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Accounting separation in the Italian local television sector ^(*)

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ABSTRACT: In 2011 and in connection with the switch-over to digital terrestrial television, AGCOM, the Italian Communications Regulatory Authority, issued a resolution that prescribes the adoption of an accounting separation system by many Italian local television broadcasters, which typically are small and medium-sized entities. The problem with such requirement is the current lack of guidance. This work analyses the main issues associated with the implementation of this regulatory device. At present, academic literature on accounting separation has mostly concentrated its attention on debating purposes and effects of this regulatory tool, whereas works on the strictly accounting implications have addressed only specific topics so far, and studies on accounting separation in the TV broadcasting sector are currently scarce. This paper aims at providing a contribution in this research path. After the illustration of the legislative framework and intention, the article delineates a conceptual framework for accounting separation purposes in the local TV ambit, used as a guide to identify and analyse the main theoretical problems associated with this research: 1) interrelation of financial accounting with management accounting; 2) cost accounting methods and, in particular, accounting of TV network assets; 3) transfer pricing arising when measuring the virtual purchase/lease of transmission capacity between the separated content provider unit (buyer/lessee) and the network operator one (seller/lessor). In order to test propositions derived by the theoretical background, this paper presents a single case study concerning the implementation of accounting separation in an important local television broadcaster operating in South Italy. Results obtained, although limited to a single case, confirm overall validity of the conceptual framework, and indicate that management accounting systems, especially costing methods, are fundamental for a proper separation of activities. Specifically this case study provides evidence, as expected, of the application of fully distributed costing based on historical cost for the accounting of network assets, while transfer pricing measurement results different from expectations, because not exactly measured at market prices, due to specific reasons. Finally, this case study offers qualitative information on management's decisions concerning the implementation of accounting separation.

KEYWORDS: accounting separation, television broadcasting, regulatory accounting.

1. Introduction

Although the implementation of regulatory policies in the telecommunications industry and, in general, in public utilities is nowadays a matter of fact in Italy and in many developed countries, as a result of major reforms occurred in the last two decades (BRUNO, 2012; CAROLI CASAVOLA, 2001; NARDI, 2010), the introduction of regulatory tools in the radio and television broadcasting sector took place in Italy only in 2005, with the official publication of the Consolidated Act for audio-visual and radio media services – Legislative decree no. 177 of 31 July 2005, as amended by Legislative decree no. 44 of 15 March 2010 – by the Italian Communications Regulatory Authority (Autorità per le Garanzie nelle Comunicazioni or “AGCOM” or the “Authority”)⁽¹⁾. Following this act, in 2011 and in connection with the so-called *switch-over* to digital

* Articolo sottoposto a doppio referaggio anonimo.

⁽¹⁾ AGCOM is an independent authority, established by article 1.1 of Law no. 249 of 31 July 1997. It is accountable to the Italian Parliament, which has established its powers, defined its bylaws and elected its members. The two

terrestrial television – DTT broadcasting (a process completed in Italy, as well as in other European countries, in 2012: AGCOM, 2012b and 2013)⁽²⁾, AGCOM issued Resolution no. 353/11/CONS that prescribes the adoption of an accounting separation system by many local television broadcasters, as better specified in the following section.

Italian local television broadcasters (LTVBs) constitute a population of hundreds of small and medium-sized entities – SMEs (more than 600 enterprises, according to information available at the AGCOM web site), authorized to broadcast via DTT in specific local ambits.

The problem with the regulatory requirement introduced by the Authority in 2011 is the current lack of details and guidelines, susceptible to cause inadequate or wrong implementation of it. As a matter of fact, several LTVBs faced difficulties in the attempt to comply with this regulation: some of them, in failing to implement an accounting separation system, have even lost the governmental authorization as network operators, with significant economic consequences.

These considerations lead to the research objectives of this work, which can be synthesized in the following questions. How to implement an effective and compliant accounting separation system in the Italian local television sector? Furthermore, what are the main theoretical and practical issues related to its implementation? Answers are necessarily articulated and have derived from the development of research hypotheses based, as explained in Section 3, on the examination of provisions and guidelines about accounting separation in sectors similar to that of local television broadcasting. This helped to define, through a process of interpretation by analogy, a conceptual framework for accounting separation purposes in the local TV ambit. Such framework permitted to analyse the main theoretical problems associated with this research and to develop further hypotheses, which were tested through a case study.

Academic literature on accounting separation is, at the moment, mostly concentrated on debating the regulatory purpose and on analysing its effects, whereas works on the strictly accounting implications have addressed only specific topics so far, like telecommunications' network access pricing (FJELL AND FOROS, 2008; HÖFFLER AND KRANZ, 2011; PINDYCK, 2007; SIDAK AND SINGER, 2002). An Italian research field, which presents some similarities with this theme, is represented by the literature regarding separate assets or assets designated for a specific business (see e.g. BIANCHI, 2003; DELL'ATTI, 2005; GIANNELLI, 2004; STRAMPELLI, 2011). Hence, scholars' and practitioners' studies on accounting separation in the TV broadcasting sector are currently scarce. This paper aims at providing a contribution in this research path. Given the complexity of this matter, which involves several arguments of the accounting disciplines, a literature review has been performed in almost all the sections, according to the particular aspect analysed time by time. In particular, literature review concerning the theoretical implications of this research is included in Section 5.

This paper is organized as follows. The Second section explains the legislative framework and provides an insight into the regulatory provisions and intentions. Section 3 illustrates the

main tasks assigned to it by Law no. 249 are to ensure equitable conditions for fair market competition and to protect fundamental rights of all citizens. Specifically, AGCOM's functions extend from telecommunications to audiovisuals and publishing.

⁽²⁾ DTT is the prevailing means of television broadcasting in Italy. In fact, in 2012 broadcasting through DTT reached 85% of the Italian population and amounted to 63.7% of TV services, while the remaining was mostly represented by satellite platforms. In Europe, the composition of broadcasting means and TV services shares is different: DTT 29.2%, satellite 33.3%, cable 29.7%, IPTV 7.8% (AGCOM, 2013:30).

research approach and the methodology applied. Section 4 delineates the conceptual framework used to identify and analyse the theoretical aspects of this research that, together with the related relevant literature review, are illustrated in Section 5. Section 5 is articulated in four subsections, each dedicated to the main theoretical implication of this paper: interrelationship between financial accounting and management accounting systems (subsection 5.1); cost accounting and specifically TV network assets accounting (subsection 5.2); transfer pricing measurement (subsection 5.3); propositions tested through the case study (subsection 5.4). Section 6 illustrates the case study: the analysis of the implementation of accounting separation in Telenorba S.p.A. The last section summarizes and concludes, indicating some research directions.

2. Legislative framework and considerations on the regulatory device

As anticipated above, the current reference legislative framework for accounting separation requirements in the local broadcasting sector is a measure adopted by AGCOM in 2011: Resolution no. 353/11/CONS of 23 June 2011, published in the Italian Official Journal no. 155 of 6 July 2011 – General Series, effective as from 7 July 2011. This Resolution endorsed the “New regulation for the terrestrial television broadcasting using digital technology” (the “Regulation”), set out in Annex A to the above Resolution, of which it is an integral and substantial part.

Resolution no. 353/11/CONS and the related Regulation were necessary in order to regulate the broadcasting sector in connection with the obligation to switch to DTT broadcasting for programmes and multimedia services. Previously, the named Consolidated Act for audiovisual and radio media services provided for accounting separation only for companies that did not broadcast using analogue technology and local operators were nonetheless exempted.

The reasons underlying the unbundling requirements introduced by the Authority are related to the general principles of the protection of pluralism of media broadcasting and competition, as set out in article 5 of the Consolidated Act, which constitutes one of the main sources of reference for Resolution no. 353/11/CONS. Indeed, in establishing the above-mentioned accounting requirements, the Regulation refers to the general issue of transparency in reporting, in order to reduce the so-called “informational asymmetries”.

