



Is book publishing on the road to sustainable SC?

The French case through the place and role of a meta-organisation, the Syndicat National de l'Édition.

Carole Poiriel

Aix-Marseille University, Cret-Log, EA 881

### **Summary**

The aim of this paper is to examine the place and role of a meta-organisation such as the Syndicat National de l'Édition in the consideration of sustainable development objectives by players in the sector. Using a substantial corpus of documents and an interview with a key player in the union, a series of achievements is brought to light, demonstrating the ability of a meta-organisation to transform '*grand challenges*' into collective strategies. The results also highlight the major obstacles inherent in the vision of the profession and the book, which could limit progress in the future.

### **Key words**

Meta-organisation, trade union, publishing, books, sustainable development

Meta-organisations (MOs) are the subject of a relatively recent literature that has focused a great deal of attention on sustainable development. Following the work of Arhne and Brunsson (2005, 2008), MOs are defined as organisations whose members are themselves organisations. They provide organisational support for collective strategies (Astley and Fombrun, 1983) that enable organisations to manage problems together that they could not manage alone (Berkowitz and Dumez, 2016). Environmental issues sometimes referred to as '*grand challenges*' (George et al. 2016) are typically among the problems that require organisational collectives to solve. MOs can take a variety of organisational forms and bring together stakeholders from different backgrounds (public, private, NGOs, etc.). They have the particularity of operating on the basis of low structural costs, which plays in favour of their durability, but they are also subject to inertia. This paper addresses this issue by focusing on a sector that has yet to be studied from a sustainable development perspective - book publishing - and in which a trade association, the Syndicat National de l'Édition (SNE), is actively involved. What is the role and place of a trade association such as the SNE in the ecological transition of the sector and its players? The aim is to assess the progress that MO can boast in terms of sustainable development, in terms of the diversity of actions, innovations and impact.

The SNE is a union that is over a hundred years old, that has long brought together the largest publishing houses without closing itself off to the smallest, and that has well-established legitimacy with the public authorities. It acts in favour of editorial freedom, copyright and the promotion of books and reading. In particular, it defends the single price law known as the Lang law, which was passed in August 1981 and came into force in January 1982. This has led it, alongside the booksellers' union (the syndicat de la librairie française), to call for a number of amendments over the past 40 years to preserve its founding principles. Structured into working groups and commissions, the SNE has adapted its membership to meet its needs. In 2011, for example, it set up an Environment Committee, which was renamed Environment and Manufacturing in 2015, to consider the ecological issues specific to the sector. These issues are being addressed in a context where printed books continue to dominate (publishers generate 90% of their sales from printed books<sup>1</sup>) and where production is structurally higher than demand. The gap between books produced and books sold in 2021 was 68 million copies (554 million copies produced for 486 million sold). It was around 80 million copies before the health crisis in 2019, narrowed to 35 million copies in 2020 following the halt in publishing for a few months, and has since tended to return to its pre-crisis level. The number of new titles continues

---

<sup>1</sup> Unless otherwise indicated, all the statistics quoted in this article come from the SNE and, more specifically, from the annual statistical reports available on the union's website.

to rise, and has passed the 100,000 mark every year since 2016. At the same time, however, book sales are falling slowly and steadily (Xerfi, 2019) and book reading is at half mast (Lombardo and Wolff, 2020). This gap between supply and demand is partly resolved by shelving, which consists of simply destroying books that publishers deem to be surplus to requirements. Pillaging is inevitably a symbol of wasted resources. How does the publishing industry integrate sustainable development issues into the context of the cultural and creative industries? Our working hypothesis is that the sector's trade union, as MO, plays a key role in raising the ecological awareness of the players involved and in putting in place collective sustainable solutions.

We have followed a classic plan, presenting in the first part a review of the literature on professional unions as meta-organisations, in the second part the research methodology and in the third part the results. In conclusion, a summary-discussion of the results is proposed, followed by the limits and prospects of the research.

## **1. LITERATURE REVIEW ON TRADE UNIONS AS A META-ORGANISATION**

Ahrne and Brunsson (2008) were the first to develop the notion of meta-organisation to describe organisational groupings as different as the European Union, Fifa and Medef. Alongside public meta-organisations and multi-stakeholder meta-organisations (states, NGOs, private companies), there are meta-organisations whose members are simply companies, such as trade unions. The SNE, studied in this paper, belongs to the latter category (see Box 1). In order to identify its place and role in the book industry with regard to the environmental issues associated with printed books, this literature review will first look at the reasons for the creation of a meta-organisation in general (1.1), then at the specific nature of the way in which an MO such as a trade association operates (1.2) and, finally, at the functions performed by the MO and their potential effects on the *supply chain* (1.3).

### 1.1 A meta-organisation for "meta-problems"

An MO is designed to deal collectively with questions that companies cannot answer on their own. It therefore supports a collective strategy. The trend developed by Astley and Fombrun (1983) focuses on the way in which organisations adapt to their environment, and considers that uncertainties can sometimes be better managed collectively than by each entity in isolation. There are three main reasons for collective strategies (Yami and Le Roy, 2007):

- threats to the resources needed for business activity, limiting access to them, the quantity available or even their quality;
- a development opportunity arising from technological change and requiring skills that a single company could not master in their entirety;
- a regulatory change that modifies the operation of the business sector or a related sector and calls for new operating conditions for the companies concerned.

