Public Service Media and Ecosystem Sustainability

Towards Effective Partnerships in Small Media Markets

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Abstract

Agreements and charters for Europe's public service broadcasters increasingly include ambitions for developing partnerships and engaging in collaboration. The recent management contract of VRT in Flanders specifically includes a new strategic objective to implement partnerships in order to strengthen the wider media ecosystem, including cross-sectoral media partnerships and co-operation with private media companies. This chapter clarifies relevant concepts and offers a framework for the development of partnership strategy that premised on a belief that public service media should be a central node in a networked media system. Research on ecosystems in business literature structures our framework and offers metrics for evaluating media ecosystem health and sustainability. The metrics are illustrated through an empirical analysis of the media ecosystem in Flanders. Risks and benefits of public service media partnerships are assessed. The practical framework specifies criteria for selecting, assessing and managing partnership proposals and serve as building blocks for public service media organisations to make ex ante estimates about which partnerships will be most beneficial for public media in the light of its public service mission.

Keywords: collaboration, media metrics, ex ante evaluation, management contract, development strategy

Introduction[1]

Castells (1996) proposed the concept of the 'networked enterprise' as the organisational form a firm should adopt to suit the conditions of uncertainty and unpredictability in a networked society environment. The strengths of this form are mainly in the shift from the vertical bureaucracies of the past to a horizontal structure enabled by digital technology to connect dispersed organisational nodes and integrate with external firms (Corolla 2006). In this chapter, we explore the development of public service media (PSM) as a networked enterprise by focusing on two key concepts: the *media ecosystem* to describe the networked environment for PSM, and the implementation

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of *partnerships* as the practical means for establishing network links between the PSM organisation and external firms and organisations.

Research in media economics and policy regarding PSM emphasises the importance of public media for the sustainability of the media ecosystem as a whole (Collins 2011; Davies 2013; Barwise & Picard 2014; Raats & Donders 2017). Building or renewing partnership with audiences, civil society organisations and public institutions are often considered to be 'natural allies' of PSM, and were earlier proposed as a prerequisite for PSM to remain crucial for society (Murdock 2005; Jakubowicz 2008; EBU 2014). Collaboration with private industry has only recently become a focus of discussion and debate as PSM has begun to collaborate with the private sector. The BBC started incorporating public-private partnerships as the 'default' logic in 2008, resulting in specific commitments towards newspapers, technical facilitators, other broadcasters and distributors (Raats 2012).

Collaboration with private industry is emphasised in contemporary media policy in response to criticisms about the position and activities of PSM that are claimed to hinder market initiative and growth in the digital media environment. Policymakers promote collaboration as a remedy. But current approaches for developing the partnership agenda are problematic for two reasons. First, the focus of policymakers is generally limited to PSM organisations only and tend to overlook the extent to which private players are actually willing to collaborate with them. Second, attempts to develop a partnership agenda for PSM have been lacklustre as evident in vague and arbitrary commitments. They predominantly highlight *who* should be sustained (mostly larger legacy firms in mass media) rather than *what* needs to be sustained – namely, an economically stable, diverse, high-quality, and productive media market (Raats & Donders 2017).

In this chapter we argue that both problems can be resolved by conceptualising the role and position of PSM in a networked media environment as an *ecosystem*. In our view, the partnership agenda is only useful when tied explicitly to the benefits this can provide for the media ecosystem as such. This grounds a more coherent approach to developing partnerships in three interdependent dimensions: 1) a characterisation of media as an ecosystem, 2) defining goals that policymakers and media operators want to sustain and further develop, and 3) translating these goals into a partnership agenda where PSM acts in ways that will benefit the media ecosystem as a whole, but without damaging its own distinctiveness. This framework offers a more coherent partnership agenda because it defines the concept of a media ecosystem as the basis for applying metrics to assess its health and sustainability.

In the second part of the chapter, we apply the characterization of the ecosystem to the Flanders region in Belgium to define how and when partnerships between VRT and third party private players are in the best mutual interests of the ecosystem as such, and clearly beneficial for VRT. A team of VRT staff and scholars, including the authors, collaborated to establish a structure for the organisation's partnership ambitions. The framework and criteria resemble earlier ex ante evaluation schema for value

and impact, especially the 'public value test' in the UK (Donders & Moe 2013). Our framework provides building blocks that will be useful for other public media firms to develop ex ante evaluations of which partnerships are most beneficial to engage. The framework was adopted in 2016 by VRT as an integral part of its partnership strategy.

The evidence is derived from two sources: 1) a media economic analysis of primary and secondary market data, and 2) benchmarking legal and strategic provisions for PSM partnerships in various European PSM organisations. We begin with a review of business literature about the ecosystem metaphor to develop insight about how highly distributed networked structures typically function in industries today.