As in other regulated industries, the need for the introduction of regulatory policies is a consequence of the sharing of a network, which, in this case, is constituted by portions of DTT band frequencies. Hence, the importance of preserving pluralism of TV frequencies occupants, a fundamental topic in media communications, and the impulse towards “net neutrality” by European regulators (AGCOM, 2013).

Going to the cornerstone of the regulatory requirements introduced by the Regulation, it was set out they apply to broadcasters that carry out more than one of the activities covered by the Regulation. Specifically, with reference to the requirements applicable to LTVBs, the principal provision is article 25.2 of the Regulation, which states:

“Network operators in local ambit that are also content providers shall use an accounting separation system, whereas network operators in national ambit that are also audiovisual media service providers shall apply corporate separation”.

A clear definition of terms is included in article 1.1 of the Regulation, namely and for the purposes of this paper:

- Network operator: “a subject authorised to install, operate and provide a television network on terrestrial television frequencies using digital technology and airing, multiplexing, distributing and broadcasting frequency resources that allow the broadcasting of television programmes to users”;
- Content provider or audiovisual media service provider: “a natural or legal person with editorial responsibility for the selection and the audiovisual content of the service offered and programme schedule”;
- Local television ambit: “the operation of television broadcasting activity using digital technology [...] in one or more regional areas, not more than ten, even neighbouring, provided that coverage is below 50% of the national population”;
- National television ambit: “the operation of television broadcasting activity not limited to a local ambit”.

Therefore, according to this rule, local network operators, which concurrently are content providers with editorial responsibility, shall adopt a system of accounting separation. The introduction of such terms is one of the innovations presented by the above-mentioned Consolidated Act in 2005, which distinguished between the main two *souls* of LTVBs, i.e.: the network operator’s activities – consisting in streamlining broadcasting capacity and infrastructure management (frequencies, systems, television stations, etc.) – and the content provider’s activities, that are the typical activities of editors (development of television content and the responsibility for programme scheduling).

As a result of these innovations, the two activities are subject to separate and specific ministerial authorizations and can, therefore, be carried out either separately or jointly. In this regard, the concurrent presence of these activities, corresponding to two distinct figures, in a single legal entity (a vertically integrated firm) is quite common in LTVBs that come from the analogue system, and it is precisely for this reason that the Regulation may have significant effects on the accounting systems of many companies in that industry.

With regard to the regulatory devices chosen by the Authority, corporate separation for national broadcasters and accounting separation for local ones, it may be argued that such decision was somehow influenced by the structure of the Italian media broadcasting market. In fact, as indicated by the Authority in its 2013 Annual Report, the television broadcasting industry in Italy denotes a concentration of market shares and this situation is substantially stable over the years (AGCOM, 2013). Focusing strictly on DTT broadcasting and on the revenues of the “free-TV”, 4.9 billion Euros in 2012, figures shown in the aforementioned AGCOM report say that just two players account for the majority of the market: RAI 48% and Mediaset 39%. Leaving out the third terrestrial operator by revenues, Telecom Italia Media, the share of which is only 3%, the remaining population accounts for about 10% of the market and is made up of several operators, mainly LTVBs. Therefore, the Italian TV broadcasting market is currently characterized, at national level, by the domination of few players (an oligopoly of large media groups), and, at local level, by the presence, in almost all the local ambits, of several competitors (typically SMEs).

Given this picture of the market, the decision to prescribe accounting separation as regulatory tool for LTVBs can be considered reasonable. According to several authors (see, for instance, contributions from: BRUNO, 2012; CAVE, 2006; CAVE AND MARTIN, 1994; HARDT, 1995; HARDT AND STÜRMEER, 1994; PROSPERETTI, 2003), at least three progressive levels of separation can be identified: 1) accounting separation; 2) functional or operational unbundling (i.e. business or corporate separation, where legally separated entities are allowed to belong to the same own-

ership); 3) structural separation or separation of ownership; the latter being considered the most rigorous. Although as illustrated in CAVE (2006) accounting separation represents the weakest degree, in the Italian local broadcasting sector, characterized by the existence of many competitors with limited market power, the regulatory aims of pluralism, fair competition and transparency pursued by AGCOM can be achieved through accounting separation. Moreover, such regulatory device may be considered a control tool for the Authority to gather information on the network utilization by local operators, useful to assess the quality of service, which is an important goal for regulators as well (BRUNO, 2012), especially because of significant government grants received by broadcasters per Law no. 448/1998, as subsequent amended and supplemented.

Since, as mentioned above, principles underlying the *ratio legis* are transparency for the protection of competition and the non-discrimination and pluralism of media, it is reasonable to assume that the accounting separation system required by article 25.2 of the Regulation also applies when other activities, which may include unregulated activities as well as other type of regulated activities, are carried out. Radio broadcasting, property management or services that are not covered by the Regulation are examples of other activities or non-television activities. This paper will not dwell on such other activities. As pointed out by the European Communities Commission Recommendation no. 98/322/EC, an important document later commented, accounts for regulated and unregulated activities need to be kept separate.

Summarizing, the effects of the above-mentioned measures imply that LTVBs are required to implement an accounting separation system in order to allocate accounting figures to the following activities:

- a) network operator;
- b) content provider;
- c) other activities (if any).

3. Hypotheses and research methodology

Neither Resolution no. 353/11/CONS nor the attached Regulation stipulate principles and/or rules for the implementation of an accounting separation system, nor has AGCOM issued any guidelines in this respect yet, unlike the accounting separation model for RAI-Radiotelevisione Italiana S.p.A. ("RAI")⁽³⁾ – Italy's national public broadcasting company, owned by the Ministry of Economy and Finance – subject matter for specific AGCOM resolutions, or the telecommunications sector, extensively regulated by the Authority.

The only known elements relate to the separation between the network operator's and the content provider's activities mentioned earlier. Furthermore, it should be noted that, at the present time, said Resolution and Regulation do not require any kind of reporting of separate accounts to AGCOM or to other specifically identified bodies.

Given the fact that accounting separation here analysed is an exercise requested for AGCOM's regulatory purposes, in order to address the question under investigation and to analyse

⁽³⁾ The main purpose of RAI's accounting separation is to separate the results of the operations related to the public broadcasting service from the commercial ones, in order to show that the public grant coming from a compulsory subscription fee (a tax imposed to all the owners of television equipment and similar) does not exceed the public service costs, otherwise qualifying as an undue subsidy (CORTE DEI CONTI, 2011).

the main related issues it was crucial to consider AGCOM's approach to regulatory accounting. Therefore, the main research hypothesis (a working hypothesis) was to apply interpretation by analogy of similar regulations in order to delineate a conceptual framework that could serve as a guide to address the problem. This generated further hypotheses and related predictions, which were tested through a case study.

The research methodology can be summarized in the following steps:

1. Analysis of provisions and guidelines regarding accounting separation in sectors similar to that of local television broadcasting, to define, through a process of interpretation by analogy, a conceptual framework for accounting separation purposes in the local TV ambit;
2. Using such conceptual framework as a guide to identify and investigate implications and theoretical problems associated with the implementation of such an accounting separation;
3. Definition of propositions to be tested;
4. Case study and evaluation of results.

The definition of a conceptual framework through a process of analogical inference resulted to be a necessary starting point for the development of hypotheses, and their successive testing. In applying analogical reasoning I considered factors usually affecting the strength of an analogy, such as relevance, consistency, degree of similarity (mapping and connecting similar elements and relations), and purpose.

The formulation of research hypotheses based on interpretations by analogy implied, initially, a prevalent deductive method, namely for the identification of the concepts underlying accounting separation in this context (Section 4) and for the definition of proposition (subsection 5.4). But nonetheless, while performing activities summarized in step n. 2 I applied an inductive method, especially when examining specific problems like cost configuration of network assets (subsection 5.2) and transfer pricing (subsection 5.3).