---

#### The national publishing union (SNE)

In the case studied in this paper, the collective strategy takes the form of horizontal cooperation between publishers, which began in 1874 and became the Syndicat National de l'Édition (SNE) in 1947. The SNE currently has over 700 members covering more than 80% of the publishing industry's turnover, and brings together all sectors of activity (literature, children's and young people's books, school books, human and social sciences, etc.) and all sizes of structure.

*"It defends the freedom to publish, copyright, the single book price [since its introduction on 1<sup>er</sup> January 1982 under the Lang law passed on 10 August 1981], cultural diversity and the idea that collective action can build the future of publishing. It helps to promote books and reading"* (<https://www.sne.fr/> consulted on 10 January 2023).

The SNE is structured into groups and commissions corresponding to the main actions and discussions carried out collectively, which have evolved over time since its creation. A Manufacturing and Environment committee was created in 2011. Each group and committee operates on a voluntary basis, with members taking on leadership roles, participating in activities or attending meetings. Permanent staff employed by the union ensure the continuity of the work carried out.

---

The "*grand challenges*" (Georg et al, 2016) could also be described as "meta-problems" because of their complex nature, their public dimension and the sharing of certain values around the preservation of the planet and climate change. Because, even if individual actions can generate positive externalities, they will never be as productive as if they are coordinated and organised on a meta-level. A body of literature on ecologically and environmentally committed meta-organisations supports this view (in particular, Berkowitz and Bor, 2018; Roux and Lecrocq,

2022). It should be added that the MO defends a particular sector of the economy, i.e. a collective private interest. It is therefore intended for public action and lobbying (Dumez and Renou, 2020). The various laws and regulations enacted to protect nature therefore fall within its sphere of action.

### **1.2 Heterarchical operation of the trade union**

Ahrne and Brunsson (2010) have explained the notion of partial organisation to which the professional union belongs. The latter is indeed an organisation (because there has been a constituent decision) but only a partial one insofar as the 5 criteria defined by the authors are not all met. Only two criteria are met, namely: defining who is a member of the organisation and who is not; and issuing and applying rules. On the other hand, the other three criteria are not met: operating in a hierarchical fashion; setting up monitoring systems to check that the rules are being applied; and distributing sanctions or rewards.

As a result, the organisations that are members of an MO work together in a heterarchical mode (on the other hand, the employees of the MO remain in a hierarchical mode). The heterarchy that prevails in partial meta-organisations such as the NES means "*command by others*". It is a mode of co-ordination that encourages inter-relationship and co-operation between members instead of a pyramid structure. This mode takes place in a network where each member shares the same horizontal position of power and authority. For Gulati, Pranam and Tushman (2012), who focused on this in their work on MOs, heterarchy defines particular meta-organisations that they call "communities" and to which the case studied refers but in a specific modality known as "closed community" because reserved for certain organisations. (The SNE as a professional grouping is in fact reserved for publishing houses).

We can assume that it will not be easy for a meta-organisation operating in a heterarchical mode to decide and move forward with its projects, all the more so if its members are numerous and heterogeneous. What's more, an MO is entirely dependent on its members, especially the most important ones. And competition is always possible between the MO and its members. However, Ahrne and Brunsson (2008) defend the opposite hypothesis. They believe that a rule developed collectively and voluntarily adopted can ultimately be better implemented than a poorly negotiated and imposed rule. It is precisely because rules are not binding and do not generate penalties for non-compliance that they are adopted. The integration of sustainable development objectives can (must?) therefore take place on consensual bases guided by the search for the common good.

### **1.3 The functions entrusted to the MO and their impact on the supply chain**

The MO does not produce products but may sell some services to its members. It is entrusted with functions previously carried out separately by each of the organisations, or is given entirely new tasks if the objectives justify it. It can thus :

- inform members of laws and regulations and help them to comply with them;
- protect their interests through lobbying and communication;
- check that competitors' practices comply with the law and take legal action if necessary ;
- produce and distribute information, standards and indicators
- participate in the creation and renewal of the supply system in terms of the techniques and technologies available, as well as legitimate practices.

The meta-organisation is positioned at a meso-economic level of analysis, which is constructed according to the stakeholders involved. These may be competing companies, partners in the *supply chain*, distribution channels, public authorities, etc. The level of analysis is therefore not only horizontal (the sector or industry) but also vertical (the *supply chain*, distribution channels or production chain) or even transversal when public players or those from related sectors are involved. The meta-organisation is thus the site of a collective exchange space from which sustainable development innovations and actions can spread, as shown by work on the oil sector (Berkowitz and Dumez, 2015), palm oil (Carmagnac and Carbone, 2019), renewable energies and the energy transition (Dumez and Renou, 2020) or even food (Lapoutte, 2021).

The work of Carmagnac and Carbone in particular (2019; 2022) falls specifically within the field of sustainable *supply chains*. They show how sustainability principles emerged between different stakeholders brought together within a meta-organisation and then spread throughout the *supply chain* to affect direct players such as producers and traders, as well as other companies in related sectors. The presence of the MO has changed the environment of its members and promoted more sustainable management of the *supply chain*. The authors also show the limits to progress that could be more significant without the disruptions resulting from the power games at work between players.

An organisation's commitment to sustainable development depends not only on the nature of the functions it undertakes, but also on the ambition of the objectives it pursues. Is it just a question of doing the minimum required or of striving towards an ideal? This question is posed by Enderle and Tavis (1998), who propose three levels of commitment to answer it: a first level of minimum requirements, a second level of practices that partially integrate environmental aspects, and a third level of aspiration towards ethical ideals for eco-socio-designed activities.

