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Jens Thoemmes

CERTOP, CNRS, University of Toulouse, Toulouse, France and Taylor's University-Lakeside Campus, Subang Jaya, Malaysia

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Contact

thoemmes@univ-tlse2.fr

BARGAINING FOR DISTANCE: REGULATORY PATTERNS OF REMOTE WORK IN FRENCH C AGREEMENTS

Abstract

Purpose – This paper examines how collective bargaining shapes distinct patterns of remote work regulation in France, tracing the formalization of telework arrangements before, during, and after the COVID-19 pandemic.

Design/methodology/approach – Mixed-method analysis combining systematic coding of 126 variables across 107 company-level agreements with qualitative case studies, informed by Reynaud's Theory of Social Regulation (TSR).

Findings – Three regulatory models emerge: restrictive (39%), integration (36.2%), and transformative (24.8%), each with internally consistent patterns of temporal allocation, eligibility, material support, and managerial philosophy. Post-pandemic, integration agreements rose from 17.6% to 45.1% while transformative agreements slightly declined, indicating that bargaining produced moderate expansion rather than fundamental restructuring. Eligibility criteria, not technological capacity, serve as the primary mechanism determining who gains access to remote work. Trust appears as a central but contested mechanism, invoked to justify both the loosening and tightening of arrangements.

Originality – Offers a rare mixed-method analysis of company-level telework agreements, revealing regulatory configurations typically obscured in qualitative research. Extends TSR to virtual work both analytically and empirically, showing how spatial disruption reshapes the interaction between management-imposed and worker-developed rules.

Research limitations/implications – The French institutional context limits direct transferability. The regulatory dimensions identified, particularly eligibility restrictions and the role of trust, may nonetheless prove relevant in other employment systems where collective bargaining structures remote work.

Practical implications – The three-model typology may serve as a diagnostic tool: organizations could locate their positioning along the restrictive-integration-transformative spectrum and identify which provisions distinguish one model from another.

Social implications – Post-pandemic eligibility exclusions tripled for production workers despite proven feasibility, and housing requirements in transformative agreements may exclude lower-income workers, suggesting that remote work policies risk creating new workplace inequalities.

Article classification: Research paper

Keywords: collective bargaining, remote work, social regulation theory, regulatory patterns, France, COVID-19 pandemic

1. Introduction

The COVID-19 pandemic settled one question and opened another. It confirmed that digital technologies can sustain distributed work across most knowledge-based occupations. Yet organizations have responded very differently once the emergency subsided, with remote-work practices varying widely across firms, occupations and places (Bloom et al., 2023). This gap between established capability and actual policy points beyond technology, to the institutional processes through which remote work becomes regulated.

Collective bargaining is one such process, and arguably a central one in countries where it structures employment relations at the firm level. Yet bargaining's role in shaping remote work outcomes has received limited attention. The literature tends to focus on digital surveillance and algorithmic management (Wood et al., 2019; Leonardi, 2020) or on the coordination challenges of spatial dispersion (Sewell and Taskin, 2015; Nurmi and Hinds, 2016). How collective agreements actually codify remote work, and what patterns they produce across organizations, remains largely unexplored. New technologies create arenas for contestation over workplace rules (Kellogg et al., 2020), but collective bargaining's specific role in producing formalized regulatory outcomes for remote work has yet to be systematically examined.

This paper addresses that gap. The research question is: How does collective bargaining shape distinct patterns of remote work regulation in French organizations? The focus is on agreements' regulatory content, specifically configurations of eligibility criteria, temporal provisions, and material support, and on how these shifted after the pandemic.

France provides a particularly instructive case. The country maintains a mandatory collective bargaining framework, reinforced by the 2017 Macron Ordinances that simplified telework implementation at the company level. French organizations bargained extensively over remote work both before and after the pandemic. Yet France retained an estimated 41% of its pandemic-era telework expansion, by the author's calculation from Eurostat data, compared with 64.2% in Germany and 78.3% in Estonia (Eurostat, 2024). This reversion cannot be attributed to technological constraints alone. Something in the institutional fabric appears to pull arrangements back toward restriction, even where feasibility has been established. Understanding how collective bargaining mediates this process requires examining the agreements themselves.

The Theory of Social Regulation offers a framework suited to this task (Reynaud, 1988) : TSR conceptualizes workplace rules as products of ongoing interaction between management-imposed regulation (régulation de contrôle) and worker-developed practices (régulation autonome). Social regulation emerges from this interaction through negotiation, conflict, and iterative adjustment (Reynaud and Richebé, 2009). Applied to remote work, TSR directs attention to how agreements crystallize particular configurations of rules about who may work remotely, when, under what conditions, and with what organizational support. TSR suggests reading agreements not as static documents but as provisional stabilizations of competing regulatory logics. This paper extends TSR to virtual work, examining how spatial disruption reconfigures dynamics between regulatory sources in ways the original framework did not address.