The analysis of theoretical problems associated with the implementation of accounting separation in the Italian local television ambit required the performance of a specific literature review concerning themes of management accounting, in particular: costing methods, activity-based costing, cost accounting of network assets, transfer pricing in vertical integrated companies.

In order to test propositions resulting from steps n. 1 and 2 (listed in subsection 5.4), I designed a single case study, which was intended both to evaluate hypotheses and propositions developed (confirmatory research), and to investigate empirically (within its real-life context) how a LTVB implemented accounting separation, thus serving as an exploratory research to observe ways and procedures chosen. In this sense, such case study analysis is a qualitative research, being mainly focused on management's decision-making process. Data collection was performed through semi-structured interviews and analysis of documents: see subsection 6.2 for details.

As any qualitative research focused only on a single investigation, such case study has the main limitation that results are entity-specific and not valid for the majority of LTVBs. Consequently, I could not carry out any statistical analysis.

4. A conceptual framework for accounting separation

As outlined before, for the development of the research hypotheses it was necessary to start with the identification and analysis of regulations affecting sectors similar to that of local television broadcasting, in order to delineate, through interpretation by analogy, a conceptual framework for accounting separation in the Italian local TV ambit.

Specifically, to the extent applicable to local television networks and in a manner consistent with the average small and medium size of such operators (and related simple organisational structure), I referred: firstly, to regulations relating to sectors similar to the local broadcasting ambit, such as those applicable to RAI and national broadcasters; secondly, to the directives pertinent to the telecommunications industry, which is subject to AGCOM regulations and, therefore, is governed by rules that express similar concepts and fundamental methodological criteria. Table 1 lists the documents analysed. Moreover, I have taken into account the criteria used in other regulated sectors, namely energy and natural resources.

Table 1 – Main reference legislation consulted for accounting separation purposes

Sector	Document
<i>Broadcasting</i>	AGCOM Resolution no. 353/11/CONS of 23 June 2011 – New regulation for terrestrial television broadcasting using digital technology
	AGCOM Resolution no. 541/06/CONS of 21 September 2006 – Amendments to RAI's accounting separation model pursuant to art. 1.6 of Resol. no. 186/05/CONS
	Resolution no. 177 of 31 July 2005 – Consolidated Act for audiovisual and radio media services
	AGCOM Resolution no. 186/05/CONS of 9 June 2005 – Approval of the accounting separation model of RAI pursuant to article 18.1 of Law no. 112 of 3 May 2004
	AGCOM Resolution no. 102/05/CONS of 10 February 2005 – Implementing approach to article 18.1/2 of Law no. 112 of 3 May 2004
	Law no. 112 of 3 May 2004 – Standards for the structure of the broadcasting system and RAI Radiotelevisione Italiana S.p.A., authorising the government to issue a consolidated broadcasting act
<i>Telecommunications</i>	AGCOM Resolution no. 324/13/CONS of 3 May 2013 – Guidelines for Regulatory Accounting and service agreements: traffic interconnection services
	AGCOM Resolution no. 678/11/CONS of 12 December 2011 – Guidelines for landline network regulatory accounting and service agreements
	EC Commission Recommendation no. 2005/698/EC of 19 September 2005 on accounting separation and cost accounting systems under the regulatory framework for electronic communications
	EC Commission Recommendation no. 98/322/EC of 8 April 1998 on interconnection in a liberalized telecommunications market (Part 2 – Accounting separation and cost accounting)

The following step was to understand the basic concepts or principles that should underlie accounting separation in the Italian local television sector and for AGCOM's regulatory aims, as they could be argued or derived from the above listed references, reasoning from analogy.

The aim of an accounting separation system is described in the European Communities Commission Recommendation no. 98/322/EC of 8 April 1998 (the "EC Recommendation"): "*The purpose of accounting separation is to provide an analysis of information derived from the accounting records to reflect as closely as possible the performance of parts of the business as if they had operated as separate businesses*". Despite addressing the telecommunications industry, the EC Recommendation is explic-

itly referred to by the main measures of the broadcasting sector listed in Table 1 (see, for instance, art. 1 of AGCOM Resolution no. 102/05/CONS of 10 February 2005, regarding RAI's accounting separation). As a matter of fact, the EC Recommendation has to be considered a major reference for implementing an accounting separation methodology in the broadcasting sector, especially because of its *Guidelines in implementing accounting separation*, included in the Annex to such document. Of course, this does not necessarily mean that everything in this EC Recommendation is applicable to LTVBs, but indeed general concepts and logic behind the methodology illustrated in the named document are to be taken into account for the local broadcasting ambit as well.

As a result of the comparative study of document listed in Table 1 and related interpretation by analogy, in which factors enhancing analogical inference like relevance, consistency (AGCOM's approach to such matter), similarity (between TV broadcasting and telecommunications), and purpose (accounting separation) were carefully considered, the following accounting separation principles can be found out:

- *Derivation*: separate accounting derives from accounting records. Separation into activities (network operator, content provider and other activities) is obtained by applying suitable unbundling procedures. This entails that the accounting standards used for bookkeeping and financial statements purposes and those used for accounting separation are to be consistent: a confirmation of such statement may be found in the requirement of preparing a reconciliation of separate accounts with the general ledger in RAI's and in the Italian telecommunications companies' unbundling regulations (see e.g. RAI, 2011; TELECOM ITALIA, 2012);
- *Specificity*: despite being derived from financial accounting, separate accounts have to be prepared using specific criteria and they do not aim at presenting a company's financial position and results of operations;
- *Separation and independence*: separate accounts aim at presenting the performance of the regulatory activities as if they had operated as separate businesses. Accordingly, separate accounts show the business units' financial position and results of operations as if they were single and independent entities;
- *Causality*: this principle is expressly referred to in the EC Recommendation and relevant legislation governing RAI's accounting separation. Causality, which is a cornerstone of cost accounting as commented in subsection 5.2, requires that costs, revenues and investments be allocated based on their origin, i.e. be assigned to those activities and services that caused them. This entails adopting an approach for a suitable and analytical allocation of captions, by: 1) examining each cost, capital expenditure and revenue caption; 2) establishing the driver that caused each item to arise; and 3) using the driver to allocate each item to individual activities.

BROMWICH AND HONG (2000:140) provide a further confirmation of the importance of causality, especially cost causality, in the context of accounting separation: "*Accounting separation in conventional accounting involves first assigning all direct costs and all feasibly traceable costs to cost objects. Secondly, it requires allocating other appropriate costs using bases which are believed to reflect cost causality so as to determine the full cost of cost objects*".

As suggested by the EC Recommendation, in most cases if not all, revenues should be directly allocated to the related activities. Generally speaking, direct attribution is always preferable as it is more reliable and limits subjectivity in valuations (KAPLAN AND ATKINSON, 1998). Conversely, since usually a portion of costs is common to all activities, the

identification of costs should be adequately analytical to permit the allocation of the highest possible percentage, on a direct and indirect causality link basis.

In the attempt to identify a framework of general rules to follow, it is reasonable to state that the above principles are to be integrated with fundamental financial reporting concepts, which should include, for the scope of accounting separation, at least: accruals basis, faithful representation, substance over form, consistent application of accounting policies, relevance and verifiability of information, materiality (for a description of such concepts see the OIC's Italian accounting principle no. 11, 2005). The respect of such fundamental financial reporting concepts is asserted, for instance, by CALORI AND PEREGO (2008) when discussing accounting separation as regulated by AEEG – the Italian Energy Authority.

Although the majority of LTVBs are Italian accounting principles adopters, these financial reporting concepts are compatible with the IASB's Conceptual Framework for Financial Reporting (2010), thus being applicable to IFRS-adopters as well (an illustration of the different theoretical approach to general concepts for financial reporting between the Italian tradition and the IASB's Framework can be found in DI PIETRA, 2007).

