



Fondation pour une culture
de sécurité industrielle

FONCSI

*WORKING BETTER TOGETHER: THE NEW CHALLENGES OF
SUBCONTRACTING AND REGULATORREGULATEE
RELATIONSHIP, LESSONS LEARNED FROM OTHER INDUSTRIES*

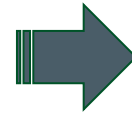
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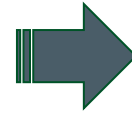
- ⊙ **The FONCSI- FONdation pour une Culture de Sécurité Industrielle) : a French public-interest research foundation**
 - **Operates as an international think tank**
 - **Scientific work plan organized around in-depth “strategic analyses”, each of which lasts 2 years.**
 - **Outputs published in an open access collection of books managed by Springer, the SpringerBriefs in Safety Management (<https://www.springer.com/series/15119>).**

FONCSI IN A FEW WORDS

Focus on the results of two of the last analysis



Safety and Subcontracting: the evolution of outsourcing



Regulator-regulatee relationship in high-hazard industries'

Demographic changes digitalisation and compleity

The new challenges of rule-based Vs Mananeg based safety

OUTLINE

- Two lessons learned from the strategic analysis on 'the evolution of outsourcing'
- Three lessons learnt from the strategic analysis on the 'regulator-regulatee relationship in highhazard industries'

TWO LESSONS LEARNED THE EVOLUTION OF OUTSOURCING

A core group of EU Academic and industrial partners

+ Guest international experts

1. **Petter Almklov, Norwegian University of Science and Technology (Norway)**
2. **Nadezhda Gotcheva, VTT Technical Research Centre (Finland)**
3. **Jean-Christophe Le Coz, INERIS (France)**
4. **Colin Pilbeam, University of Cranfield (UK)**
5. **Bruce Pinnington, University of Liverpool (UK)**
6. **Michael Quinlan, University of New South Wales (Australia).**
7. **Jorge Walter, University of San Andres, Buenos Aires (Argentina)**

Megatrends affecting forms of industrial organizations

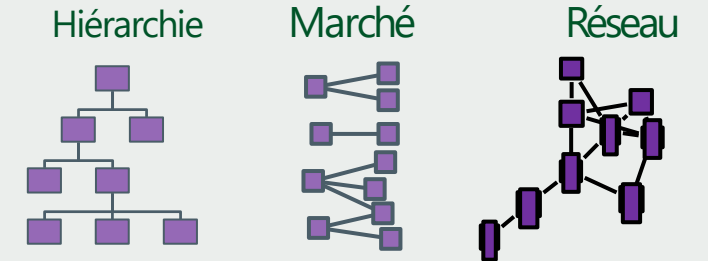
Globalisation

- ⦿ Globalization of the division of labor / value chains and logistics
- ⦿ Development of multinationals companies
- ⦿ Global standardization of production organization methods and products

Financiarisation

- ⦿ Companies considered as investments rather than production units
- ⦿ Concept of core business
- ⦿ Outsourcing of activities deemed non-strategic

Fragmentation



- Externally: subsidiary, subcontracting, agreements, alliances, labels, private standards
- Internally:
 - Internal subsidiaries
 - Competence centers
 - Project groups

LESSON 1: NOT ONE BUT MANY OUTSOURCING CATEGORIES WITH DIFFERENT SAFETY CONCERNS

- ⊙ ***There is not a single type of subcontracting, but several accumulated since the 1960s.***

- ⊙ ***Three generic reasons for outsourcing activities, which translate into as many categories of subcontracting:***
 - *subcontracting to reduce costs,*
 - *outsourcing to obtain flexibility when faced with fluctuating demand*
 - *subcontracting to benefit from outside expertise that is not available internally.*

SAFETY AND TYPE 1 AND 2 OF OUTSOURCING

Established literature in this domain which correlates contracting with degraded occupational (health and- safety conditions.

◎ **Two broad contexts**

- Exploitation by lead firms of opportunities to offshore manufacturing in poorly regulated, low-wage geographic areas (e.g. the Rana Plaza disaster 2013 in the fast fashion industry). Fortunately, the expected benefits of such outsourcing are now balanced by the risks of reputational consequences for the payers.
- Similar pattern, although less pronounced, in developed countries where focal firms tend to outsource work that is inherently more exposed to health and safety risks, such as maintenance and construction. As noted by Weil (2014), the more subcontracting, the more “fissuring” of the work, the greater the risk for health and safety at the bottom of those chains.