The analysis of 107 company-level telework agreements and seven organizational case studies identifies three distinct regulatory models. Restrictive agreements (39%) treat telework as exceptional, gatekeeping access through strict eligibility criteria. Integration agreements (36.2%) reflect negotiated compromises. Transformative agreements (24.8%) reconfigure work

organization around outcomes rather than presence. The post-pandemic period marks a shift: restrictive agreements (55.9% pre-pandemic) gave way to integration as the most common model (45.1%).

The case studies add texture. Case E illustrates bargaining as iterative learning, with each agreement broadening provisions. Case G shows how regulatory accumulation across multiple rounds eventually produced transformative outcomes. Case D reveals persistent gaps between provisions and implementation, while Case A shows that without bargaining, regulation defaults to managerial discretion. Across cases, trust emerged as a recurring mechanism that bargaining appeared to build or erode over time.

Three contributions follow. First, the study extends TSR to virtual work, showing how physical distance reconfigures the interaction between regulatory sources. Second, systematic coding of 126 variables across 107 agreements reveals eligibility gatekeeping and temporal structuring as dimensions of inclusion and exclusion. Third, the case studies suggest that successive negotiation rounds matter more for regulatory outcomes than any single agreement.

2. Theoretical Framework: Social Regulation and Virtual Work Governance

2.1 Conceptualizing Virtual Work Through Social Regulation Theory

Virtual work can disrupt the control mechanisms on which employment relationships have traditionally relied. Reynaud's TSR captures the dynamic tensions between technological possibilities and organizational realities, revealing workplace practices as products of ongoing contestation between divergent regulatory sources.

At the framework's core lie two regulatory forms. Control regulation (régulation de contrôle) encompasses rules that management imposes to direct work processes; autonomous regulation (régulation autonome) captures the practices workers develop to manage their activities and assert agency. The rules that actually govern work (de Terssac, 2012) emerge from the interaction of these two forms through negotiation, conflict, and adaptation. Remote arrangements complicate this interaction by weakening traditional supervision while potentially enabling new forms of oversight.

Physical distance reconfigures these regulatory dynamics (Taskin and Gomez, 2015). Traditional control regulation has been anchored in direct observation, physical presence, and spatial boundaries demarcating work from non-work. When virtual work weakens these mechanisms, workers may gain expanded space for autonomous regulation. Organizations respond with new monitoring technologies that may extend oversight beyond what physical workplaces permitted, generating in return new forms of resistance through 'algoactivism'. In platform work, this tension is particularly stark, as workers experience nominal autonomy within algorithmic control systems that produce negative working conditions linked to deadlines and pain (Wood et al., 2019).

This helps explain why pandemic experiences produced divergent outcomes despite establishing remote work's feasibility. Where control regulation dominated, organizations likely interpreted emergency remote work as temporary. Organizations with stronger autonomous regulation

traditions negotiated sustained flexibility. France's mandatory collective bargaining creates formal arenas for these negotiations, making the dynamics visible in written agreements.

2.2 Virtual Work as an Arena for Regulatory Contestation

Virtual work reconfigures spatial and temporal boundaries, creating new terrains for contestation between management-imposed rules and worker-developed practices.

When work is spatially dispersed, team members must manage their tasks more independently, which can heighten worker autonomy (Nurmi and Hinds, 2016). Workers gain control over their immediate environment, choosing workspaces and managing interruptions. Yet within this same dispersion, work extends into previously protected domestic spaces and times through 'spatiotemporal scaling,' a process that blurs the very boundaries whose absence was supposed to liberate (Sewell and Taskin, 2015).

Temporal flexibility constitutes a further contested dimension: aligning professional and personal rhythms challenges assumptions about synchronized schedules yet creates opportunities for intensified availability expectations. How these contestations play out depends on context. In knowledge-intensive sectors, worker-developed practice tends to be embraced; manufacturing and service sectors with entrenched supervision traditions resist or implement restrictive versions (Thoemmes, 2024; Thoemmes, 2025).

2.3 Collective Bargaining as Institutional Mediator

Within TSR, collective bargaining is the mechanism through which tensions between management-imposed rules and worker-developed practices crystallize into codified rules with legal standing, providing stability and minimum standards that individual resistance or informal customs cannot.

Collective bargaining gives workers' voices institutional expression, preventing the unilateral imposition of virtual work parameters. Through union representation, workers negotiate equipment provisions, expense reimbursements, evaluation criteria, and disconnection rights, making implicit power dynamics explicit (Louey, 2024). In France, company-level bargaining is mandated for firms exceeding fifty employees, creating regular renegotiation opportunities. The German case offers a contrast: work councils possess legal rights to influence technological change, yet agreements on digital workplace governance remain rare, suggesting institutional capacity does not automatically translate into regulatory outcomes (Haipeter, 2020). Nordic systems, by contrast, combine high union density with voluntaristic, coordinated social dialogue (ILO, 2022).