The media ecosystem as framework for partnerships

The ecosystem metaphor in business is a relatively recent phenomenon that provides a new framework for evaluating industry health and deciding what constitutes an industry in the first place. The metaphor was first adopted in the U.S. information technology and telecom sectors and has been adopted in other sectors, including media. It is especially attractive for media given increasing digitalisation, convergence, and the popularity of technology-driven business models. We follow Williamson (2012) in understanding a business ecosystem as a network of organisations and individuals that co-evolve their capabilities and roles to align investments in ways that create additional value and/or improve efficiency.

The ecosystem notion was coined by a botanist, Arthur Tansley in 1935. He found it useful for describing a localised community of living organisms interacting with each other and their particular environment (Willis 1997). James Moore introduced the business ecosystem perspective as a strategic planning concept in 1993 to facilitate the understanding of the company as part of a complex assortment of industries and, what we now call, stakeholders. In a business ecosystem, companies co-evolve their capabilities in response to innovation. They work co-operatively and competitively at the same time to support new products, satisfy customer needs, and eventually incorporate the next round of innovations

Hannon (1997) explored the analogy between biology and economics to demonstrate common features in their 'ecologies'. Both study dynamic, organically-based systems that have methods of production, exchange, capital stocks and storage (see also Peltoniemi 2006). Thus, symbiosis and co-evolution are key characteristics. And just as biological ecosystems consist of a variety of interdependent species, business ecosystems analogously depend on interdependent networks of organisations for sustainability. In such networks, each member contributes to the ecosystem's overall wellbeing and is dependent on other members for survival. Reciprocally, the survival and success of each member is influenced by the ecosystem as a holistic entity that is in continuous evolution (lansiti & Levien 2004a; Makinen 2007). There are differences, too. In a business ecosystem, actors engage in planning and are able to envision

the future with some accuracy (Iansiti 2004b; Peltoniemi 2006). Moreover, business ecosystems compete for members rather than only against them. Finally, business ecosystems aim at delivering innovations, whereas natural ecosystems aim at mere survival (ibid).

A business ecosystem is centred around a leading company, typically characterised as the 'keystone' because it regulates overall functioning (Iansiti & Levien 2004a). Its actions influence the behaviours and consequences for itself and all other ecosystem members. Other terms for the keystone firm are 'ecosystem leader' (Moore 1993), 'platform leader' (Cusumano & Gawer 2002), and 'hub' (Dobson 2006). Sustainability is a function of the ecosystem's overall health, which depends on the extent to which it fosters the durable growth of opportunities for its members and improves the benefits delivered to customers (lansiti & Levien, 2004b).

The literature on business ecosystems adds new and useful elements for the analysis of competition in media industries and markets. First, ecosystem thinking recognises the importance of competition not only *within* but also *between* ecosystems (Dobson 2006). New entrants in media industries such as Google and Netflix have established powerful global ecosystems that invade and erode the 'incumbent' multi-sided media ecosystem in domestic environments for audiences and advertising. Second, the co-evolution of members that comprise a business ecosystem implies that incumbent actors who mainly competed before must now also co-operate at the same time.

Bengtsson (2000) argues that the most complex, but also the most advantageous relationship, is 'coopetition' where firms co-operate and compete simultaneously. Co-operation (or collaboration) within an ecosystem describes the process of companies working or acting together in a partnership agreement for their mutual benefit, as opposed to working in competition for solely self-interested benefit. Implementing co-operation requires formal agreements that specify objectives and goals, means and governance, and the purview of the intended co-operation. A partnership involves the sharing of various assets, including finance, skills, information and other resources in the joint pursuit of common goals. Partnerships can be implemented at narrow operational levels, such as co-operation between news media (e.g. Dailey 2013; Hatcher 2017), or at broader strategic levels such as co-investment for research and development or the joint development of new platforms (e.g. the YouView platform in the UK).

For PSM, the audio-visual media ecosystem is comprised of all the companies and interactions between companies that contribute directly or indirectly to the creation of and investments in audio-visual and digital content services. This indicates the combination of the *media content* value chain (commercial and public service broadcasters, distributors, production companies, film, print, online, etc.), the wider *creative industries* (the primary focus of PSM partnerships), and actors in the *e-commerce*, *media-tech and internet technology* industries. The integration of these levels is especially important for small markets, as we later demonstrate.

The health and wellbeing of a business ecosystem

Iansiti and Levien (2004b) explored the makings of a healthy business ecosystem to develop measures of the extent to which the ecosystem provides durable growth opportunities for every member and dependent. They identified three factors that define the performance of an ecosystem, taken as indicators of its health.