LESSON 2: OUTSOURCING IN NETWORKS OF NETWORKS : THE IMPORTANCE OF COMMON STANDARDS, AND OF THE REDUCTION OF FRAGMENTATION AND EXCESSIVE BUREAUCRATISATION

- ⊙ **'network of networks'** In this complex new landscape, **Global Production Networks** (GPNs) in the automobile, food, clothing, service, logistics, transportation, and extractive industries present different configurations, but many companies in these sectors play leading or intermediary roles in a 'network of networks' (Dicken, 2015).
- ⊙ **'business units (BU)'** For multinationals, these 'networks of networks' mean regular adaptation of their organisational structure and processes in a world of shifting opportunities and threats. One way of adapting is to organise their operations by creating business units (BU) operating in different geographic areas..
- ⊙ *The range of operational, administrative and legal degree of autonomy of this BU in relation to headquarters varies across industries and companies. But these evolutions of businesses in the context of globalisation also reflect the liberalisation of finance and its subsequent growing power and influence in firms' strategic decision-making.*
- ⊙ **increasing importance of new standards** that allow collaboration despite increasing organisational complexity. deregulation and privatisation of different sectors (telecoms, transport, energy) in many countries have led to a breaking down of the old monopolistic state organisations, with the intent to favour consumers. These are now shared with private organisations, producing a networked — also sometimes described as **fragmented — configuration**.

THREE LESSONS LEARNT ON NEW 'REGULATOR-REGULATEE RELATIONSHIPS IN HIGH HAZARD INDUSTRIES'

A core group of EU Academic and industrial partners
+ Guest international experts

INVITED EXPERTS

1. **Julia Black : UK.** Strategic director of Innovation, professor of law at the London School of economics (LSE) and Political science. Finances and bank regulation, decentered regulation", "
2. **Jeffrey Braithwaite, Australia.** Professor public health, health systems research, Macquarie University, founding director of the Australian Institute of Health innovation, director centre for healthcare resilience
3. **Cary Coglianese, USA.** Professor of Law and political science, University of Pennsylvania,
4. **Ulla Forseth, Norway** Professor of Sociology at the Department of Sociology and Political Science, Faculty of Social and Educational Science Norwegian University of Science and Technology (NTNU), Trondheim, Oil and Gaz - Industrial regulation, **Dialogue as a Regulatory Strategy**
5. **Jean-Pierre Galland, France.** Ingénieur de l'Ecole Centrale de Nantes, LATTS Comparison of English and French Industrial regulatory systems, market, regulation, legitimacy, credibility, responsibility of the third party,
6. **Patrick KY, Germany, France,** Director European Union Aviation Safety Agency, EASA, Koln, Germany Level of autonomy given to regulatees, Aviation Cies and manufacturers
7. **Christopher Hood, UK.** Emeritus Professor af the Blavtnik school of Gouvernement , University of Oxford, **& Martin Lodge, Director of CARR. Understanding Risk Regulation Regimes ; The limits of administration**
8. **Preben Lindo, Norway.** Univ. Stavanger, Dr Ing. Professor emeritus, **Private sector bodies**
9. **Michelle Pautz, USA.** Professor political science University of Dayton, Environmental policy and regulation
10. **Kristine Storkersen, Norway** Senior research scientist, Norwegian University of Science and Technology (NTNU), Trondheim, Work on **bureaucratisation and safety management**

LESSON 3-THE FRAMEWORK FOR RULE DESIGN IN THE DIGITAL AREA: MORE DELEGATION AND MACROENDS REGULATION

	MEANS	ENDS
MICRO	Micro-means Rules (Prescriptive regulation) <i>Install a hazard warning sign having a certain color scheme</i>	Micro-ends Rules (Performance -based regulation) <i>Demonstrate the capability to evacuate all occupants from a building in a designated time</i>
MACRO	Macros-means rules (Management-based regulation) <i>Engage in threat and risk analysis</i>	Macro-ends Rules (General Duty clauses) <i>Avoid a transportation accident</i>