## 2. RESEARCH METHODOLOGY

In order to understand the contribution of the NES as a MO to raising ecological awareness among its members and to the implementation of concrete actions, various documents have been selected, as shown in Table 1.

Table 1: Documentary references

Types	References
SNE publishing statistics	Rapports statistiques annuels et rapports d'activité du Syndicat National de l'Édition, de 2000 à 2021, documents disponibles sur le site sur SNE (pour les dernières parutions)
NES studies	<p><i>Enquête sur les tonnages de livres transportés dans l'édition : retours, pilon et recyclage (2015-2017)</i>, Enquête de la commission environnement et fabrication, 2<sup>ème</sup> édition, Décembre 2018</p> <p><i>Enquête sur les tonnages de livres transportés dans l'édition : retours, pilon et recyclage (2018-2020)</i>, Enquête de la commission environnement et fabrication, 3<sup>ème</sup> édition, Avril 2021</p> <p><i>La consommation de papier des éditeurs en France (2013-2016)</i>, Enquête de la commission environnement et fabrication, 2<sup>ème</sup> édition, décembre 2017</p> <p><i>Les achats de papier des éditeurs de livres en France en 2018</i>, Enquête de la commission environnement et fabrication, 3<sup>ème</sup> édition, septembre 2020</p> <p><i>Les achats de papier des éditeurs de livres en France en 2019-2021</i>, Enquête de la commission environnement et fabrication, 4<sup>ème</sup> édition, janvier 2023</p>
SNE corporate communications	<p><i>Charte environnementale de l'édition de livres, guide des bonnes pratiques</i>, SNE, 2021, <a href="https://www.sne.fr/app/uploads/2021/10/001-CHARTE-ENVIRONNEMENTALE-SNE-NUMERIQUEEXT.pdf">https://www.sne.fr/app/uploads/2021/10/001-CHARTE-ENVIRONNEMENTALE-SNE-NUMERIQUEEXT.pdf</a></p> <p>Communiqués de presse du SNE en faveur du développement durable : <a href="https://www.sne.fr/app/uploads/2021/10/CP_SNE_Charte_DD_ComEnv_Fab_Oct2021-002.pdf">https://www.sne.fr/app/uploads/2021/10/CP_SNE_Charte_DD_ComEnv_Fab_Oct2021-002.pdf</a></p> <p>Vidéos en ligne de différents acteurs de l'édition sur les pratiques écoresponsables dans le domaine du livre réalisés par le SNE et Livres-Hebdo, disponibles sur le site du SNE : <a href="https://www.sne.fr/actu/le-sne-publie-une-charte-environnementale-de-ledition-de-livres/">https://www.sne.fr/actu/le-sne-publie-une-charte-environnementale-de-ledition-de-livres/</a> (10 vidéos en ligne de 4 minutes chacune en moyenne)</p> <p>Diverses fiches téléchargeables sur le site du SNE sur les pratiques éditoriales (pilon, pratiques écoresponsables, etc.)</p> <p>Le pacte des éditeurs de l'ONU Source : <a href="https://www.un.org/sustainabledevelopment/sdg-publishers-compact/?utm_source=Website&amp;utm_medium=Press_release_and_social&amp;utm_campaign=SDG_Publishers_Compact">https://www.un.org/sustainabledevelopment/sdg-publishers-compact/?utm_source=Website&amp;utm_medium=Press_release_and_social&amp;utm_campaign=SDG_Publishers_Compact</a></p>
Clic.Edit corporate communications	<p>Sur le site de l'association, les rubriques accueil, association, événements, groupes de travail, presse et archives <a href="https://www.clicedit.com">https://www.clicedit.com</a></p> <p>Notamment : Présentation en mai 2018 d'un état d'avancement du projet, « EDI pour la filière de fabrication de livres. Clit.Edit : ses objectifs, son fonctionnement, ses moyens et ses résultats »</p>
WWF and ADEME reports	<p>Daniel Vallauri, Chloé Moitié, Manon Garin, Antoine Meunier, Lisa King, Julien Tavernier, <i>Les livres de la jungle, L'édition jeunesse française abime-t-elle les forêts ?</i> Rapport de synthèse du WWF, 2018</p> <p>Julien Tavernier, Lisa King, Juliette Kacprzak, Daniel Vallauri, <i>Vers une économie plus circulaire du livre</i>, Rapport du WWF, 2019</p> <p>Julien Tavernier, Lisa King, Daniel Vallauri, <i>L'écologie du livre à l'école : état des lieux et enjeux</i>, Rapport du WWF, 2021</p> <p>ADEME, 2015, « Guide d'utilisation : signalétique commune de tri Triman »</p> <p>ADEME, 2022, « Actualisation 2021 des flux de produits graphiques en France »</p>