With regard to postulates like the consistent application of accounting policies and the relevance and verifiability of information, they are directly referred to by article 18 of Law no. 112/2004 for RAI's unbundling, whereby, in order to allow the determination of the costs for the provision of the public broadcasting service covered by the subscription fees, RAI is required to prepare separate accounts using cost assignment and allocation rules in a "consistent" and "objectively justified" way.

Finally, concerning the presentation of separate accounts, as mentioned earlier, the Regulation does not provide for an unbundled financial report template or model. Nor is any such report required to be published or disclosed to AGCOM or other supervisory bodies. On the other hand and as a general consideration, it can be argued that a proper accounting separation system should be suitable to present accounting information for regulatory purposes at a sufficient and adequate level of detail, allowing a regulatory authority, or another entity appointed by it, to check the compliance with regulation.

The following section will focus on the main theoretical aspects associated with the implementation of an accounting separation system in the Italian local TV broadcasting sector, according to the conceptual framework here delineated.

5. Theoretical aspects associated with the implementation of accounting separation in the local TV ambit and related literature review

Having defined a conceptual framework for accounting separation in the Italian local TV ambit, it is possible to use it as a guide to identify and address implications and theoretical problems associated with the implementation of such an unbundling procedure. In particular, after performing a specific literature review, the following questions emerge as strictly concerned with the subject of this research:

- Interrelation of financial accounting with management accounting;
- Importance of cost accounting methods, specially for the accounting of network assets;
- Transfer pricing.

The next three paragraphs provide an analysis of such topics, while the fourth one outlines the propositions tested through the case study.

Accounting separation and the interplay between financial accounting and management accounting systems

As observed by CAROLI CASAVOLA (2001:470), the implementation of an accounting separation system implies the “*organization of accounting records in analytical elements, in order to separately identify costs and revenues related to each business unit*”. Such activity cannot, therefore, be effectively performed without the support of analytical information caught by an appropriate management accounting system. Moreover, as shown by CORONELLA (2008), the accounting of television programmes is quite complex; thus, financial accounting alone could be an insufficient source of information to arrange a valid set of separate accounts. These observations enforce the need of an integration between financial and management accounting systems for regulatory aims in the television broadcasting sector, like already provided for in other regulated sectors (see, for instance, the operating instructions for the unbundling provisions released by the Italian Energy Authority, which explicitly request integration with management accounting information whereas those obtainable from financial accounting are not available: AEEG, 2011).

This need of interplay between the two accounting sets goes beyond the conventional wisdom’s portrayal of management accounting as providing information for a mere “internal” use, i.e. exclusively for management planning and control. An enabler of such interplay is represented by the development and diffusion of integrated information systems (TAIPALEENMÄKI AND IKÄHEIMO, 2013), where both financial and management accounting modules are combined and both pick up from a unique database.

The importance of management accounting systems, even in simplified forms, arises from the necessity to properly allocate account captions and more analytical accounting figures, especially those pertaining to costs and expenses, according to the causality principle described in Section 4. Allocation of accounting captions may vary depending on the entity’s organisational structure and the way in which data are captured and analysed. However, the ultimate aim of allocating figures and captions remains the same, thus interrelation between financial accounting and management accounting seems to play an important role in the local TV broadcasting sector as well.

Cost accounting

Causality and the significance of causal variability factors have always been important topics in management accounting, and this is particularly true for costing methods (SHILLINGLAW, 1989), and for the related necessity to understand drivers of costs and expenses (for a literature review of causal variability factors in management accounting models see, e.g., BJØRNENAK AND OLSON, 1999).

With particular regard to costing models, the aforementioned EC Recommendation emphasizes the concept that entities implement appropriate and detailed allocation methodologies, especially regarding costs, since usually a substantial portion of costs is shared between activities to be separated. In particular, such EC Recommendation suggests the utilization of activity-based costing (ABC) in order to comply with the principle of cost causation. However, it must be underlined that it is not compulsory and, specifically, none of the regulation strictly pertaining to the broadcasting sector, as listed in Table 1, calls for it.

Referring to ABC, it is a cost-management approach which focuses on activities, and their costs, as the basis for assigning costs to other cost objects such as products, services or customers (HORNGREN ET AL., 1999). ABC systems measure the cost of resources used in organizational processes to produce outputs, thus aiming at improving allocation of indirect costs (overhead) compared to traditional cost systems (COOPER AND KAPLAN, 1992), even though a certain degree of arbitrariness and judgement will inevitably continue to affect overhead cost accounting. Such costing methodology stresses the concept of causality (KAPLAN AND ATKINSON, 1998) and requires identification of a number of cost drivers, i.e. factors that create or drive the cost of the activity, some of which should not be proportional to the volume of outputs produced (COOPER, 1988).

Concerning the implementation and effects of ABC in SMEs, although the empirical research is quite limited so far, there is some evidence of application of this or other advanced management accounting models in smaller firms (JÄNKÄLÄ AND SILVOLA, 2012; SANTINI, 2013): further research on this topic would be greatly advisable. Recent contributions about diffusion, in general, of ABC in Italy can be found in CINQUINI ET AL. (2006, 2010). Certainly, it can be observed that the implementation of such a costing technique by LTVBs can be very helpful for the aims of accounting separation. Anyway, flexibility in implementing managerial accounting systems is generally a desirable characteristic and, whatever the costing model adopted by a broadcaster, essentially it should allow the attribution of the majority of costs in order to respect the causality principle.

Dealing with cost configuration, an important aspect to consider is the accounting of network assets. The related relevant question is: historical (HCA) or current cost accounting (CCA)?

With this regard, it must be observed that the European recommendations regulating the telecommunications industry (as listed in Table 1) state that these assets are to be measured using CCA. CCA implies depreciation charges included in the operating costs be calculated on the basis of current valuations of equivalent assets. Rationale behind such choice for telecoms is to be found in the necessity to reflect: a) the evolution of acquisition costs of assets, especially for a new entrant willing to build a network; b) the impact of continuously evolving technologies; c) the evaluation of network assets at current value of an efficient operator (AGCOM, 2012a; ANDERSEN BUSINESS CONSULTING, 2002). The use of CCA in the telecommunications industry is strictly related to the European approach to interconnection pricing, orientated to forward-looking long-run average incremental costs. The long-run incremental cost (LRIC) calculates the incremental cost (direct variable and fixed costs) of supplying access based on equivalent asset values in an efficient network reconstruction perspective. The CCA-LRIC approach, despite having a major drawback in being highly dependent on forecasts and underlying assumptions (ANDERSEN BUSINESS CONSULTING, 2002), it is recognized by some authors as an advanced method, especially for cost accounting of access network assets (BROMWICH AND HONG, 2000), but PINDYCK (2007) presented conflicting evidence about the idea to disregard historical costs and underlined some important problems with the CCA-LRIC rule in telecom networks.

However, it should be taken into account that this European provision applies to telecommunications operators with significant market power, and clearly shows the need for price control by the regulators (AGCOM, 2012a). Instead, as illustrated in Section 2, the Italian local TV broadcasting sector is characterized by the presence of competitors with limited market power, and price control is not AGCOM's purpose in this ambit. Thus, even if CCA-LRIC is an option to consider for the accounting of TV network assets as well, the decision to rely on HCA and

fully distributed costing would be equally valid and not contrasting with any specific regulation. A supporting element in this regard can be found in RAI's unbundling regulation (see art. 1.3 of AGCOM Resolution no. 102/05/CONS), which requests the application of a fully distributed costing model, *based on HCA*, when allocating costs and capital investments.