Constraints emerge in equal measure. Formal procedures may limit radical transformation. Decentralization reforms have shifted bargaining toward the company level (Rehfeldt, 2018; Béthoux and Mias, 2021), leaving union representatives facing more complex calculations. Seeking to protect all members, including those unable to telework, they may accept restrictive

compromises rather than risk creating workforce divisions. Majority requirements can produce lowest-common-denominator outcomes.

Recent scholarship documents post-pandemic evolution. Moizard (2025) traces French collective bargaining fragmentation following decentralization reforms, showing how company-level negotiations increasingly diverge from sectoral frameworks. Significant variation persists even within the same industry, suggesting organizational choices reflect factors beyond technological constraints.

How effectively bargaining mediates these tensions varies across institutional settings. France's framework, where social dialogue produces binding agreements at both sectoral and company levels, contrasts sharply with Nordic systems that achieve comparable regulatory outcomes through voluntary associational governance, and with market-oriented systems where company-level agreements operate with minimal institutional scaffolding (Eurofound, 2022).

3. Methods and Context

3.1 Research Design and Analytical Strategy

This study of collective bargaining's influence on French virtual work outcomes (2017–2024) combines systematic agreement analysis with organizational case studies.

Three integrated phases structure the analysis: quantitative examination of 107 company-level telework agreements, seven organizational case studies, and synthetic analysis integrating findings to develop the three-model typology.

3.2 French Employment Relations Context

France's employment relations system requires attention when analyzing virtual work regulations. State-centered capitalism creates a regulated environment through labor codes, mandatory collective bargaining, and formalized social dialogue.

Complex interactions characterize multiple regulatory levels within the French system (Artus, 2010). The Code du Travail establishes employment standards; company agreements cannot descend below this regulatory floor. Industry-specific provisions emerge through sectoral agreements covering 98% of French employees (OIT, 2016). Company-level bargaining has grown increasingly important since decentralization reforms, adapting broader frameworks to organizational needs (Rehfeldt and Vincent, 2020).

Five nationally representative confederations (CFDT, CGT, FO, CFE-CGC, CFTC) retain significant institutional roles despite a union membership density of just 10.3% in 2019 (Pignoni, 2023). Legal prerogatives in collective bargaining, not membership numbers alone, sustain their influence. Workplace elections determine representativeness, with unions needing at least 8% of votes.

French telework regulation evolved through successive phases: the 2005 National Interprofessional Agreement transposed the European Framework Agreement on Telework; the 2012 Warsmann Law integrated telework into the Labour Code; and the 2017 Macron Ordinances simplified implementation by allowing telework through collective agreements, employer charters, or individual arrangements.

3.3 Data Collection Strategy

Three complementary methodological components ensure variation across analytical dimensions.

Systematic Analysis of Collective Agreements

The Légifrance database provided 107 company-level telework agreements signed between January 2017 and June 2024. Pre-pandemic agreements (2017–2019, n=36) contrast with those negotiated during and after the crisis (2020–2024, n=71). The construction and quantitative coding of this corpus are presented in detail elsewhere (Thoemmes, 2025); the present article draws on it and extends the analysis through the Theory of Social Regulation and seven organizational case studies. Manufacturing (35.5%), services (38.3%), and the public sector (26.2%) provide sectoral representation. The category 'Services' groups heterogeneous activities, limiting sector-level comparison precision.

Eight thematic domains structured coding of 126 variables examining regulatory configurations: formal characteristics (agreement duration, signatory composition); stated objectives (work-life balance to business continuity); eligibility criteria (access mechanisms, exclusion patterns); organizational arrangements (volume limitations, scheduling constraints); material support (equipment allocation, financial allowances); control mechanisms (performance monitoring, availability requirements); employee rights (disconnection provisions, training access); and implementation procedures (application processes, appeal mechanisms). This coding architecture enables systematic comparison, with recurring patterns suggesting regulatory logics that transcend individual organizations.

In-Depth Organizational Case Studies

Field research occurred between June 2020 and December 2021. Maximum variation sampling guided selection of seven organizations across sectors, telework maturity, size (60–4,800 employees), and pre-pandemic experience. Cases E (construction) and G (insurance) serve as the primary analytical cases due to their iterative bargaining trajectories, while the remaining cases provide comparative context across the three regulatory models.

Table 1: Distribution of Telework Agreements by Sector (n=107)

Sector	N	Percentage
Production/ Manufacturing	38	35.5%
Services	41	38.3%
Public Sector	28	26.2%
Total	**107**	**100.0%**

Source: Author's own work, analysis of the Légifrance database (2017-2024). Note: 'Services' encompasses heterogeneous activities (insurance, IT, retail, consulting) that limit the precision of sector-level comparisons.