First, one must assess the *productivity* of the business ecosystem. In a biological ecosystem, the most important measure of health is its ability to effectively convert non-biological inputs, such as sunlight and mineral nutrients, into living outputs – populations of organisms, or biomass. The business equivalent is a network's ability to consistently transform technology and other raw materials of innovation into lower costs and new products. The second factor is *robustness*. To provide durable benefits for a species that depend on a biological ecosystem, it must be able to adapt and persist in the face of environmental changes. Similarly, the durability of a business ecosystem depends on its capacity to survive disruptions such as unforeseen technological change. The third factor is *innovation* (or niche creation). In addition to productivity and robustness, a healthy biological ecosystem supports a diversity of species (Iansiti & Levien 2004b). Innovation, or niche creation, is the critical mechanism by which business ecosystems increase diversity over time. This diversity results in new alternatives and choices for the customers that depend on an ecosystem (Iansiti 2006).

On the basis of these three factors, Iansiti and Levien propose metrics for evaluating business ecosystem health. Although all the measures will not apply in every circumstance, they provide an effective set of tools for assessment.

- Productivity: total factor productivity, productivity improvement over time, and delivery of innovations.
- Robustness: survival rates, persistence of ecosystem structure and predictability, limited obsolescence, and continuity of use experience and use cases.
- Innovation: variety and value creation of new options.

Linking these indicators to the health of public and private broadcasters, in accordance with the work of Simon (2013), we identify metrics and apply these as assessment measures for VRT.

Translating the partnership agenda in Flanders

In Flanders, a management agreement between VRT and the Flemish Government is negotiated every five years. A focus on equilibrium in the media system is characteristic and motivated, for example, the 1989 decision to only grant one commercial player (VTM) a license to operate alongside the public broadcaster. Since then, govern-

ment has stressed the importance of a 'pax media' between all Flemish media players (Raats & Pauwels 2013).[2] The emphasis on partnerships since 2010 can be usefully understood in that context.

The previous management agreement (2012–2016) showed the problematic nature of enforcing partnerships in specific obligations and measurable criteria. Commitments remained vague and mostly oriented towards sustaining the (power) positions of legacy media players, rather than supporting the development of new content and services. Negotiations for the 2016–2020 management agreement features a more focused approach.[3] In the new agreement, a preamble sketching disruptive changes in the media sector drives the requirement for VRT to contribute to the anchoring and sustainability of the Flemish media ecosystem. Implementing partnerships is one of the seven strategic objectives for VRT to strengthen the wider media ecosystem, including cross-sectoral media partnerships and co-operation with private media companies. This specifically includes collaboration with newspapers, distributors, producers, the music sector, and media tech companies and start-ups.

In Belgium, the Flemish market displays typical characteristics of a small nation (limited number of players, limited export and domestic markets, and language differences) – see Puppis 2009. At the same time, Flanders has high proportions of domestic programming and viewing, and a flourishing domestic production sector. The Flemish television market is dominated by three broadcasting groups: the public broadcaster VRT and two private broadcasting groups, Medialaan and SBS. In 2014, the total audience share for VRT and the two private broadcasting groups was 81.2 per cent, with an HHI concentration index of 0.26, indicating strong concentration in the audience market.[4] The penetration of SVoD over-the-top platforms is currently at the European average of 11 per cent of households, but much lower than in the UK or the Northern countries (EBU 2016). Although private broadcasters and publishers are concentrated, the independent production sector is highly fragmented – consisting of more than 40 companies (VRM 2017).

We illustrate the health of the Flemish media ecosystem by benchmarking selected metrics with other European countries. We compare three metrics for the *productivity* of the ecosystem: the output of the TV ecosystem, the total investment in original (or local language) content; the quality of the original content as perceived by audiences; and the diversity of ecosystem output (i.e. the proportion of local content produced by the commercial broadcasters compared to the public broadcaster). We then discuss the *robustness* of the ecosystem by identifying threats to the ecosystem and highlighting areas for sustainability development in the ecosystem. Since the metrics for productivity also address the two key metrics for innovation (variety and value creation) there will be no separate discussion on innovation. Space doesn't permit a full treatment, but the results will demonstrate the utility of the framework we propose.