Transfer pricing

The requirement of a suitable transfer charging or transfer pricing procedure arises from the need to measure the intra-unit notional profits or losses resulting from internal transactions. Transfer charging is based on the separation and independence principles discussed in Section 4. Since separate accounts are prepared to show the business units' performance as if they were independent entities, virtual transactions among them need to be considered.

The importance of a proper system of transfer charging is, for instance, a topic specifically addressed by AGCOM in regulating the telecommunications sector, because of its potential effects causing discriminatory and non-competitive policies in vertical integrated companies (for explanatory notes on this issue see AGCOM, 2012a; while for considerations on the unfair effects in the Italian telecommunications industry see, for instance, LEPORELLI AND REVERBERI, 2004).

Moreover, it should be noted that appropriate transfer charging is an issue directly related to the fact that, as explained in Section 2, accounting separation can be considered the lowest degree of regulatory separation. Although CAVE AND MARTIN state that "*proper accounting separation may achieve the same regulatory aims as structural separation*" (1994:14), it cannot be denied that, as illustrated in HARDT, "*in many ways accounting separation is not equivalent to structural separation*" (1995:69). In fact, within a firm it is always possible to operate an intra-unit transfer of revenues, costs and related profitability (cross-subsidies) in order to pursue business strategy (CAROLI CASAVOLA, 2001). Therefore, an accurate analysis of the main intra-unit notional transactions is fundamental, as well as the proper measurement and accounting of them.

The most significant notional transaction carried out within companies which perform both content provider and network operator activities is the purchase of transmission capacity by the Content provider unit from the Network operator unit. In other terms, should the Content provider unit be a legal entity separate from the Network operator unit, in order to carry out its editing activities and broadcast programmes, the Content provider unit would have to lease transmission capacity from the Network operator one, using its infrastructures and networks. Hence, in order to be able to provide its services to users, the Content provider unit would necessarily use portions of television band frequencies assigned to the Network operator unit, therefore using its airing, multiplexing, distribution and broadcasting systems. Consequently, it is fundamental to measure the transfer price for purchasing transmission capacity in order to recognise the transaction in separate accounts, as if it had been carried out between different and independent parties.

Therefore, transfer pricing in the context of broadcasting accounting separation is important for the understanding of the network costs, which help determine those charges which other operators would pay for using a TV network.

The requirement for a fitting transfer pricing model is included in the above-mentioned EC Recommendation. Specifically, paragraph 2.1 of the Annex states: "*The transfer charges for internal usage should be determined as the product of usage and unit charges. The charge for internal usage should be equivalent to the charge that would be levied if the product or service were sold externally rather than internally*". Indeed, considering a suggested measurement through a price per unit of usage and information

available at AGCOM's web site, the transmission capacity purchase/lease cost should be quantified by using the following formula:

$$TC = P \times N \times \text{Mbit/s re.}$$

Where:

TC = transmission capacity cost

P = price in Euro for 1 Mbit/s per resident of occupied TV band

N = number of residents/users reached by the TV signal

Mbit/s re. = occupied TV band quantity expressed in mega-bit per second per resident.

In this formula, both transmission capacity used by each television channel and population covered by the assigned frequency broadcasting systems are quite objective figures, usually well monitored by the technical division of a LTVB. Therefore, the main variable to be estimated is the price.

The transfer price issue has always been an open problem in accounting (HIRSCHLEIFER, 1956; KAPLAN, 1984). According to KAPLAN AND ATKINSON (1998), market price less cost to sell would be the preferable choice when operating in a perfectly competitive market, whereas a negotiated transfer price, i.e. a transfer price that is agreed on between the selling and purchasing units, could be the alternative solution when operating in an imperfectly competitive market. When there is no market, these authors suggest that the selling division's long run marginal cost should be applied, instead of commonly used solutions like cost-plus transfer prices (see, e.g., ALLES AND DATAR, 1998). More recent surveys on transfer pricing investigating its methods as observed in practice can be found in GÖX AND SCHILLER (2007) and BALDENIUS (2009). A recent examination of the performance of various cost-based transfer pricing methods is shown in PFEIFFER ET AL. (2011).

With regard to market price, as illustrated in BALDENIUS AND REICHLSTEIN (2006), a typical problem that arises when internal transfers are valued at such price is that the resulting transactions may be affected by double marginalization: some improvements may come from specific adjustments or "intracompany discounts", subject to consideration on capacity constraint.

It is important to remark that the particular transfer pricing here examined is not that occurring between divisional organizations of a firm or between subsidiaries, affiliates or related entities of multinational enterprises, the latter usually involving taxation implications. The transaction here discussed is an exercise needed for accounting separation, and regards the pricing of a virtual lease contract between the two named activities of a vertically integrated SME, characterized by a relative simple organizational structure. This implies that negotiated transfer price is an option not applicable in such a context. In fact, this method, besides being difficult to analyse, seems to work better when measuring transactions regarding interdivisional operations in structured companies and related aspects, like managers' compensation and bargaining skills (VAYSMAN, 1998).

Although the Italian local TV broadcasting sector cannot be defined as a perfectly competitive market (any network industry is, by definition, characterized at least by a certain degree of oligopoly), however the following arguments could favour market-based price as a feasible solution for accounting separation aims in this specific context:

- the existence of an external market for the intermediate lease in question (the transmission capacity is traded between third party network operators and content providers);
- the relevance of transfer charges for the purposes of transparency and assessment of network utilization and quality of service by AGCOM. Market prices are more observ-

able inputs for AGCOM controls and they can enhance network operators' comparability. At the moment LTVBs are not required to publish their separate accounts, this should prevent some distortions typically observed in published network access prices (FJELL AND FOROS, 2008);

- its administrative simplicity in contrast to other pricing mechanisms, which rely on extensive reporting and verification requirements.

An alternative solution would be following by analogy the provisions for the interconnections charges in the telecommunications industry. According to the Interconnection Directive (Directive 97/33/EC of the European Parliament and of the Council) such charges must be cost-oriented and based on CCA-LRIC (therefore HCA of network assets should not be applicable for the sake of coherence), including a reasonable return on investment. In this case, as requested by the EC Recommendation, transfer price per unit should take into account an adequate remuneration of the cost of capital, by following the Capital Asset Pricing Model and applying the WACC – weighted average cost of capital formula, which reflects the opportunity cost of funds invested in network components by the network operator. This is consistent with what other regulatory authorities, like AEEG in Italy, usually recognize to network operators (SPERANDINI, 2012).

However, as commented in subsection 5.2 access price regulation in telecommunications was conceived to prevent discrimination by significant market power operators, and cross-subsidization remains a minor concern in local TV broadcasting for the reasons described earlier. Besides the considerations related to some problems with access prices, as shown in FJELL AND FOROS (2008), applying this cost-based methodology would inevitably create complications in LTVBs. Therefore, at a glance a pragmatic market-based price approach seems supportable and an easier task for LTVB-SMEs. From a transfer pricing theory standpoint both the solutions considered present pros and cons, as illustrated above.

Whatever the solution adopted, it would be advisable to assess the appropriateness of the elected transfer price by applying the test shown in BROMWICH AND HONG (2000:159), in order to evaluate the coverage of the firm's total incremental cost.

Propositions

Having defined general concepts and rules that should apply to accounting separation in the Italian local TV sector, and having illustrated the main theoretical aspects associated with its implementation, it is possible to list certain specific propositions to be tested through the case study.

Proposition n. 1: accounting separation should respect the principle of derivation, which implies consistency between accounting standards used for financial statements purposes and those used for accounting separation, and the possibility to reconcile separate accounts with the general ledger.

Proposition n. 2: accounting separation should respect the principles of specificity and independence; therefore separate accounts should be prepared using specific criteria in order to show the results of the regulatory activities as if they had operated as independent entities.

Proposition n. 3: accounting separation should respect the principle of causality: costs, revenues and investments should be allocated based on their origin. Such principle requires analytical allocation of captions, by: 1) examining each cost, capital expenditure and revenue caption;

2) establishing the driver that caused each item to arise; and 3) using the driver to allocate each item to individual activities.