Table 2: Case Study Organizations (n=7)

Case	Industry	Sector	Employees	Model Type
A	Personal assistance	Services	60	Restrictive
B	Agricultural trade	Agriculture	400	Restrictive
C	Metallurgy	Manufacturing	400	Integration
D	Local government	Public	400	Restrictive
E	Construction	Construction	800	Integration
F	Information technology	Services	1,700	Transformative
G	Insurance	Finance	4,800	Integration

Source: Author's own work. Note: Employee counts at the time of fieldwork (2020-2021). Model type based on agreement analysis.

3.4 Analytical Framework

Iterative movement between empirical observation and theoretical abstraction characterized the analysis. The three-model typology emerged through systematic data engagement rather than predetermined categories.

Initial quantitative analysis mapped provision distributions. Maximum telework duration (≤20%, 20–40%, >40%) provided preliminary categorization. Chi-square tests examined associations between organizational characteristics and regulatory provisions; only statistically significant relationships ($p<0.05$) informed interpretation.

The three-model typology emerged through iterative analysis rather than a priori categorization, with model differentiation extending beyond temporal allocation to philosophical orientation (exception, balance, or organizational principle), exclusion patterns, and support provisions. Chi-square analysis confirmed statistically significant associations ($p<0.05$) between telework

volume categories and these dimensions. Coding reliability was supported through iterative protocol refinement: a pilot phase clarified ambiguous definitions, and borderline cases were revisited systematically.

Fifty-seven semi-structured interviews across the seven case organizations (Case A, n=7; Case B, n=10; Case C, n=9; Case D, n=5; Case E, n=9; Case F, n=7; Case G, n=10) captured multiple perspectives: senior managers (n=14), HR directors (n=12), union delegates and employee representatives (n=14), and employees across job categories (n=17). Protocols covered negotiation history, implementation experiences, and evolving practices. Interviews averaged 60–90 minutes, conducted in French, with verbatim transcription. Appendix Table A4 identifies the 17 interviewees whose accounts are drawn upon in this article, selected from this full sample.

Grounded theory principles (Glaser and Strauss, 1967) informed qualitative thematic analysis. NVivo software supported systematic coding while preserving analytical flexibility. Initial coding produced descriptive categories tied to participants' language. Axial coding revealed category relationships, and selective coding developed higher-order concepts linking empirical patterns to TSR.

4. Findings: How Collective Bargaining Shapes Remote Work Regulation

The quantitative analysis identified three regulatory models: restrictive (39%), integration (36.2%), and transformative (24.8%). Section 4.1 establishes the baseline of bargaining absence through Case A. Section 4.2 presents the three models' regulatory configurations. Sections 4.3 through 4.5 examine how these models emerge in practice through extended case studies, and Section 4.6 integrates cross-case findings.

4.1 The Regulatory Baseline: When Bargaining Is Absent (Case A)

Case A, a personal services association (~60 employees), reveals regulation in the absence of collective bargaining. No formal telework agreement exists:

> *An agreement… I don't think so, I'm not sure whether we discussed it at staff representative meetings. (…) telework, no, there is no specific agreement; it's an arrangement that we work out ourselves. (A1, female, coordinator, personal services association, no formal agreement)*

Telework emerged exclusively through COVID-19, concerning only three administrative staff. Without codified rules, the director functions as the sole regulator, rejecting formalization:

> *I'd rather save myself the trouble, and a charter seems fine to me because I don't intend to contractualize telework; I think it can remain a custom and we can continue (…) from my point of view, it's an investment at a loss because we have little or no*

productivity gains from telework. (A7, male, director, personal services association, no formal agreement)

The director was unaware of the 2020 national interprofessional agreement and described a 'permanent negotiation' with weekly informal scheduling. Without clear rules, telework distribution became a source of tension; the coordinator reported invisible overtime leading to a psychological breakdown. Absent bargaining, regulation defaults to managerial discretion, producing ad hoc arrangements and invisible labor intensification.

Case A establishes the analytical baseline: the restrictive model arises not only from deliberate bargaining choices but from the absence of bargaining itself. Where collective representation plays no role, regulation defaults to managerial discretion. The question the remaining cases address is: what does collective bargaining actually change?

4.2 Three Regulatory Models: From Restriction to Transformation

The systematic analysis of 107 agreements reveals three distinct regulatory models, each with internally consistent configurations of eligibility, temporal allocation, material support, and managerial philosophy (Table 3).

The restrictive model (39% of agreements) treats telework as an exceptional privilege. Access is tightly controlled: seniority requirements, part-time exclusions, and production worker exclusions create cumulative barriers. Material support remains minimal, and day-of-week prohibitions signal that physical presence remains the organizational norm. The underlying philosophy positions remote work as a concession to be contained rather than a mode of work to be supported. Case B illustrates the cultural dimension: employees described the organization as 'old-fashioned' (B1), with managerial assumptions about physical presence outweighing demonstrated feasibility. Nevertheless, even within this restrictive framework, Case B established psychological support during lockdown: 'it's really good that [the company] thought of that a psychological helpline with psychologists who are available' (B7, female, quality technician, agricultural trading company, restrictive model).

