictions is the small market size and the existence of a relatively small number of media companies.

In Luxembourg the Ministry of State is responsible for media and telecommunications. Since 2014, Luxembourg's media regulation for audiovisual media has been carried out mainly by the Autorité luxembourgeoise indépendante de l'audiovisuel (ALIA). Before 2014, different authorities had been involved in

the regulation of news media industry. For instance, the Independent Broadcasting Commission (Commission Indépendante de la Radiodiffusion) was in charge of granting broadcasting licenses and the National Program Council (Conseil National des Programmes) was an advisory program commission. Another important regulatory institution is the Luxembourg Institute of Regulation (Institut Luxembourgeois de Régulation, ILR). It is a body which regulates and coordinates the use of radio frequencies, but also the utility sectors telecommunications, electricity, gas, railways and post (Binsfeld, Whalley, & Pugalis, 2014).

The monopoly of RTL was formally abolished with the introduction of the Law of 27 July 1991 on electronic media. In 2010 Luxembourg finalized the implementation of the EU Audiovisual Media Services Directive with adopting the Law of 17 December 2010 Amending the Modified Law of 27 July 1991 on the Electronic Media.

In broadcasting the most significant agreement is still the concession contract between the Grand-Duchy of Luxembourg and the RTL Group which legitimates RTL Télé Lëtzebuerg to continue its service as privately financed public TV broadcaster for Luxembourg. The latest version of this agreement was signed in 2007 and runs until 2020. Its connection between the local and international media policy is emphasized by the commitment of the RTL Group (back then called: CLT-Ufa) to remain its headquarters with about 660 employees for the full term of the agreement in Luxembourg.

3 Media Innovation Policies

Especially because of the small news media market size and the high number of competitors from neighboring countries Luxembourg's government wants to ensure a certain variety of newspapers in the Grand Duchy by financially supporting newspapers with about 7.5 million euros per year. The subsidies can aggregate to more than 1 million euros per year for a larger newspaper. The financial support contributes substantially to the income for a smaller newspaper (Grand Duchy of Luxembourg, 2013). The press aid was introduced in 1976 and specified in 1998 by law. The press subsidies consist of two components. One component is an identical amount for all newspapers and the other component is based on the number of published pages. Since 2014 there is a discussion about extending the support to online media activities. A reallocation of financial support will create problems for the newspapers. It is likely that newspapers with a relatively small market share would be in immediate danger without press aid, whereas other newspapers could get in trouble in the near future. To deal with the survival issue of newspapers, the suggestion is to split the existing press aid between print and online publications. In autumn 2015, another suggestion arose to introduce additional funding for online publications on top of the current press aid (Luxemburger Wort, 2015).

Besides from subsidizing traditional news media, the Luxembourg's government promotes research, development and innovation (RDI) activities and implements strategic initiatives to promote the diversification of the economy, to

increase the competitiveness of its businesses and to create a knowledge-based society. Therefore, the government established Luxinnovation to stimulate research, development and innovation in 1984. It is a National Agency for Innovation and Research, and is now a European Economic Interest Grouping (EEIG). The public budget for RDI has increased from 28 million euros to 326 million euros between 2000 and 2014. The goal is to raise the expenditure on RDI from 2.3 to 2.6% of the GDP by 2020 (Luxinnovation, 2015). Other authorities involved in the countries innovation policies are the Ministry of Economy, the Ministry of Higher Education and Research, the Chamber of Commerce, the Chamber of Skilled Trades and Crafts and Fedil—Business Federation Luxembourg.

Information and communication technologies (ICT) are one of the key industries for Luxembourg's innovation policies. Other areas include life sciences, eco-technologies, materials and production technologies, space technologies, young innovative businesses, skilled crafts and automotive components industry. Within the ICT sector Luxembourg's objectives include the development of tele-communication infrastructures, support for innovation and access to finance startups, innovation in services related to the financial sector, promoting e-skills, establishing e-administration. In recent years Luxembourg has been successful in developing businesses in e-commerce, digital content, cloud computing, big data and e-payment. This is represented by companies like eBay, iTunes, KABAM, PayPal, Rakuten, RealNetworks, Skype and Vodafone which all contribute to Luxembourg as an important European ICT location.

In 2014 a few initiatives were launched to regroup the main public research actors in Luxembourg which include the University of Luxembourg, the public research centre Luxembourg Institute of Science and Technology (LIST), focusing on Environmental Research and Innovation, IT for Innovative Services and Materials Research and Technology and Fonds National de la Recherche Luxembourg and Luxinnovation.

Another important Luxembourgish initiative is Digital Lëtzebuerg. It was launched in October 2014 with the goal to strengthen and consolidate Luxembourg's position in the ICT field on the long run. The guiding principle behind the initiative is to diversify the economy to the benefit of the citizens and all socio-economic sectors.

However, in November 2014, Luxembourg faced international criticism following media revelations based on leaked documents, so-called LuxLeaks, which pointed out a scheme for advance tax ruling. An investigation of EU tax authorities in 2015 has lead Amazon to the decision to stop to channel their revenues through Luxembourg (Businessinsider UK, 2015). It is unclear which influence this EU investigation will have on the regional economic policy, its agenda on RDI and the multinational media companies based in Luxembourg.

4 Summary and Best Practices

Luxembourg follows a combined approach between the regional economic policy to settle international media companies in the Grand Duchy and to ensure a variety of multilingual media for the citizens and commuters. The press plays still an important role in the news media landscape in Luxembourg. A specific press aid system exists in Luxembourg that supports all newspapers. As a consequence, a relatively large number of newspapers appears in Luxembourg given its population. Nowadays the importance of online news platforms is recognized as well and there is a legislation under discussion to subsidize these types of media as well.

The focus on commercial broadcasting with the still predominant role of the RTL Group and the lack of existence of a strong public broadcaster is a unique characteristic of the country. Moreover, news media have a high priority in Luxembourg. For instance, the prime minister himself is responsible for the media policy. Media policy is viewed holistically as a part of the ICT sector where infrastructure policy plays a major role. The country has a leading role in the ICT development in Europe.

5 Innovation Policy Recommendations

In April 2015, the World Economic Forum ranked Luxembourg ninth of 143 countries regarding the Networked Readiness Index, which measures the predisposition of countries to exploit the opportunities offered by the ICT sector. With the 'Digital Lëtzebuerg' initiative, which was launched in 2014, the government plans to further develop the digital economy, promote e-government and encourage the uptake of digital skills. In terms of infrastructure Luxembourg belongs to the leading European countries and reaches already a broadband coverage of 100 %. With a national strategy to establish ultra-high-speed rates of 1 Gbps for the entire population by 2020 the government exceeds the objectives of the Digital Agenda for Europe (World Economic Forum, 2015).

In terms of media innovation there is a special focus on digital media. These developments should also be relate to maintain or even improve Luxembourg's position as an important European finance center. Moreover, Luxembourg should continue to invest in enhancing the skills of its workforce and in enhancing its capacities for academic research.

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