Proposition n. 4: the interplay between financial accounting and management accounting systems is important for the purpose of preparing separate accounts.

Proposition n. 5: costing methods are crucial to the attribution of the majority of costs in order to respect the causality principle.

Proposition n. 6: the accounting of network assets should either be CCA-LRIC or fully distributed costing based on HCA.

Proposition n. 7: transfer pricing related to the notional transmission capacity transaction between Content provider unit and Network operator unit should be measured at market price. An alternative would be applying CCA-LRIC (entailing remuneration of the cost of capital by following the Capital Asset Pricing Model). Any choice should be consistent with that of proposition n. 6.

6. Case study

I have investigated the implementation of accounting separation in Telenorba S.p.A. (TN), holding company of a media group operating in South Italy since 1976, headquartered in Conversano (Bari, Apulia). This study covers TN's accounting separation procedure and results for the years ended 31 December 2011 and 2012.

Company profile

Telenorba S.p.A. is an important Italian operator in local media services. It was the leading LTVB in Italy in years 2011 and 2012 in terms of audience. In fact, according to Auditel's average audience data cited in TN's financial statements as of 31 December 2012, its main channel TN7 - Telenorba ranked at n. 1 both in 2011 and in 2012, while its second channel TN8 - Teledue ranked at n. 9 in 2012 and n. 11 in 2011.

TN closed its financial statements as of 31 December 2012 with total revenues amounting to € 18.984.705 (€ 20.172.081 in 2011) and total equity of € 32.298.305 (€ 35.740.734 in 2011), average number of human resources: n. 180 (n. 188 in 2011).

TN is a LTVB authorized by AGCOM to broadcast via DTT in the following Italian regions: Apulia, Basilicata, Molise, and some areas of Campania and Calabria.

TN is both a network operator and a content provider, and performs some unregulated activities as well. With particular regard to the regulated activities here examined, TN has been accredited as an audio-visual media service provider (content provider) in local ambit. Its authorized contents, and related TV channels, are about n. 15: TN7 - Telenorba, TN8 - Teledue, TG Norba 24, Business TV, TN Verde, TN 7+1, TN 8 +1, etc. In 2011 and 2012, the main channels in terms of revenues were TN7, TN8 and TG Norba 24, with the following assigned Logical Channel Numbers (LCNs), i.e. position assigned on the TV:

Table 2 – TN's main channels

Content	Region	LCN
TN7 - Telenorba	Apulia	10
	Basilicata	15
	Molise	17
TN8 – Teledue	Apulia	11
	Basilicata	16
	Molise	19
TG Norba 24	Apulia	180
	Basilicata	180
	Molise	180

As a network provider, TN has been authorized to occupy specified portions of DTT band frequencies in the regions described above by legal assignment of n. 3 multiplexes. Broadcasting block or multiplex, according to AGCOM's definition, identifies the group of numerical radio, TV and data programmes and interactive services that can be broadcasted from an assigned television network using Standard Definition, High Definition, or a mixed definition technology. Multiplexes make it possible to transfer video and audio channels simultaneously over the same allocated bandwidth. Network broadcasting is possible only through legally assigned multiplexes.

Approach and data collection

As said before, the analysis of this case study intends both to evaluate hypotheses and propositions developed and to investigate empirically the implementation by a LTVB (in this case, TN) of an accounting separation system. Overall approach was that of a qualitative investigation, since I focused my attention on TN's management decisions.

Data collection was done through semi-structured interviews and analysis of documents. The following table summarizes interviewees, subjects discussed, documentation collected and examined.

Table 3 – Interviews and documentation

Interviewee	No. of interviews and period	Subjects discussed and documents analysed
<i>Vice general manager</i>	N. 5 interviews: February 2013 (two), July 2013 (one), September 2013 (one), final update in November 2014.	<ul style="list-style-type: none"> ● Legislation and regulation; ● General approach to accounting separation; ● Correspondence with AGCOM; ● Content production and audience; ● Reports and memoranda for internal use.
<i>Chief financial officer</i>	N. 8 interviews: February 2013 (three), July 2013 (three), September 2013 (one), final update in November 2014.	<ul style="list-style-type: none"> ● Financial accounting system; ● Financial statements (separate and consolidated) as of and for the years ended 31 December 2010, 2011 and 2012; ● Management accounting system in place; ● Approach and methodology followed for accounting separation; ● Accounting separation procedure and related attachments (flow-chart, schemes, etc.); ● Reports and memoranda for internal use.

<i>Controller</i>	N. 7 interviews: February 2013 (one), July 2013 (four), August 2013 (one), September 2013 (one).	<ul style="list-style-type: none"> ● Management accounting reports; ● Cost allocation procedure and related drivers; ● General ledger chart of accounts and financial accounting procedures; ● Separate accounts for the years ended 31 December 2011 and 2012, and related accompanying documentation; ● Implementation and reporting of the accounting separation procedure; ● Approach and rationale behind specific decisions: network assets accounting, transfer pricing, allocation of indirect costs, non-attributable costs.
<i>Technical director</i>	N. 4 interviews: February 2013 (one), July 2013 (three).	<ul style="list-style-type: none"> ● TN's main TV network assets; ● DTT band frequencies and related coverage; ● TV channels; ● Multiplexes and related use; ● Transfer charging measurement.
<i>HR manager</i>	N. 1 interview in July 2013.	<ul style="list-style-type: none"> ● Organizational structure and functions, organization chart; ● HR assignment and related expenses; ● Personnel costs allocation.
<i>IT specialist</i>	N. 1 interview in July 2013.	<ul style="list-style-type: none"> ● IT structure and IT systems in place: focus on financial and management accounting systems.

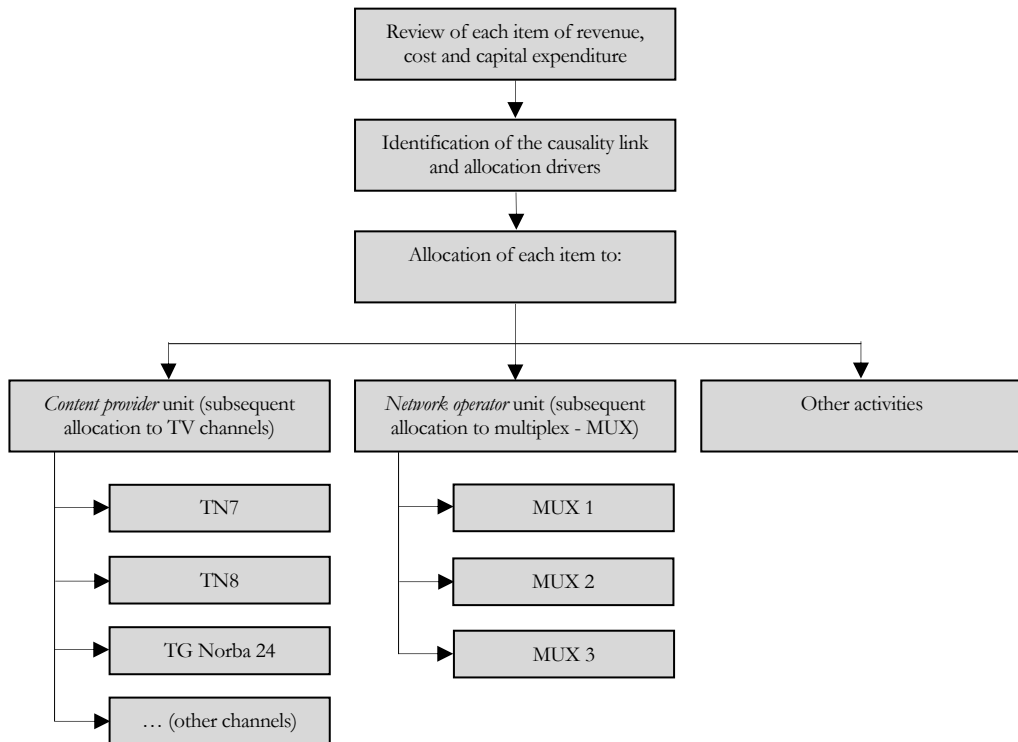
The above interviewees may be considered as the key figures involved in TN's accounting separation process in TN.