Table 3: Three Models of Remote Work Regulation in French Organizations (n=107)

DIMENSION	RESTRICTIVE (39%)	INTEGRATION (36.2%)	TRANSFORMATIVE (24.8%)
Time Allowed	≤ 20% (1 day/week)	20-40% (1.5-2 days)	> 40% (up to 100%)
Philosophy	Exception/Privilege	Balance/Compromise	Transform/Remote-first
ELIGIBILITY & EXCLUSIONS			
Seniority required	95.1%	81.6%	57.7%
Apprentices excluded	70.7%	65.8%	30.8%
Part-time excluded	56.1%	44.7%	15.4%
Fixed-term excluded	36.6%	18.4%	3.8%
Production excluded [ns]	34.1%	47.4%	19.2%
Days prohibited	43.9%	26.3%	11.5%
Housing requirements [ns]	90.2%	81.6%	92.3%
MATERIAL SUPPORT			
Telework allowance	26.8%	55.3%	73.1%
Office furniture	12.2%	34.2%	57.7%
Internet subsidy	17.1%	23.7%	53.8%
Portable computer [ns]	95.1%	92.1%	88.5%
Other expenses	29.3%	47.4%	73.1%
OPERATIONAL PROVISIONS			
Business continuity	39.0%	68.4%	69.2%
Dependent care [ns]	9.8%	21.1%	30.8%
Environmental protection [ns]	34.1%	57.9%	53.8%
Coworking spaces [ns]	22.0%	7.9%	3.8%

Source: Author's own work. Note: Differences across models are statistically significant ($p<0.05$, chi-square test) except where marked ns. Percentages indicate the proportion of agreements in each model containing the specified provision or exclusion.

The integration model (36.2%) reflects a negotiated compromise. Exclusionary provisions moderate across nearly every dimension, and material support increases substantially, with telework allowances more than doubling compared with restrictive agreements. Temporal allocation expands to 1.5 to 2 days per week. This model embodies what collective bargaining characteristically produces: incremental expansion within maintained structures. Case C illustrates this negotiated compromise: the 2020 company agreement established a right to one day of telework per week, with management seeking to limit the number of days and resisting fixed schedules (C9).

The transformative model (24.8%) reconceptualizes work organization around outcomes rather than presence. Exclusions decline sharply: part-time worker exclusion drops to 15.4% and fixed-term exclusion virtually disappears. Material investment is substantial. These agreements concentrate in knowledge-intensive sectors, raising questions about whether transformation reflects genuine organizational learning or sectoral selection. Case F traces this trajectory's endpoint: the organization moved from two days per month to three days per week, with employees reporting that 'the results were much, much better than what they hoped for' (F2, male, commercial engineer, IT services company, transformative model). Housing requirements persist even here (92.3%), transferring infrastructure costs to employees and potentially excluding workers in smaller or shared housing.

4.3 Bargaining as Learning: From Experiment to Conviction (Case E)

Case E, a construction group (~800 employees), illustrates how collective bargaining progressively shapes remote work. Three successive agreements (2018, 2019, 2020) trace a trajectory from experimentation to institutionalization.

Phase 1: The experimental agreement (October 2018). Before formal negotiation, individual employees had been making discreet requests. The HR director was personally favorable; union delegates (CGT and CFE-CGC) were enthusiastic. The management committee, however, was divided:

> *There were still some members who were not in favor and who said, 'But how are we going to monitor, in quotation marks, these teleworkers and their output?' (E1, female, HR director, construction company, integration model)*

The union delegate framed this resistance:

> *The most important underlying argument is that managers want to keep their teams, I would almost say, on a leash. That is, under their eyes at all times. (...) In my view, it was the difficulty they had in delegating, in trusting people. (E2, male, CFE-CGC delegate/CSE secretary, construction company, integration model)*

The first agreement (October 2018, one year) allowed one day per week. E2 described it as 'almost a revolution.' Exhaustive eligibility lists were abandoned to avoid 'jealousy between positions' (E2). The union sought cost contributions; management refused:

> *What bothered me a bit is that management said, 'Look, it's already good for you, you're eligible for telework, that's already an advantage.' (...) Which is absolutely ridiculous because telework is first and foremost about the worker. (E2, male, CFE-CGC delegate/CSE secretary, construction company, integration model)*

The union signed despite disagreement. Uptake was modest: ~50 requests out of 400 eligible employees. The CGT delegate, an electrician ineligible for telework, signed nonetheless:

> *Even though I'm not affected, I think telework is an advance for me, and it would have bothered me to be against it when I see only positives. (E5, male, CGT delegate/electrician, construction company, integration model)*

Phase 2: Institutionalization (October 2019). After a positive assessment, a second, open-ended agreement was signed. The shift to permanent status marked institutional consolidation: 'The parties consider that it's satisfactory for both sides, so we make it permanent' (E2). Trust built through word-of-mouth:

> *Trust built up because it's word-of-mouth. When you go to a department, someone is teleworking, and it's still running well. (...) So the others said to themselves, 'Well actually, the thing works.' (E2, male, CFE-CGC delegate/CSE secretary, construction company, integration model)*

This phase also opened the possibility for more than one day per week.