The productivity of the Flanders media ecosystem

For the first productivity metric (output), we draw on a study by the European Audiovisual Observatory (Kevin 2015) to compare the total original content programming investments[5] per capita by the major TV channels versus the country populations for selected European countries. While the selection of countries is not comprehensive, the comparison yields several insights. First, Flanders ranks third among the countries in terms of total original content budgets per capita, behind the UK and Finland. The ecosystem therefore is productive, relative to its population size. Second, there is a U-shaped curve between the total original content investment per capita and the population size of the countries. Small European countries, in particular in Northern and Western Europe, invest higher amounts in original content per capita compared to several larger countries.[6] Referring to the framework of Hallin and Mancini (2009), we observe that the levels of original content investment per capita are lower for countries belonging to the 'mediterranean polarized pluralist' model than countries belonging to the other two media models.[7]

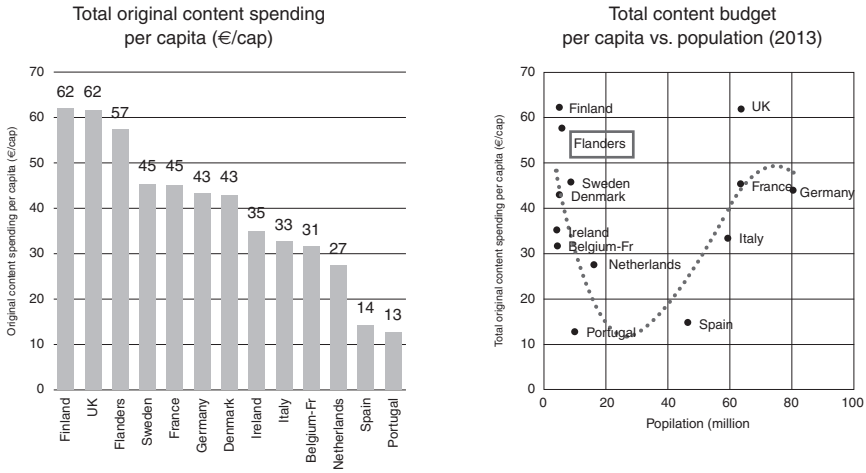

Figure 1. Original content budgets per capita and relationship versus country population

Source: European Audiovisual Observatory

A second metric is the quality of the TV content, as perceived by the audience. From a European audience data report (IPNetwork 2014) we categorised the top rated 20 programmes by genre and origin, and ranked the countries in terms of quality of the local content by differential scoring for several genres.[8] Our analysis focuses on the share of local drama/crime series and news programmes versus foreign acquired programmes, specifically US originated. As highlighted in Figure 2 below, the countries with the highest original content spend per capita also had the highest number of domestic TV drama series or crime series in the Top 20 most watched programmes in 2013.

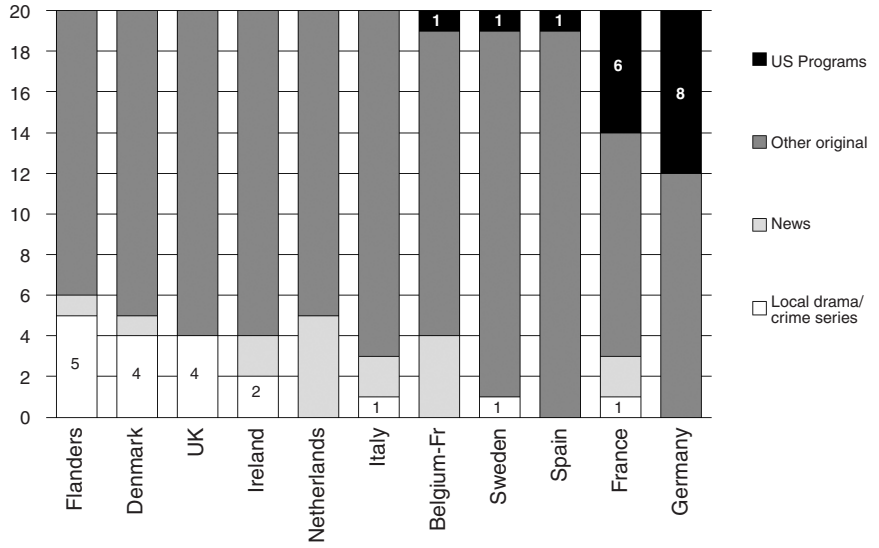

Figure 2. Top 20 audience programs by original content genre vs acquired programs (2013)

Source: IP Network Television Facts

As shown in Figure 2, Flanders leads the way with five TV drama series in the top 20 TV programmes. All programmes in the top 20 for Flanders along with Denmark, the UK and Ireland are original content or sports programmes. By contrast, eight out of the top 20 most watched programmes in Germany (40 per cent) originate in the US, and in France this pertains to six out of 20. Although the dataset is small and focused only on the highest ratings of the top 20 programmes during the year, it raises two questions that merit further research.

First, the higher total original content spend in the top countries is co-related with a higher appreciation by audiences for local drama or crime series and news programmes. Second, France and Germany appear as outliers for original content spend. Other factors may be at work, such as local taste and the adaptation of foreign programmes through dubbing versus subtitles (Bondebjerg et al. 2015).