Results

The analysis of TN case provided an overall confirmation of Propositions from n. 1 to n. 6, while Proposition n. 7 was not exactly confirmed. Results are here described in orderly sequence.

TN has arranged and implemented an accounting separation procedure, formally approved by the board of directors. By inquiry of the persons indicated in Table 2 and through inspection of documents obtained, I received a corroboration of the effective implementation of such procedure. In particular, this study proved that TN respected the principle of derivation (Proposition n. 1) and separate accounts prepared by TN's administrative and finance department showed a reconciliation with the general ledger. Moreover, it can be stated that procedure in place reasonably complies with the principles of specificity and independence (Proposition n. 2).

With regard to Proposition n. 3, both the inquiries and the examination of the above listed documentation confirmed the observation by TN of the causality principle. In particular, TN's allocation process starts from information and data captured by the accounting systems. Then, the related unbundling model can be schematized as in Figure 1.

Figure 1 – TN's allocation process scheme

According to TN's accounting separation procedure, a critical review of the general ledger chart of accounts and an examination of all cost, capital expenditure and revenue captions and the related recognition in the general ledger are fundamental in order to apply the causality principle. This is realistic, in fact the review of the chart of accounts from an unbundling perspective usually leads to the identification of changes to be made thereto, in order to facilitate the preparation of separate accounts (e.g. CALORI AND PEREGO, 2008, state the importance of such review for accounting separation in the energy sector).

A subsequent step in TN's procedure is the analysis of the transactions originating the main costs, revenues and intangible and tangible assets in the accounting records⁽⁴⁾. TN's chief financial officer stated that the valuation of the adequacy of the information system was another aspect that drew management's attention while putting such process into effect.

With regard to the step "Identification of the causality link and allocation drivers", the most critical operation, as confirmed by TN's management, is to understand and distinguish costs among those: directly related (and attributed) to activities; indirectly related to activities (costs that can be apportioned to activities, on a measured non-arbitrary basis, using fitting allocating

⁽⁴⁾ This activity could induce improvements like the introduction of new accounts, the revision of the procedures for the recognition of certain transactions in the general ledger accounts and the reorganization of T-accounts in special groups. TN's accounting department evaluated this during the first implementation of its accounting separation procedure.

drivers); non-attributable (costs that can be allocated only on an arbitrary basis, therefore needing a special account and specific rules). Actually, TN's management agreed that setting proper allocating drivers for indirectly related items requires a deep analysis of the causality principle, and suitable management accounting information as well, although in practice sometimes they assumed some simplifications in terms of causality relationships and related drivers.

Concerning the allocation of each item, the above Figure 1 shows a first allocation into the three activities, where:

- Content provider unit includes the accounts relating to the editing activities: production, scheduling, purchase and sale of television programmes and content, programme scheduling responsibilities and use of broadcasting capacity;
- Network operator unit includes all captions relating to infrastructure and network management: designing, installation, construction, maintenance, implementation, development, network and software management, aimed at the provision of broadcasting services;
- Other activities: includes the transactions for unregulated activities as well as other type of regulated activities.

Subsequently, TN's procedure requires a second level unbundling for the two main activities. In particular, the Content provider unit is separated by TV channel (contents authorized and visible on the TV according to AGCOM's Local Channel Numbering Plan), while the Network operator one is broken down by multiplex. Overall, such an unbundling model looks reasonable and compliant with AGCOM Regulation.

It should be noted that second level unbundling needs the availability of a good management accounting system, since it is mostly driven by internal information. With this regard, TN's finance department used information provided by their management accounting system, especially to allocate indirect costs, thus confirming Proposition n. 4 and n. 5.

TN's management accounting system provides for a detailed accounting of TV programmes and related revenues by using a specific software, which enables direct attribution of the majority of sales and revenues, in conformity with the principle of causality. Regarding costs, TN's management accounting system is organized in cost centres/objects and allocation policies substantially refer to ABC criteria.

In particular and concerning the separation of key revenues and costs, TN operated as follows:

- *Sales* – directly attributed to the aforementioned activities and, in most cases, directly allocated to the sub-units. Such accuracy in sales allocation allowed the identification of robust revenue related cost drivers, such as those pertaining to some commercial costs, and this is consistent with an activity-based costing technique as well (BRUSA, 2012). Specifically, revenues pertaining to the Content provider activity, mainly comprised of advertising and other commercial communications, were fully allocated to the relevant TV channels. Revenues belonging to the Network operator unit, which usually comprise transmission capacity lease income, were directly attributed when relating to leases to third parties, based on information derived from management accounts. Concerning the allocation of intra-unit transfer charging, this is discussed below.
- *Government grants as per Law no. 448/1998, as subsequent amended and supplemented* – Such revenues are currently related to the Content provider activity and were directly attrib-

uted during both first and second-level unbundling, based on the application for such grants.

- *Services* – Separation inevitably gave rise to directly-attributable, indirectly-attributable and non-attributable costs. TN's management accounting systems played an important role for the allocation of services, which are usually a significant caption in a broadcaster's income statement.

Indirectly-attributable services were allocated using specific criteria and activity cost drivers, in line with the causality principle. As stated by KAPLAN AND ATKINSON (1998), when allocating costs it is preferable to have direct measures of quantities. Indeed TN considered this aspect, together with the origination of expenses and their association with other directly-attributable items.

Regarding non attributable services, which require more attention and analysis because such costs have to be optimized by considering their detailed relationship with volume (BROMWICH AND HONG, 2000), TN for some sales-related costs and other variable costs strictly depending on revenue used suitable revenue drivers.

- *Personnel expenses* – Allocation of these costs, which are a material caption as well of the profit and loss account of a broadcaster, was also done with information derived from the management accounts. In particular, TN mainly employed duration drivers, like time-driven activity cost drivers (that can facilitate payroll allocation according to, among others, KAPLAN AND ANDERSON, 2004), avoiding excessive disaggregation (as shown in CARDINAELS AND LABRO, 2008, about determinants of measurement errors), limiting revenue drivers exclusively for some overheads. Specifically: labour costs regarding sales and production departments were directly attributed into the Content provider unit and subsequently apportioned among the sub-units; expenses concerning the editors and news department went into a specific Content provider unit and finally allocated to the Content provider sub-units; HR costs relating to the technical department were attributed to the Network operator unit, and subsequently split into the sub-units. Finally, payroll costs incurred for personnel of the general and administration departments, which are typical overheads, were allocated using suitable activity-based revenue drivers.

It must be noted that TN separated all the income statement and the balance sheet items. In my analysis, I have focused my attention only on revenues, operating costs, intangibles and fixed assets, which are surely the most important items for accounting separation in this ambit. Given the aforementioned lack of patterns and guidelines, the separation of some balance sheet items (e.g. net equity, investments, cash, bank loans and borrowings, provisions) or income statements captions that usually fall below net operating profit/loss may be problematic. In fact, captions like non-operating costs, financial income and charges, income taxes inevitably give rise to non-attributable costs and revenues (BRUSA, 2009; SELLERI, 1999), therefore needing a special account and specific rules: this is consistent with the EC Recommendation and with provisions applicable to the accounting separation of energy utilities (see CALORI AND PEREGO, 2008; PALOMBA, 2007). For instance, in RAI's unbundling system they represent mere reconciling items (see RAI, 2011).