Types	References
Specialist trade journals	« Les alternatives. Ecologie, économie sociale et solidaire : l'avenir du livre », <i>Revue Bibliodiversité</i> , février 2021, éditée par Alliance des éditeurs indépendants et Double ponctuation. Dossier documentaire de la FILL, paru en 2022, « livre et lecture à l'heure de l'écologie », <a href="https://fill-livrelecture.org/livre-et-lecture-a-l-heure-de-l-ecologie/">https://fill-livrelecture.org/livre-et-lecture-a-l-heure-de-l-ecologie/</a> Le magazine <i>Livres-Hebdo</i> consulté sur les mots clés de la présente communication : 20 articles retenus publiés entre 2020 et 2023
Professional days	Livre et écologie. Événement organisé par <a href="#">Agence régionale du Livre Provence-Alpes-Côte d'Azur</a> 20 juin 2022 – 20 juin 2022, Cité du Livre, 8-10 Rue des Allumettes, Aix-en-Provence, Provence-Alpes-Côte d'Azur, France ; compte-rendus disponibles sur le site de l'agence. « Livre, lecture et environnement, une histoire à poursuivre » était le thème de deux journées d'étude, qui se sont déroulées le 4 décembre 2018 et le 28 mars 2019. Elles étaient organisées par le ministère de la Culture, la Bibliothèque nationale de France et le Centre national du livre, en partenariat avec le SNE Premières assises de l'édition indépendante, 2 et 3 février 2023, Aix-en-Provence, Co-organisées par l'agence régionale du livre en Paca et la fédération des éditeurs indépendants (un thème consacré à l'écoresponsabilité) Assises internationales de l'édition indépendante, organisées du 23 au 26 novembre 2021, à Pampelune sur le thème de l'écologie du livre et de l'édition

Among the documentary references, the SNE occupies an important place, producing statistics, studies, advice and institutional communication media around the publishing industry's environmental charter in particular. To provide a counterpoint, we have collected documents from other sources:

- surveys published by other institutions, such as WWF reports, a special issue of the Alliance of Independent Publishers' magazine *Bibliodiversité* and a documentary dossier by the Fédération inter-régionale du livre et de la lecture;
- on the other hand, professional days on the theme of book ecology, co-organised by trade unions (including the SNE, but not systematically in the documents used) or professional associations and public players (such as the Ministry of Culture or regional book agencies).

The nature of the documents is also varied, ranging from figures to union press releases, and even interviews recorded at trade days. We listened carefully to these interviews (12 selected from a corpus of 30) but did not transcribe them in order to use them as an additional source.

However, on 16 June 2022 we conducted a semi-structured interview lasting around an hour and a half with Pascal Lenoir, Production Director at Gallimard and head of the SNE's Environment and Manufacturing Committee. The interview covered five topics: the commission itself, its composition and *modus operandi*; studies on paper and feedback produced by the union; the Clic-Edit association, of which our interviewee is also president, its purpose and scope; the impact of the commission's actions on publishers' behaviour; an



assessment of progress to date and future projects. The interview has been transcribed in full for analysis.

All these documents were subjected to a thematic content analysis (Bardin, 1991). This was carried out manually in two stages: firstly, an individual analysis of each source, followed by a comparative analysis. Sub-themes were identified during the coding phase, with the aim of identifying nuclei of meaning linked to editorial behaviour and its evolution. The sub-themes were grouped into categories in accordance with the principles of objectivity, homogeneity, relevance and exhaustiveness. The categories resulting from the data analysis concern three distinct types of NES achievements presented in the third section on the results of the research.

### 3. RESEARCH RESULTS

The corpus as a whole highlighted a number of significant advances made by the SNE in terms of sustainable development (see table 2 below). These include the information and communication function specific to MOs, which in the case of the SNE is part of the union's mission beyond environmental issues (3.1). A significant advance has been the digitalisation of the production chain since 2016, supported by a new MO created in partnership with the printers' union (3.2). Taking into account the entire *supply chain* from design to manufacture and distribution calls on the SNE to promote eco-responsible practices for all players (3.3). The enthusiasm surrounding the commission's positive assessment is tempered by certain limitations in the areas of piling, printing and recycling (4.1). In this section, unless otherwise indicated, the verbatims are taken from the interview with the head of the SNE commission.

Table 2: Progress made by the NES in terms of sustainable development

Information-Communication	Study of paper consumption by publishers
	Return flow study - pestle
Digitalising the book production chain	Clic-Edit
Promoting eco-responsible practices	The eco-responsible charter

Source: personal elaboration

#### 3.1 A specific information and communication function

The creation of a committee dedicated to the environment initially enabled publishers and manufacturing managers to find a place to discuss environmental issues and manufacturing in particular, which was quickly placed at the centre of the discussions. *"Initially, in 2011, the committee was called Environment because manufacturing was not necessarily a subject for publishers [who see it as] a receptacle and a place for constraints. What's important [to them]*

*is sales and what booksellers will sell [as well as] good relations with authors. Between the two, there's production, and it has to do its best. Then we changed paradigm [and renamed the committee Environment and Manufacturing in 2015] because everyone realised that the biggest environmental part of our industry is linked to manufacturing. Every choice [in manufacturing] has an impact on price, lead time and environmental footprint."*

In organisational terms, the commission is moving forward in a "very free and democratic" way. *"Those who want to attend, attend. Those who don't want to attend, don't attend. Those who want to attend occasionally, attend occasionally. Those who want to participate, take part. The framework is that of voluntary work, except for Karen [Politis Boubilil] who is an employee of the SNE. However, "the point is to get people to take part and learn things, because we've discovered that these subjects are little known and that some people are only just beginning to learn about them."*

In terms of external communication and data production, since 1954 the SNE has been required by the Ministry of Industry to carry out an annual statistical survey. This provides figures on the production and sale of books in all formats, in France, internationally and by sector, as well as on the transfer of rights. It is based on a stable sample of 160 respondents currently representing 650 publishing brands. With regard to the environmental dimension, the first statistics will be published in 2018 on paper consumption by publishers (in terms of volume, quality and type of paper buyer, publisher or printer) on the one hand, and on return flows and piling on the other. Carried out by the Environment and Manufacturing Committee on a regular basis, these statistics now cover the medium term: from 2012 to 2021 for paper and from 2015 to 2020 for returns and waste. In a fairly traditional way, they provide instruments for measuring phenomena and also serve as a tool for dialogue. In the words of our respondent, *"these figures provide a starting point for making observations and seeing trends. [...] People realise that we're not trying to hide the problems but, on the contrary, to show them and discuss them together"*.