As a final productivity metric, we analysed the diversity of original content production and present this as the 'leverage' ratio in each country, i.e. the original content spend of commercial broadcasters versus spend by the publicly funded broadcaster. Using data from the European Audiovisual Observatory (Kevin 2015), the original content budgets per capita of both categories of broadcasters and the leverage ratio are represented for each country in Figure 3. Within the top countries in total original content spend, the leverage ratio is highest in the UK[9], followed by Finland and Sweden. In Flanders, the leverage ratio is 0.6 since the majority of original content is made by the public broadcaster. The analysis provides insights for government policy.

Governments should strive to maximise both the total original content spending by the ecosystem and the leverage ratio. This not only generates the maximum output of original content by the ecosystem while optimising government funding of the public broadcaster, but also preserves a competitive playing field between the public and the commercial broadcasters.

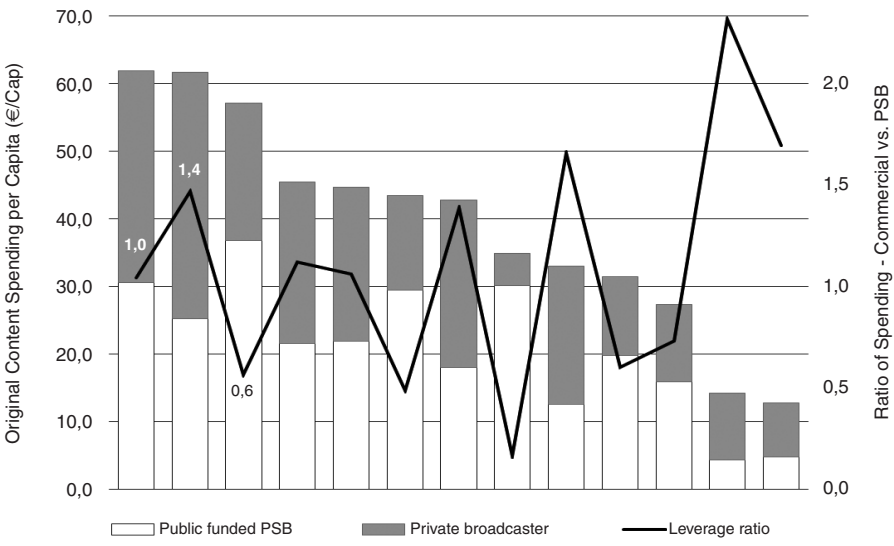

Figure 3. Original content spending per capita of public vs. commercial broadcasters and 'leverage ratio'

Source: European Audiovisual Observatory

The lower leverage ratio in Flanders is a concern, particularly given the high dependency of commercial broadcasters on television advertising. As advertising revenues are under pressure, original content budgets are being adjusted downward. This is achieved via strategies such as changing the genre mix of original content from expensive genres (drama) to cheaper genres, increased acquisition of foreign content to replace local content (the price difference can be up to 11 times higher), lowering risk by moving to deficit financing of external productions, and vertical integration by moving more productions in-house (Econopolis 2017).

The robustness of the Flanders media ecosystem

An analysis of the weaknesses of the ecosystem and the corresponding driving factors helps to identify key areas for improvement and to define metrics for the sustainability of the media ecosystem. One trend that exerts pressure on the domestic media ecosystem is changing use patterns and viewer fragmentation, which occurs at several levels. First, traditional TV set viewing is evolving towards multi-screen video consumption

and 'on-demand' forms of content distribution and monetisation. Second, fragmentation occurs within the traditional 'linear viewing' as well, resulting in a 'greying' of the demographics for local television. The average age of Flemish TV viewers is now 53.3 years, or 12 years older than the median age of citizens (41.2 years). Like the loss of valuable species in a natural ecosystem, younger viewers and 'digital natives' are leaving the 'traditional' TV ecosystem and migrating to new platforms (Econopolis 2017).

A second trend is strongly related to the previous – a shift in advertising markets. New technological developments and changes in audience behaviour have impacted advertising. The three changes that have the largest impact on the advertising model are 1) the fragmentation of media consumption, 2) new measurement and analysis technologies, and 3) the competitiveness of television against internet TV in terms of targeted advertising. While linear television still attracts the largest share of advertising budgets for all media in Flanders, the revenues have been stable in recent years while internet advertising has grown strongly, although mainly at the expense of print advertising.[10] Advertisers are continuously adjusting their marketing budgets to maximise the sales response curve for advertising investment. As the time spent on print media declines and the time on internet and mobile media grows, advertising revenues are shifting towards internet content providers (Econopolis 2017).

Within internet advertising, new global disruptors are taking an increasing share of the total advertising market. The share for Google and Facebook has grown from 40 per cent to 54 per cent in recent years, whereas the share taken by traditional, local publishers has declined to less than a quarter of the total. This means that for every euro that shifts from print to internet advertising, more than 75 per cent 'leaks' out of the local ecosystem to benefit mainly foreign market players (Caudron et al. 2014).