Phase 3: COVID as catalyst (July 2020). The lockdown produced what E1 called a 'great reversal.' An open-ended employee survey returned overwhelmingly favourable responses, with telework cited spontaneously in roughly 90% of them. The HR director proposed extending to two days:

> *I've always supported telework; two days a week I think is very good; switching to three days a week is something else. I think, at that point, the balance tips toward more homeworking than an on-site presence. (E1, female, HR director, construction company, integration model)*

Union delegates initially wanted five days, then moderated. The amended agreement (July 2020) extended telework to two days and included part-time workers. However, non-eligible workers, primarily on construction sites, experienced a 'double penalty': partial unemployment during lockdown while eligible colleagues continued working:

It's not fair, telework is not fair. (…) We are forced to come and work on-site (…) we have no compensation. (E1, reporting workers' grievances, construction company, integration model)

In TSR terms, Case E traces the full regulatory arc. The pre-agreement phase shows worker-developed practices: individual employees making requests outside any framework. The first agreement represents social regulation's emergence, with concessions on both sides. COVID disrupted the equilibrium, establishing feasibility and shifting the balance of power. The post-COVID amendment illustrates adaptive joint regulation: the HR director set the direction (two days, not three), unions moderated demands, and non-eligible workers' grievances were acknowledged but unresolved.

4.4 Regulatory Accumulation Through Iterative Bargaining

Case G, an insurance mutual (~4,800 employees), shows how an iterative renegotiation progressively reconfigures regulatory provisions within an integration model.

Agreement genealogy: the CFDT union, holding over 50% of electoral weight, had pushed for telework for years. A critical precursor emerged from a 2015 redundancy plan (PSE) involving site closures that left ~150 employees facing commutes of 130–175 km. The union negotiated telework provisions within the PSE:

It was putting a foot in the door and initiating an experiment with telework. (…) we built on this experiment to say, 'Well, you see, it works.' (G2, female, CFDT national delegate/CSE secretary, insurance company, integration model evolving toward transformative)

The December 2017 framework agreement capped teleworkers at 30% per service and limited telework to one or two days. Managers were excluded but gained a 'nomadic work' provision.

A 2019 amendment extended scope and made the agreement permanent. Call centers remained excluded despite telephone-based work:

For example, the call centers that I had pushed hard for, well, at the beginning they weren't included in the agreement. (G1, female, industrial relations manager, insurance company, integration model evolving toward transformative)

The exclusion was partly technical (telephony systems) and partly cultural: call center supervisors sat within 'daisy' formations alongside workers, operating in extreme proximity.

On 15 March 2020, the CSE issued a formal right of alert. Within one week, nearly 4,000 employees were teleworking:

We managed in one week to find solutions (…) so that nearly 4,000 employees in one week found themselves teleworking. (G2, female, CFDT national delegate/CSE secretary, insurance company)

Twelve COVID-related agreements were negotiated, covering confinement protocols, agency reopening, partial activity, and return-to-site procedures. Weekly crisis meetings produced successive amendments, each building on the previous. This iterative process fundamentally changed union practice:

COVID upended our practice because we faced situations we had never encountered. (G2, female, CFDT national delegate/CSE secretary, insurance company)

G2 described a fundamental shift in bargaining's purpose:

The reasons for negotiation were no longer about acquiring new advantages; (…) it was much more about how we reconcile continuing to work and how far we accept degraded working conditions. (G2, female, CFDT national delegate/CSE secretary, insurance company)

Perhaps the most concrete indicator of transformation was the abolition of electronic badging:

Management said, 'There is no longer any point in people badging.' So we stopped badging. (…) And in fact, we never went back to badging. (G2, female, CFDT national delegate/CSE secretary, insurance company)

Badging was never reinstated. This irreversible shift from time-counted to connectivity-based work signals a qualitative rupture. Yet the transformation remains contested. Management introduced individual computer 'beacons' (balises), officially for software monitoring but capable of tracking individual activity. G2 noted: 'I call them beacons; others, more nastily, call them spies (mouchards).' Some employees were warned about detected inactivity; others expressed a desire to return to badging, finding security in counted hours. The union struggled with how to move from counting hours to something more flexible without sliding into production-based pay. This ambivalence complicates any linear narrative of telework as liberation.

The renegotiation revealed a sharp gap between external communication and internal negotiation. Top management publicly announced three days per week for all employees. At the negotiating table:

Internally, when we negotiate, we're told, 'Well, we won't go for 3 days.' (G2, female, CFDT national delegate/CSE secretary, insurance company)

G2's frustration escalated:

It's contemptuous towards us, it's insulting our intelligence. (…) We simply cannot accept such dissonance between external discourse to make the shop window look nice and the discussions in the backroom. (G2, female, CFDT national delegate/CSE secretary, insurance company)

COVID rendered the 2017 framework agreement obsolete, proving nearly all employees could telework. Yet when the union proposed formalizing call center telework, management claimed it had not been 'properly tested' (G2).