The SNE's studies show a certain amount of progress, which our contact pointed out at various points during our discussions, in the use of certified paper (from 88% in 2013 to 98% in 2021) and in the reduction of the tonnages circulating in outbound, return and shredder traffic (see table 3). The quantity of paper consumed has remained relatively stable over the last 10 years at around 215,000 tonnes per year.

Table 3: Outbound, return and crushed goods tonnages according to the last two SNE studies

	Study (2018) 2015-2017	Study (2021) 2018-2020
On average over the period		
Outbound tonnage	202 900	199 100
Return tonnage	50 370	42 200
As a % of outbound flows	25%	21%
Crusher tonnage	29 800	26 300
As a % of outbound flows	15%	13%
As a % of return flows	59%	62%

Source: SNE, returns and piling surveys published in 2018 and 2021

Anticipatory and mature behaviours are highlighted: *"If today 95% of our paper is certified, you can imagine that this is because since the 90s and 2000s we have started to certify forests, papers, papermakers, printers and so on. So it's been a long time coming, and it's coming now. We're mature.* Publishing is said to be a good pupil within the cultural industries: *"Even through the thinking of the Ministry of Culture, which has a vision of the global impact of culture on production and the environment, it considers publishing to be a sector that is far ahead on these issues.*

Lastly, the carbon footprint of books is a key indicator on which the Commission is making progress in partnership with its suppliers in the graphic arts industry as part of a joint project called Clic-Edit, which is the subject of the next section. The players involved have agreed to exchange *"standardised data on the manufacture of books and to track the route of raw materials [...] to define the carbon footprint of each printer"* and *"in the future, an accurate and consistent carbon footprint automatically for the entire industry"* (comments by Mr Lenoir in an interview with *Livres-Hebdo*, 7 December 2021).

### 3.2 Digitalisation of the production chain

The digitisation of the book production chain is based on the creation at the end of 2016 of a non-profit association called CLIC.EDIT (for coordination langage informatique commun - édition de livres) by the SNE and UNIIC, Union Nationale des Industries de l'Impression et de la Communication, which will provide an experimental version of this language two years later in 2018. Two trade associations, one representing publishers and the other printers, are therefore behind a new meta-organisation tasked with developing a computerised data exchange system between publishers and suppliers.

The inter-professional vocation and the balance of power between principals and suppliers are clearly stated by the association's chairman, Richard Lenoir, who is also head of the SNE's Environment and Manufacturing commission: "*open to all players in the book manufacturing industry, without condition or distinction, and whatever the size of the company*"; "*managed 50/50 by publishers and suppliers*". These two founding principles are likely to lead to technological complications (linking different information systems) and managerial complications (due to the large number of players, their disparate sizes and the diversity of professions represented). But they do guarantee the participation of as many people as possible, and hence the success of the project, which is part of a meso-economic *supply chain* approach. In the various documents in the corpus, the search for cost savings is the most highlighted objective, but during our interview with Mr Lenoir, the environmental objective came to the fore, in a complementary relationship with the economic objective, acknowledging that "*most of the environmental impact of our industry is linked to manufacturing*". In fact, the committee dedicated to the SNE, which was initially called Environment when it was set up in 2011, became Environment and Manufacturing in 2015, reflecting the importance of manufacturing in the environmental issues specific to the book ecosystem.

As publishers produce more and more titles in fewer and fewer average copies, the fixed costs of print runs are rising, production processes are becoming fragmented and the number of documents shared is increasing. While "*the industries [involved: publishing, stationery, printing] are mature, producing as closely as possible to demand and reducing their stocks*", they are seeing their costs rise steadily: in production, in administration and in raw materials such as paper and paper pulp, the price of which has been soaring since 2020 as a result of the health crisis but also of a strong correlation with energy costs when there is not an outright shortage. *Ultimately*, these industries are left with a collective solution through CLIC-EDIT to find productivity gains, i.e. "*administrative simplification and management time savings, improved management and processing of flows, reduced lead times and stocks, fewer errors and disputes, compliance with payment deadlines*", according to a presentation of the project's progress in May 2018 by its initiators. The person we spoke to added that "*it helps us to reduce our print runs and avoid increasing our administrative costs*", and stressed the need to save scarce resources: "*If my paper is too big and I waste too much paper, how do I reduce it so that I don't have waste that goes straight into the bin, even before I've started the work? There are lots of mechanisms like that that we integrate*."

---

Clic-Edit, an MO created by other MOs

The association has 45 members who are composers, photoengravers, papermakers, printers, converters, publishers and trade associations. The latter 2 are also founding members, the SNE and the UNIIC. Other stakeholders include the Directorate General for Enterprise (Ministry of the Economy) and training bodies (École Estienne, Asfored, Gobelins, Pagora, etc.).

In 2017 and 2018, 6 working groups coordinated by an external project manager (Kalpa) were set up: 4 Black Printing, Colour Printing, Paper, Prepress, and 2 coordination groups, one technical and IT, the other overall coordination. Appendix 1 outlines the main stages in the production of the book, providing an understanding of the various trades involved.