Third, there is a shift in the sources of revenue into the media ecosystem. In Flanders, the majority share of the inflows come from consumer payments (57 per cent) that comprise the largest part of subscription payments to distributors. Of the other sources of revenue, 24 per cent comes from advertising, 16 per cent from the government through the TV portion of total VRT funding and subsidies, and a mere 1 per cent is provided by export revenues (Caudron et al. 2014).

Table 1. Sources of funds into the Flemish media ecosystem

	2012		2015		CAGR growth
	in million €	in per cent	in million €	in per cent	(in per cent p.a.)
Consumer	740	55	801	57	2,7
Advertising	338	25	340	24	0,2
Government	242	18	227	16	-2,1
Export	10	1	13	1	9
Financing	11	1	16	1	13
Total	1 340		1 397		1,4

When looking at the growth of the funding sources from 2012 to 2015, we observe that the share of consumer payments to distributors has grown in recent years while the share of direct flows to the broadcasters, i.e. advertising and government funding, have declined. As a result, retransmission disputes between distributors and broadcasters have significantly risen in recent years (Evens 2014).

Our analysis illustrates challenges for preserving the financial health of the Flanders TV ecosystem in the future. Advertising and government funding are not expected to grow, so the growth will need to come from consumer spending and smaller revenue sources, especially export and external financing. Although there is opportunity to generate more export sales and increase external financing, those revenues currently generate only a tiny fraction of total funding and have a small impact on total funding for the Flemish ecosystem. Finally, broadcasting economics penalise the financing and production of original content by broadcasters in smaller countries because it has limited possibilities for export appeal.

Developing an operational framework and criteria for evaluating partnerships

Based on the characterization of the ecosystem and assessment of what needs to be sustained and developed in the Flemish media ecosystem above, a series of objectives and criteria can be developed to foster a partnership agenda for VRT. Important to note is that the criteria in our framework apply specifically to partnerships with private players, and the outcome of the partnership test is not meant as a binding regulatory measure. The key principle is that partnerships will be considered eligible when they create a positive impact on the media ecosystem as such and simultaneously reinforce the societal mission of VRT. To assess this principle, specific sets of criteria were defined to implement the framework.

The first set evaluates the *positive impact on the ecosystem* of the partnership proposal by examining the expected value of the partnership proposal according to the health metrics of the ecosystem in the key dimensions of productivity, robustness and innovation, as described in the contextualization and analysis above.

The second set of criteria evaluates the *impact on consumers and on competition*. If the impact of the partnership on either of these groups is negative, the partnership will not be initiated. The impact on the consumer concerns both the negative substitution effects and the positive market creation effects. Key aspects to be considered are the benefits to consumers and whether the partnership increases investment and may lead to an increase in consumer choice. The impact on competition is evaluated on aspects that include: impact on market access, abuse of market position, cross-subsidisation from VRT to other market players, or repeated exclusive co-operation that may bring harm to other market players. The table below schematizes the criteria for the ecosystem.

Table 2. Criteria for assessing partnership potential for the ecosystem

Criteria for expected value from the partnership; evaluate whether…	Impact on consumers and on competition
The level of investment in original content is increased or maintained, both directly and/or indirectly	Increased investments
The cooperation increases (or maintains) the diversity of the media content and/or services	Increased consumer choice
The cooperation contributes to the quality of content and/or services	Impact on market access
The cooperation increases the access and/or comfort of local content and/or services	Abuse of market position, cross-subsidisation from VRT to other market players
Creation of economic value add (new revenues, cost sharing, new investment)	Repeated exclusive cooperation that may bring harm to other market players
The cooperation increases or is needed for innovation in the media ecosystem	
The cooperation contributes to an increased know-ledge or know-how for the actors in the ecosystem	
(All these criteria do not need to be cumulatively fulfilled)	

Criteria with respect to the *impact on the public service mission of VRT* are classified into two categories: 1) the contribution to the public service remit of VRT, defined in the key public purposes in the management agreement; and 2) ensuring no harm for the independence and integrity of VRT or its operations – as derived from a benchmark of editorial guidelines in various public broadcasters in a 2016 study (see Raats 2016). Table 3 summarizes the criteria for the impact on the public service mission of VRT.