- ⊙ *Means-based” regulation focuses on actions, such as the use of a technology or practice. For example, safety regulators may require firms to install a particular type of valve,*
- ⊙ *Alternatively, a regulation can mandate the achievement or avoidance of certain ends. “Ends-based” regulation may require that a code-compliant building be capable of evacuating all occupants in a designated time*

Complexity and globalisation create conditions for an historical push to adopt more macro regulations, and delegate more to industries. The digital revolution is a significant component of this added complexity

AN EXAMPLE OF THE GENERAL TREND TO DELEGATION IMPACT OF NEW DIGITAL TOOLS ON THE REGULATOR-REGULATEE RELATIONSHIP

- ⊙ **Growing opacity of advanced digital systems (such as “black box” neural networks) which question the certification processes (and the measure of risk), as well as raising questions as to who will be responsible for failure at end, the supplier of the software component or the system integrator**
- ⊙ **Growing problem for safety authorities with a possible lack of advanced digital competences in their own staff**
- ⊙ **Series of questions about the poverty of established standards in this rapidly evolving digital context, giving rise to a flourishing of local standards, including the ones for safety demonstration of these new digital systems.**

LESSON 4: DELEGATION TO THIRD PARTIES IS GROWING

- ⊙ **Regulatory systems tend to include a growing variety of third party intermediaries** (insurers, notified bodies, auditors, industry associations), performing a variety of roles with variable capacities, motivations, strategic position and authority.
- ⊙ Delegation of responsibility to these third parties can be a benefit to the regulator, expanding its capacity, but can also produce **unintended consequences and raises significant questions concerning legitimacy and public acceptability.**
- ⊙ **Partial delegation of authority raises questions concerning the management of conflicts between commercial considerations and safety** when decisions are made by a private entity that has incentives to reduce the stringency of its controls, the effectiveness of the resulting safety controls, and the public acceptability of delegation to organisations that have no strong democratic mandate or accountability to the public.

Different aspects of regulatory authority may be delegated:

Writing standards, regulations and legislation (“rulemaking” or “standards setting” activities)

Monitoring compliance with the regulations, for example by undertaking periodic inspections or by measuring the levels of pollution emitted;

Enforcing compliance, for example using fines or other penalties when a duty-holder is not compliant.

LESSONS 5: SHARING INFORMATION BETWEEN REGULATORS AND REGULATEES: A HUGE VARIATION AMONG INDUSTRIES AND COUNTRY

- ⊙ **“Togetherness” risks** : Regulators facing a well-known dilemma: effective control of risks requires expertise and information on real activities, which requires them to be “socially close” to the regulated industry, but this “togetherness” risks affecting their independence.

- ⊙ **How socially close or distant should regulators and regulatees be in high-hazard industries?**
Closeness and high interdependence between regulators and regulatees can enable regulators to overcome otherwise disabling information asymmetry and draw on the technical and operational expertise of the regulatees, while the latter can rely on regulators to provide them with formal and informal authorisation for their continued ‘social licence’ to operate. Trade-offs are approaches differently depending on the national culture and the industry sector.
 - Two examples
 - the successful use of dialogue as a regulatory strategy in the Norwegian oil industry (Forseth, 2021) is closely associated with Northern European culture and is unlikely to be as effective in southern European countries.
 - Another extreme example comes from healthcare. Healthcare is typical of a complex adaptive system (Braithwaite, 2017).

TO WHAT EXTENT ARE THESE LESSONS RELEVANT TO THE RAIL INDUSTRY?

- ⊙ Railways long been limited to operations under their national banners, operated by national companies, and controlled by national authorities. This time is definitively over.
- ⊙ Continuous commercial push to open borders, consider wider operations, privatize and open up to market competition the access to the national railways. The number of railways actors grows in parallel as well as the commercial ambition, and the inherent complexity of networks of partners, suppliers, and subcontractors. In this context, particularly relevant for EU countries, all the problems and solutions reported above sound relevant.
- ⊙ National railways systems are entering into an unprecedented period of transformation, with a specific challenge for safety which is only supposed to go one way: always better.