Case G illustrates 'regulatory accumulation': each negotiation round expanded scope, yet each also revealed social regulation's limits through management's divergent discourse and new surveillance tools.

4.5 The Implementation Gap: When Agreements Meet Practice (Case D)

Case D, a local semi-public company (~400 employees), signed its telework agreement in late 2019 as part of five simultaneous agreements. The FO delegate described it as 'a small record' (D1), providing one day per week.

COVID transformed this into a full-scale experiment, but D1's primary concern was the gap between provisions and implementation.

The agreement stipulated individual assessment and dialogue. In practice, managers defaulted to collective treatment:

What we wanted, what is written in the agreement, is that it should be linked to the individual. That it should not be collective treatment. (…) The spirit of the agreement is that it should be a discussion between the employee and the manager. When you apply collective treatment, you no longer need to explain yourself. That's a shame. (D1, male, FO union delegate, local semi-public company, restrictive model)

The gap extended to how employees understood their rights. D1 reported colleagues insisting, 'We have a right to one day of telework,' whereas the agreement requires a written request and managerial validation. Mass-email allocation, treating telework as an administrative assignment rather than a negotiated arrangement, undermined the agreement's intent. Initial managerial responses included oppressive dashboards:

We had dashboards for everything. (…) We had to account for everything. Oh my, it was painful! (…) It was as if you had someone behind your shoulder, watching you. (D1, male, FO union delegate, local semi-public company, restrictive model)

These were eventually relaxed after complaints. D1 identified the underlying issue:

The organization is not mature enough. (…) We stayed for 20 years in immobility, working the old-fashioned way. Overnight there's a new HR director with good ideas, progressive… The shock is somewhat brutal. (D1, male, FO union delegate, local semi-public company, restrictive model)

D1 countered skepticism with performance data: profit sharing during 2020 (full telework) matched 2019. He reframed telework as recognition: 'Managers should use it as a lever' (D1). The union planned to reopen negotiations for two days.

Case D reveals that regulatory quality depends not only on agreement content but also on managers' capacity and willingness to implement as intended. Where collective treatment substitutes for individual dialogue and control mechanisms are imposed before being renegotiated through complaint, the agreement functions as necessary but insufficient for meaningful social regulation.

4.6 Cross-Case Analysis: From Absence to Transformation

The four cases trace a regulatory progression. Case A represents the zero point: without bargaining, governance defaults to managerial discretion.

Cases E and G show bargaining producing qualitatively different outcomes. In Case E, the process was sequential: experimentation, consolidation, COVID-accelerated expansion, with progressive trust building. In Case G, the union used restructuring to create precedent, and COVID shattered pre-existing restrictions. Badge abolition marked a shift to connectivity-based regulation.

Case D complicates optimistic readings: collective email assignments replaced individual dialogue, and oppressive dashboards were imposed unilaterally before being renegotiated through complaint.

Three cross-cutting findings emerge. First, trust appears as the central mechanism: absent in Case A, built progressively in E, institutionalized yet undermined in G, and deficient in D. Second, COVID functioned as an accelerator, not origin: Cases E and G had pre-pandemic agreements. Third, fairness tensions between eligible and non-eligible workers appeared in every case with site-based employees.

Other cases confirm these patterns. In Case B (agricultural trading, restrictive), cultural resistance was described as 'old-fashioned' (B1). Case C (metallurgy, integration) secured a one-day-per-week entitlement through company negotiation, with management limiting the number of days (C9). Case F (IT services, transformative) showed the trajectory's endpoint, moving from two days per month to three days per week.

5. Discussion

5.1 Conceptual and Empirical Contribution: Extending Social Regulation Theory to Virtual Work

This study makes a conceptual as well as an empirical contribution. Following guidance on distinguishing theory testing from theory building (Budhwar et al., 2024), we do not claim a freestanding new theory; the contribution is analytical. By extending Reynaud's (1988) Theory of Social Regulation into a domain its originator could not have anticipated, the regulation of spatially distributed work, the analysis reconceptualizes how control and autonomous regulation interact once physical co-presence is removed. This is more than an application: it specifies the dynamics that existing uses of TSR in co-located employment relationships have not captured, refining the framework's account of how regulatory sources interact under conditions of spatial distance.

The three-model typology constitutes the central empirical contribution. Restrictive agreements preserve management-imposed rules largely intact; transformative agreements absorb substantial worker-developed practices; integration agreements occupy an intermediate position.