Table 3. Criteria for assessing partnership potential for public service broadcasting

Criteria for the contribution of the partner-ship to the public service mission of VRT	Criteria for the independence and integrity of VRT and impact on the operations and financial results of VRT
Relevant for all	*Independence and integrity of VRT:*
Trustworthy, high quality, distinctive information	VRT maintains end responsibility for its own offering
Cultural and educational mission	Core values of the PSB cannot be harmed
Public value add for sports and entertainment	VRT may evaluate beforehand whether potential part-ners can be included. Some partners could be exclu-ded, cooperation with others could require extra care
Diversity, identity and community building	
Digital formats, narrative formats, innovation	The VRT and/or its brands are always recognizable in the cooperation
(At least one of the above criteria needs to be fulfilled)	*Impact on the operations and financial results of VRT:*
	The economic value add for VRT (new revenues, new business models, cost reduction)
	Contribution to the VRT competencies or know-how
	Enables more efficient or effective execution of ope-rations
	VRT has the competencies and resources to manage the partnership
	The partnership conforms to the governance structure and legal obligations of VRT

If there is a too large negative impact on the independence or integrity of VRT, the proposed partnership will not be acceptable. And likewise, if the impact of the partnership on the operational working of VRT is too negative, the partnership will not be accepted. Priority partnerships score high on both dimensions.

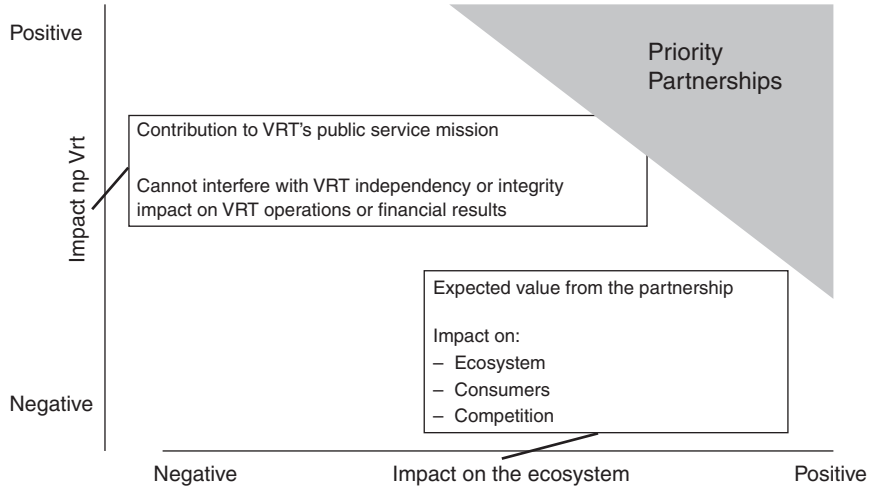

Figure 4. Partnership framework

At the time of publication, this framework was being tested to determine the validity for ex ante estimations based on existing public-private partnerships VRT was involved in, and plans for partnerships proposed in the past years. One specific case study was VRT Sandbox, an initiative launched in co-operation with the EBU that offers technology start-ups and innovative organisations in media technology the opportunity to test their products in an operational production environment. This collaborative approach allows companies to test new media technologies and VRT gets a head start in evaluating new potential products and processes. Sandbox project results are shared with other ecosystem actors.

Applying the evaluation framework, VRT Sandbox delivers a positive value for the ecosystem in terms of access and comfort, economic surplus, and support for innovation and increased knowhow. There is no negative impact on consumers or on competition. From VRT's perspective, the initiative contributes to VRT's digital presence and innovation, creates economic and added value, increases know-how and the potential for enhanced operational efficiency. In sum, this is a partnership worth pursuing.

Conclusion: Public service media as a keystone in the media ecosystem

The strategic partnership objective is an opportunity for PSM to solidify its position as a 'keystone species' in an increasingly interlinked network of media players. PSM's role and position are thereby both defining and defined by the performance of the environmental ecosystem.

Based on the literature review and our empirical analysis of the Flemish media ecosystem, there are several reasons why PSM should assume a keystone role. First, the incumbent domestic media ecosystem must compete effectively with disruption caused by new entrants. One or more incumbent firms in the ecosystem must have a keystone role. PSM has served that role for decades, rather well, so it is more efficient and secure for the ecosystem if PSM continues in this role. Second, given that PSM in many European countries accounts for more than half of the investment in original (local language) content, co-operation efforts will not achieve sufficient scale or scope if PSM does not have this role. Third, the PSM benefits from a stable funding mechanism – the licence fee or government funding is a better overall guarantee of robustness than more short-term market-driven revenues and profit imperatives among its commercial counterparts. Fourth, governments in Europe have long used PSM as a policy lever and this is guaranteed by EU treaty. PSM can most readily be used to foster co-operation in media because business ecosystems are self-organising and co-operation cannot otherwise be implemented by decree. The Flemish government has given VRT the strategic objective of establishing partnerships but left the operational implementation up to VRT management, subject to periodic review of the outcomes. Finally, European PSM's already have a pan-European network (the EBU) that facilitates knowledge and best-practice sharing of innovative approaches, services and developments. Hence, if a partnership agenda is to be part of a management agreement, as for VRT today, resources to foster co-operation that mutually benefits the domestic media ecosystem are most logical and reasonable for PSM.