The aim of these groups was to draw up technical specifications, taking into account the needs of all the partners in the book production chain. The deliverables were a data catalogue, a list of messages with their management rules and execution scenarios, and communication and training tools.

The data was structured on the basis of standardised messages relating to: the contract and price (quotation, order, invoice, down payment, etc.); the supply of paper and other materials (paper allocation, consumption, inventory discrepancy, etc.); the provision, delivery and receipt of materials and products (provision notice, delivery notice, packing list, dispatch notice, etc.); planning (scheduling, schedule confirmation or refusal, schedule changes, etc.).

---

The manufacturing chain is linked to the distribution chain by Clic-Edit within the book *supply chain*. Alongside publishers and manufacturing service providers, the association also includes representatives of book distribution, who in professional terminology are the publishers' logistics service providers. Once printed, books are sent to the publishers' warehouses before being distributed to the various sales channels. In addition to the need for functional coordination between the two chains, a strategic issue arises for the publishing groups associated with Clic-Edit insofar as the PSLs are subsidiaries of the 4 main publishing groups (Hachette, Editis, Madrigall and Média-participation) which are responsible for managing 80% of book flows by pooling logistics. In June 2022, the person we spoke to said: "*We are in the process of writing new messages relating to planning management and stock entry, which will enable us to establish a link with distribution*". The link with distribution seems to us to be particularly important for creating continuity in the *supply chain* from the supplier's supplier to the customer's customer. While distribution logistics has had inter-organisational resources for a long time, with the introduction of EDI as early as 1987 in France and the introduction of an individual coding system for books that predates the barcode with the ISBN (which dates from the end of the 1960s), manufacturing had remained on the sidelines until then.

### 3.3 Promoting eco-responsible practices

The vision of the SNE's Environment and Manufacturing Commission encompasses eco-responsible practices in all phases of a book's life. After *the 7 suggestions for becoming an eco-responsible publisher* defined in September 2017, an environmental charter for book publishing was published in October 2021 under the aegis of the commission, based on the sustainable development objectives defined by the UN. Our respondent pointed out that this charter had been translated into English so that it could be disseminated on a European scale and better defend books. "*Because books are not an object like any other [...] They are an integral part of our society*". Three main types of eco-responsible practices emerged from the analysis, based on the stages in the book's life cycle: eco-design, production itself, which is more in line with demand, and recycling of paper and the book object.

The eco-design of books involves choices in terms of format, paper, layout, cover, inks, varnish, laminating and type of printing. The choice of paper and its management are at the heart of these practices, as we saw earlier. Publishers must be responsible buyers, whether they purchase the paper themselves or go through a printer. Increasing the use of recycled paper is precisely part of good practice. Publishers are required to assess and compare their environmental and energy performance indicators with those of their suppliers, and to listen to their constraints. In particular, printers are expected to invest in high-performance offset presses in terms of makeready time and waste reduction. They are also expected to promote the use of French or European printing plants that respect the wood industry, with the aim of developing short distribution channels and reducing transport times.

When it comes to production itself, "*you have to divide the problem in two*", according to our respondent: "*one, the problem of publication, with the number of titles published in the year, and two, the problem of production, which concerns the number of copies*". This distinction is reflected in the charter, with the first targeting the readership and the second adjusting print runs. The aim is to reduce overpublication and overproduction as far as possible, to limit the number of copies that go to waste. Ecological and economic reasons go hand in hand: "*Gaining one point on the piling up means gaining one point on the margin*". "*We print just when we need to, even in very short runs. What causes the most waste are medium and large print runs*". One good practice is referred to in the charter as "*anticipating and organising*", which we think is interesting for the management approach in terms of the flows it underpins: "*avoiding emergencies and streamlining production [...] Grouping prints, working in batches, consolidating transport*". The transition from a stock dynamic to a flow dynamic is also taking place in the publishing industry. "*It's a societal change*", says our respondent. "*Before, we used*

*to print a lot and deliver to booksellers. There were long lead times on stocks. Production costs were high, and above all the cost of starting up the equipment affected the profitability of the book or collection".* Since then, the approach has been to reduce costs and lead times, which was one of the leitmotifs of the interview.

As far as recycling is concerned, the first pages of the charter address the circular economy of books through three key points: firstly, paper, which is 95% certified and is a recycled material; secondly, unsold books, which are returned to publishers' stocks, ready to go back into the distribution networks if they are in demand again, or which are scrapped and 100% recycled; and thirdly, the re-use of books, which, after being purchased once, feed into new second-hand and donation circuits at the buyer's discretion.

At the end of this review of the three main results concerning the SNE's progress on environmental issues (information-communication function, digitalisation of the manufacturing chain and dissemination of good practice), we propose a fourth result on the limits of the approach adopted by the union. Among the most critical documents we have identified are the three WWF reports on the printing of children's books (WWF, 2018), the circular economy of books (2019) and school textbooks (2021).

### **3.4 Limits to the environmental advances of the NES**

Three major limitations can be highlighted: the extent of piling, massive printing abroad, and the recycling of the book object.