Turning to Proposition n. 6, for the accounting of network assets TN applied the fully distributed costing model, based on HCA. Such solution is practical and in line with expectations formulated.

As to the allocation of capital investments, TN operated as follows:

- *Property, plant and equipment and related depreciation* – Review of tangible assets gave rise to: directly-attributable assets (especially for the network infrastructure), indirectly-attributable assets, and some limited non-attributable assets. Allocation of PP&E called for technical information. In fact, usually plants, equipment, and technology need technical advice to be directly apportioned. With reference to indirectly-attributable assets, it was critical to identify specific drivers: e.g. for the allocation of some buildings TN considered square metres of areas occupied per typology of activity performed (this is consistent with BRUSA, 2012). Non-attributable assets were residual and this permitted to avoid material allocation on an arbitrary basis.
- *Intangible assets and related amortization* – Attribution of these items demanded special care. Intangibles related to TV band frequencies and similar needed technical information for a proper allocation into the Network operator unit. Regarding programme brands, generally pertaining to the Content provider unit, separation into the sub-unit was obtained through managerial accounts. IT applications were allocated on the basis of the services they supported.

Concerning Proposition n. 7, transfer pricing related to the notional transmission capacity transaction between Content provider unit and Network operator unit was not measured as expected. In fact, TN did not apply market price to measure such transaction (the alternative solution based on CCA-LRIC would have been not applicable, given TN's choice to account network assets using the fully distributed costing model, based on HCA). The rationale provided was that, due to the recent switch-over to terrestrial digital technology, the limited number of purchases of transmission capacity and the consequent unusual price performance meant a low activity of such market locally. Therefore, according to TN's management opinion, the average observed prices did not represent the fair value. Moreover, the overall transmission capacity used by TN Content provider unit was (and still is) considerable (reaching more than 80% of Apulia, Molise and Basilicata residents) and market prices for the lease of significant quantities of TV band were not available. Accordingly, market price solution was believed not suitable to measure transfer charges. Therefore, management preferred to use an amount that, despite not equalling the fair value of TN network operator's transmission capacity, was nonetheless an objective and official figure. This was the so-called *must-carry* price. The term *must-carry* identifies the obligation to lease transmission capacity, as set out in art. 27 of the Regulation, in favour of those operators that have not been assigned frequency licences (multiplex). Pursuant to art. 27.3 of the Regulation, frequency-licensed network operators like TN are required to report the transfer price list to AGCOM (prices cannot be lower than €0.010 and higher than €0.016 for 1 Mbit/s per resident). The Authority publishes the prices on its website. Prices are subject to annual adjustments based on the Italian cost of living index (ISTAT).

Finally and with regard to the allocation into the separate accounts, the internal transfer of the transmission capacity was recognized as a cost (lease cost) in the Content provider's separate accounts and as a revenue (sale) in those of the Network operator. The allocation of the cost to the different services provided by the Content provider unit was carried out directly and accurately, based on the TV band quantity occupied during the year by each TV channel, as shown in the data provided by the technical division. Similarly, the revenues earned by the Network operator unit were allocated to the multiplexes that carried the programmes.

As a concluding remark of this section, it can be stated that the implementation of an accounting separation system implies a compromise between practice and theory, especially because results of such an operation are inevitably imperfect for a variety of reasons: e.g. the transfer price issue described above, or the fact that not all costs can be traced or measured to a cost object, or because of imperfect measures of cost causality, etc. On the other hand, such imperfections and related arbitrary solutions “allow debate and may provide a defence for any Accounting Separation used” (BROMWICH AND HONG, 2000:141).

7. Conclusions

“*What you measure is what you get*”. The incipit of the Balanced Scorecard’s manifesto by KAPLAN AND NORTON (1992:71) can be borrowed to synthesize problems and opportunities posed by AGCOM’s provisions for LTVBs. Problems originate from the current lack of guidance described in Section 2, which inevitably produces confusion and arbitrariness, further to increase difficulties in LTVBs. Opportunities coincide with the regulatory intent for AGCOM. In fact, accounting separation enables a national regulatory authority to access a significant quantity of data. If effectively implemented, such device represents a valuable source of information that can lead AGCOM to achieve its targets of pluralism, fair competition, transparency and quality of service in the local television sector. Thus, clarity is fundamental. Perhaps AGCOM will fill the present absence of instructions in the future: this situation was somehow influenced by the urgency of regulating this ambit in concomitance with the named switch-over to DTT broadcasting. In this regard, both the analysis of any future insight by AGCOM in this matter and the investigation into the actual systems implemented by other LTVBs would represent subjects for future research.

Going to the findings of this work, the analysis of provisions regarding accounting separation in sectors similar to that of local television broadcasting permitted to define a conceptual framework for accounting separation purposes in the local TV ambit, which was used as a guide to identify and examine theoretical problems and implications associated with the enactment of this regulatory device. In particular, such analytical effort allowed understanding that implementing accounting separation in the Italian local television sector implies:

- proper consideration of the principle of derivation, i.e. consistency between accounting standards used for financial statements purposes and those used for accounting separation, and the possibility to reconcile separate accounts with the general ledger;
- following the principles of specificity and independence, i.e. separate accounts should be prepared using specific criteria in order to show the results of the regulatory activities as if they had operated as independent entities;
- the respect of the principle of causality, a cornerstone of cost accounting methods, which requires that, in separating accounts, costs, revenues and investments be allocated based on their origin;
- an interplay between financial accounting and management accounting systems for the purpose of preparing separate accounts. As shown in subsection 5.2, it can be stated that management accounting systems, and in particular costing methods, are crucial for accounting separation. In this respect, activity-based costing systems, opportunely integrated with financial accounting, can facilitate the allocation of costs and capital investments;

- selecting an appropriate method of accounting for TV network assets, which should be either current cost accounting or fully distributed costing based on historical cost accounting, the latter being an easier solution for LTVB-SMEs;
- careful measurement of transfer pricing related to the notional transmission capacity transaction between Content provider and Network operator units, which are the two main activities to be separated according to AGCOM's Regulation.

These implications found a confirmation in studying the application of accounting separation in years 2011 and 2012 by Telenorba S.p.A., a major LTVB operating in South Italy.

The most critical aspect that emerged from this case study was the transfer pricing problem. Subsection 5.3 provides an understanding of the theoretical and specific aspects of it, which consist in the need to measure the virtual purchase/lease of transmission capacity between the separated Content provider unit (buyer/lessee) and the Network operator one (seller/lessor). As illustrated, for LTVBs market-based transfer pricing resulted to be a feasible solution from a theory standpoint. The analysis of TN's case showed, instead, that such LTVB did not apply either market-based prices or other theoretical alternative solutions. Due to the recent switch-over to terrestrial digital technology and the limited number of purchases of transmission capacity, the consequent unusual price performance and the unavailability of market prices for the lease of significant quantities of TV band (like those occupied by the TN's Content provider unit), TN believed that applying market-based transfer pricing could distort the results of accounting separation for years 2011 and 2012. Therefore, they preferred to use a price that, despite not equalling the fair value of TN Network operator's transmission capacity, was nonetheless an objective and official figure: the *must-carry* price (the official price offered by TN to operators that have not been assigned frequency licences).

Although TN's rationale makes sense and appears reasonable, especially from a practical point of view, further research to investigate such aspect in other LTVBs would be interesting. Moreover, it would also be appropriate to repeat this study on the same LTVB in the future, in order to see any eventual change, especially regarding the transfer pricing measurement.

As any qualitative research focused only on a single investigation, this case study has the main limitation that results are entity-specific. Anyway, results obtained by this single case study may represent matter of future research based on quantitative methods, in order to seek further empirical evidence for the research hypotheses here developed.

In broad terms, accounting for regulated industries is an important area for accounting research and a setting for observing and assessing the relationship between financial accounting and management accounting.

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