Also for PSM, there are benefits for adopting a partnership strategy. A strategic benefit is the explicit legitimation of PSM as a 'keystone species' in the media ecosystem today, and therefore a market-strengthening and long-term contributor to its overall health. Second, by developing the framework for partnerships, PSM can articulate a vision for the ecosystem and partnership goals that is specific to the roles and functions of the public service remit in media. Finally, there are direct benefits for PSM resulting from specific partnerships that are both beneficial for the ecosystem and for the organisation.

There are, however, several risks that need to be managed. Firstly, there are various types of implementation risks in developing partnerships within an ecosystem (Adner 2006; Makinen & Dedehayir 2012): 'initiative risk' (the feasibility of the partnership and its success potential), 'interdependence risk' (the amount of dependence on the co-operating partners to deliver their part of complementary innovations or deliverables); and 'integration risk' (the likelihood that a given innovation will be successfully

integrated in downstream sub-systems and effectively deployed). Thus, risk management needs to be a major element of a PSM's partnership strategy.

A second risk lies in potentially unrealistic expectations about the capability of PSM to effectively strengthen the overall ecosystem given problems related to budgetary and operational constraints. Regarding the latter, commercial sector pressure on the PSM to pull back from online development is a significant concern.

A third risk is pressure from other actors for PSM to engage in partnerships that could compromise its essential public remit or negatively impact its competitive position, operations or financial results. A clear proactive statement of the framework and criteria for PSM to use in establishing partnerships is necessary to alleviate this.

Finally, and most importantly, PSM would be the primary (or worse, the sole) instrument of government policy for strengthening the domestic media ecosystem. But the biological ecosystem literature clearly indicates that transforming an ecosystem involves all species and this suggests the need for a paradigm shift among all the key actors and stakeholders to achieve effective change (Meadows 1999; Parris 2003). The trade-offs indicate that VRT can't be the sole policy instrument for strengthening Flanders' media ecosystem. A broader stakeholder consensus needs to be created for a shared vision of sustainable development that is necessary to establish indicators to both direct and monitor progress. The case of Flanders illustrates the difficulties of implementing partnerships as enforceable commitments, and the risk that a focus on partnerships and sustainability could mainly support a status quo that only benefits legacy players rather than the ecosystem as a whole. Moreover, the interests of private firms are not always identical with those of audiences or in favour of the sustainability they set out to defend (e.g. vertical concentration, limiting access, etc.), and not all private players want a partnership with public broadcasters.

The framework for PSM and partnership presented in this chapter was developed to come to a more coherent partnership agenda that is based on what needs to be sustained and what needs to be developed in the media ecosystem. By directing the partnership implementation towards areas that generate the most value for the media ecosystem and communicating and applying the framework and criteria for creating and monitoring partnerships, VRT can contribute to strengthening the domestic media ecosystem. This aspect of development in public service media goes to the practical heart of the roles and functions of PSM in a networked society.

Notes

1. The authors would like to thank Ms. Lut Vercruysse (Director of Strategy, VRT) and Prof. Dr. Karen Donders for their helpful input and feedback.
2. This monopoly on advertising was later overruled by the Court of Justice of the EU, which deemed it incompatible with internal market legislation. In 1996, a second commercial broadcaster, VT4 (now Vier and Vijf, part of the SBS Belgium group) was launched.
3. In the current management contract (2016-2020), the word 'collaboration' appears no less than 40 times, a strong increase from the 19 and 23 times in two previous 4-year agreements.

4. The Herfindahl-Hirschman index is a measure of the concentration of a market and is calculated as the sum of the squares of the market shares of the market actors. A factor above 0,25 indicates strong concentration of a market.
5. IHS splits the programming budgets of broadcasters in 3 groups: original content, sports, and acquired content. The broadcasters included in the study represent 70-80 per cent of market share in the countries. These broadcasters typically account for more than 90 per cent of the total original content budgets in the countries.
6. This finding of a larger proportion of domestic programming in small countries compared to several larger nations was already reported as an unforeseen finding in an analysis of the broadcast economics of small countries by Picard (2011).
7. The countries in the 'mediterranean polarized pluralist' model in this chart are: France, Italy, Spain and Portugal. The other two models of the Hallin-Mancini framework are the 'Northern European Democratic Corporatist' and the 'North Atlantic Liberal' model.
8. The scoring system used is: 2 pts for each drama/crime series or movie, 1 pt for each news program, 0 for other local content and -1 for each US program in the Top 20 audience TV programs.
9. ITV is grouped among the commercial broadcasters.
10. Internet advertising consists of search, display and classified advertising.

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