Firstly, the positive assessment of the SNE's progress on environmental issues is offset by the scale of the shelling. This represents almost two-thirds of the books returned (in weight tonnes) by the trade because they are unsold (see table 3). A symbol of cultural, economic and ecological waste, churn remains a sensitive, not to say taboo, subject in the publishing industry, which few studies have examined (Poirel, 2022). Although shelving is declining according to SNE studies, it is a well-established practice among publishers, necessary to regulate chronic overproduction. Returns of unsold copies are a key part of the book ecosystem, enabling publishers to share with booksellers (and other sales networks) the risks associated with marketing new titles (of which there have been more than 100,000 each year since 2016). The resulting organisation of flows involves a *supply chain that has* been designed from the ground up by publishers, enabling them to push new titles through distribution networks and take back unsold copies almost unconditionally. An ecologically regrettable consequence is transport. Between 21% and 25% of outbound flows are in fact returned (see table 3), generating costs but no sales for publishers and bookshops. What's more, the choices made in favour of

centralised logistics through the gradual closure of regional depots in the 1990s do not help to reduce greenhouse gases, even though the existence of an inter-professional platform, Prisme, based on the outskirts of Paris since 1993 has made it possible to massify flows.

Secondly, the massive use of foreign printers is presented as a characteristic of the publishing sector by ADEME (2022) in its report on paper and its use by different industries. The trade magazine *Livres-Hebdo* reports that 30% to 40% of books will be printed abroad (No. 11, July 2021, p.73). A WWF report published in 2018 on children's books showed that the consumption of graphic paper is more at risk in some countries than in others (uncertified paper, from unsustainably managed forests). This is the case not only in Asian countries, but also in certain European countries such as Italy, Belgium and Romania, which import paper pulp from Brazil. This globalised market uses supply chains that are more or less compliant with environmental regulations. It is not easy to trace materials through these channels. This explains why the SNE requested and obtained that printed books be excluded from the scope of the European regulation on wood.

Thirdly, the SNE gives little attention to book recycling, as criticised by the WWF in its report on the circular economy of books (WWF, 2019). Paper recycling is more readily discussed, including to identify its limits. During the interview, sorting was mentioned as a sensitive stage in recycling, revealing the limits of eco-design for books. *"We recover the cellulose fibres after removing the staples and so on, but often we can't turn them into white paper, we can turn them into cardboard [...]. [...] We need to change certain habits such as inking and use more and more vegetable-based inks."* On the other hand, WWF (2018, 2019) criticises the SNE for not paying attention to the end-of-life of books that have been sold (to individuals, libraries, schools) and may one day end up in the bin. This organisation estimates that the median lifespan of a paper book is 10 years and that books thrown away in household waste represent 63,000 tonnes per year, even though publishers are not subject to the eco-contribution for "paper products". This exemption from financial participation in the circular economy is coupled with an exemption from displaying the Triman logo on books, which encourages sorting (ADEME, 2015). The SNE therefore does not see books as potential household waste and is not subject to an extended producer responsibility scheme. The union prefers the alternative of "reusing books" without encouraging it beyond a mention in the charter. This alternative offers a second life to books that do not fall within the scope of publishing. It is deployed through second-hand and donation networks that work with objectives of economic profit (Momox) but also of combating poverty and social exclusion (Oxfam, Emmaüs) and reducing waste and conserving resources (Recyclivre, ressourceries) (Chabault, 2020).



## CONCLUSION

The ecological transformation of French publishing is underway, and the SNE is making a major contribution to this through its Environment and Manufacturing commission. The results of this research show that significant progress has been made: in the production of statistics on sensitive issues such as pilon, returns and paper; in the promotion of behaviour that is more respectful of the preservation of nature; and in the implementation of an innovative collective solution involving the book production chain. The main entry point for this ecological transformation is book production, where paper consumption is a key issue. At the interface of design and distribution, manufacturing generates externalities throughout the *supply chain* in terms of eco-design, costs, consumption of resources, transport, recycling and so on. Linking the manufacturing chain to the distribution chain is a major challenge that is currently being addressed. The integration of environmental aspects into book production has been clearly established with Clic-Edit, which is pushing for more advanced eco-design through the involvement of stakeholders. From this point of view, the trade association's commitment tends towards a higher ethical level (Enderle and Tavis, 1998).

But the record is not all success. A large proportion of books are printed abroad, consumption of recycled paper could be increased and the disrupters of recycling eliminated. Above all, it seems difficult to significantly reduce book production and, by extension, the number of bookshelves. Uncertain demand leads publishers to produce more and more books. This inherent characteristic of the cultural industries works against the objectives of sustainable development, not to mention sobriety. Of course, the role of the publisher is not limited to producing to demand. They have a cultural role, which can be avant-garde or subversive. But would greater control over production be an obstacle to the editorial function? Along with piling, the end of a book's life is another major obstacle. The WWF (2019) talks of denial on the part of the publishing industry and the SNE, which represents it. The recycled book referred to by the SNE is in fact an unsold book, returned by booksellers to publishers, which may end up in the rubbish bin if it is not put back into stock to await a new order. But can the publishing industry ignore what happens to books when individuals, public libraries or schools want to get rid of them? The SNE, which represents the publishing industry, has long been a legitimate partner in dialogue with the public authorities. While it has signed the UN publishers' pact for sustainable development and drafted its own environmental charter, which is becoming a European model, the SNE has managed to ensure that books are excluded from a number of

regulatory frameworks (wood regulations, eco-contribution for paper, use of the Triman logo, etc.).

The limitations of our research lie in the almost exclusive use of second-hand sources, even though a fruitful interview was conducted with a key player. After this exploratory phase, the research could be extended and deepened by developing the case study around the SNE and the Environment and Manufacturing Commission in order to understand how it operates and its internal workings. A survey of publishers could be carried out to assess the impact of the SNE's environmental work on their behaviour. Another limitation lies in the fact that the SNE is the only way of understanding ecological issues, even though other initiatives exist in other parts of the French publishing industry. These take different meta-organisational forms, less institutional and more spontaneous, anchored in local areas. Finally, while paper books were the subject of this paper, they were not at all put into perspective with digital books. The latter has the advantage of dematerialisation, which would solve the difficulties encountered with the book object (paper, printing, transport, storage, etc.). Could paper books become an option in the future, as readers convert en masse to digital books? And what would be the ecological cost of such a digital transition in publishing?

## References

- Ahrne, G. et N. Brunsson (2005), Organizations and meta-organizations, *Scandinavian Journal of Management*, 21: 4, 429-449.
- Ahrne, G. et N. Brunsson (2008), *Meta-organizations*, Cheltenham: Edward Elgar Publishing.
- Ahrne G., Brunsson N., 2010, « L'organisation en dehors des organisations ou l'organisation incomplète », *Le Libellio d'AEGIS*, 6, 1, pp. 36-52.
- Astley, W. G. et C. J. Fombrun (1983), Collective Strategy: Social Ecology of Organizational Environments, *Academy of Management Review*, 8 : 4, 576-587.
- Bardin L, 1991, *L'analyse de contenu*, Paris, PUF, 6è édition.
- Berkowitz H. et Dumez H. (2015), « La dynamique des dispositifs d'action collective entre firmes : Le cas des méta-organisations dans le secteur pétrolier », *L'Année sociologique*, 2015/2 (Vol. 65), pages 333 à 356, Éditions Presses Universitaires de France, DOI 10.3917/anso.152.0333
- Berkowitz, H. et H. Dumez (2016), The Concept of Meta-Organization: Issues for Management Studies, *European Management Review*, 13: 2, 149-156.
- Carmagnac, L. et V. Carbone (2019), Making supply networks more sustainable 'together': The role of meta-organisations, *Supply Chain Forum: An International Journal*, 20: 1, 56-67

Chabault V. 2020, « Du livre-déchet au livre vendu, L'écologisation du marché du livre d'occasion », *Ecologie & Politique*, vol.1, n°60, p.91-104

Dumez H. et Renou S. (2020), *How Business Organizes Collectively: An Inquiry on Trade Associations and Other Meta-Organizations*, Edward Elgar Publishing, Cheltenham (UK)/Northampton (MA)

Enderle G. et Tavis L.A. (1998), « A Balanced Concept of the Firm and The Measurement of Its Long-Term Planning and Performance », *Journal of Business ethics*, Vol. 17, n°11, pp.1129-1144

Georg G, Howard-Grenville J., Hoshi A. et L. Tihanyi (2016), « Understanding and tackling societal grand challenges through management research », *Academy of Management Journal*, Vol 59, n°6, pp.1880-1895

Gulati R., Puranam P. et Tushman M. (2012). "Meta-organization design: Rethinking design in interorganizational and community contexts", *Strategic Management Journal*, vol. 33, no 6, p. 571-586.

Lapoutte, A. (2021), Résilience d'une méta-organisation : Le cas d'un commun de l'alimentation, *Annals of Public and Cooperative Economics*, 92 : 1, 79-100.

Lombardo P. et Wolff L., 2020, *Cinquante ans de pratiques culturelles en France*, coll. Culture études, ministère de la Culture, juillet 2020.

Poirel C. (2022), « SCM et édition : que nous disent les invendus de la gestion de la supply chain du livre en France ? », 14<sup>e</sup> Rencontres de l'AIRL-SCM, 18-20 mai 2022, Clermont-Ferrand

Yami S. et Leroy F. (2007), *Stratégies collectives, Rivaliser et coopérer avec ses concurrents*, éditions EMS Management, Paris.

## **Appendix 1: Book production**

### **Stage 1: writing and designing the book - Pre-press**

The text is written by the author, then proofread, corrected and laid out. It may also be illustrated and even translated. The text and images are then digitised for printing. The pre-press phase involves working on the files that publishers send to the printing works. This applies to both the cover PDF and the interior PDF. The printer has to manipulate the files to make them printable. This involves page layout and colour adjustment. With digital printing, the file is sent to the machine.

### **Stage 2: Printing**

In the case of offset printing, the printer is responsible for making metal plates from the reworked files, then placing them on the rotary presses. Ink is applied to print the sheets of paper. The front and back must be made to coincide (to avoid transparency) and the inking (the distribution of the ink) must be adjusted. The cover of the book and the body of the text are printed separately. The pages are printed on huge sheets that then have to be folded, cut out and put back in order.

### **Stage 3: Stitching and trimming**

Once the text and cover have been printed, they are assembled. This is called finishing. The printed sheets are folded into signatures. One fold produces a 4-page section, two folds an 8-page section, three folds a 16-page section and 4 folds a 32-page section. The most common types of signatures are 16 and 32 pages.

Next, you need to assemble the notebooks. They can be sewn together (each section has a sewing thread running through it). The assembled sections, which may be sewn together, receive a layer of adhesive glue on the spine (note! the spine of the book is what is commonly known as the edge). The whole book is trimmed: the pages are cut to make sure there are no pages sticking out. Then the cover is put on.

The books produced in this way are bound books: a soft cover with a glued square spine. Books can be bound. The binding is a hard cover. Two different techniques are used. The most common is stapling. The more expensive binding is now rarer, and reserved for luxury editions.