The direction of post-pandemic evolution is striking. The shift from restrictive dominance (55.9% pre-pandemic) to integration dominance (45.1% post-pandemic) indicates moderate expansion rather than fundamental transformation, consistent with recent evidence from the French private sector (Askenazy et al., 2025). Transformative agreements slightly declined from 26.5% to 23.9%. Social regulation, at least in the French context, tends toward compromise. The pandemic established technological feasibility beyond dispute, yet institutional forces channeled this potential toward measured accommodation. In the U.S. context, remote work stabilized at roughly four times pre-pandemic levels, yet firm-level discretion produced fragmented outcomes rather than convergence on any single model (Barrero et al., 2023). Our findings suggest a parallel dynamic within collective bargaining: agreements reflect negotiated settlements shaped by organizational power relations, not rational responses to technological possibility.

The temporal distribution of models across pre- and post-pandemic periods sharpens this picture (Table A3). Before the pandemic, restrictive agreements dominated at 55.9%, with integration accounting for only 17.6% and transformative for 26.5%. After 2020, integration became the most common model at 45.1%, while restrictive agreements fell to 31.0% and transformative ones edged down to 23.9%. This redistribution was accompanied by shifts in agreement content: health protection objectives increased 4.6 times, production worker exclusions tripled despite proven feasibility, and material support provisions expanded modestly. The pattern suggests that collective bargaining absorbed pandemic experience primarily through moderate expansion rather than structural change, consistent with TSR's emphasis on social regulation as an iterative compromise.

TSR posits that regulatory outcomes emerge from the interaction of management-imposed rules and worker-developed practices (Reynaud, 1988; Reynaud and Richebé, 2009). Virtual work intensifies this interaction. In Case E, three successive agreements (2018, 2019, 2020) trace an

iterative process in which each round of bargaining absorbed lessons from the previous one, with trust built through 'word-of-mouth diffusion effects' among skeptical managers (E1). In Case G, the union's initial 'foot in the door' came not through telework bargaining at all but through a restructuring plan in 2015 (G2), after which remote work provisions expanded through twelve successive COVID-era agreements. These trajectories suggest that virtual work does not merely transplant regulatory tensions into a new setting but intensifies them because physical distance unsettles the taken-for-granted supervisory arrangements of co-located work, pushing control toward formalized, explicitly negotiated terms (Sewell and Taskin, 2015). What could remain tacit in co-located settings must now be written into agreement clauses and periodically renegotiated as organizational learning accumulates.

5.2 Regulatory Mechanisms in Telework Agreements

Regulation in telework agreements operates through three mechanisms: eligibility gatekeeping, trust and control dynamics in implementation, and the gap between formal provisions and actual practice.

Eligibility as gatekeeping. Seniority requirements appear in 95.1% of restrictive agreements, declining to 57.7% in transformative ones; part-time exclusion dropped from 56.1% to 15.4%. In Case E, management abandoned eligibility lists to avoid 'jealousy between positions' (E2). In Case G, call centers were excluded despite telephone-based work.

Trust and control dynamics. The case studies reveal a more nuanced picture of workplace regulation than the surveillance-intensification narrative prevalent in the literature on digital work (Leonardi, 2020). Trust and control coexist uneasily, sometimes within the same organization.

Case E is revealing. The HR director (E1) described a 'surveillance paradox': managers who exercised no systematic oversight of on-site employees became anxious when those same employees worked from home. The CFE-CGC delegate (E2) reported that managers wanted employees 'on a leash, under their eyes at all times.' What appeared as a trust deficit was, in practice, reliance on physical proximity as an implicit control mechanism that co-location had made automatic.

In Case D, daily dashboards generated the sensation of having 'someone behind your shoulder, watching you' (D1). These were relaxed after complaints, yet the same organization replaced individual dialogue with collective email treatment, substituting one form of control for another.

Case G presents the starkest juxtaposition. Management abolished the badge system while introducing electronic 'beacons' (balises) that workers renamed 'spies' (mouchards) (G2). The symbolic abolition of one surveillance instrument coincided with the deployment of another, suggesting virtual work may redistribute rather than eliminate control.

The key insight is that control in telework operates not primarily through digital surveillance, as the literature would predict (Kala and Lyons, 2025), but through eligibility criteria, temporal restrictions, and the allocation or withholding of material support. Agreements that exclude certain categories, prohibit specific days (43.9% of restrictive agreements), or provide minimal equipment (only 12.2% include furniture) exercise control through access itself.

The discourse-practice gap. In Case G, management publicly promised 'three days for all' while internally maintaining 'we won't go to three days' (G2), complicating any straightforward reading of agreement provisions as indicators of intent.

5.3 Gender and Inequality Dynamics

Virtual work policies interact with pre-existing labor market inequalities. The most direct mechanism is part-time worker exclusion. Since part-time employment in France remains disproportionately female, the 56.1% exclusion rate in restrictive agreements (versus 15.4% in transformative ones) indicates a gendered pattern embedded in apparently neutral criteria. Minimum working-time thresholds, typically 80% of full-time, exclude precisely those workers whose reduced hours often reflect caregiving. Home-based flexibility is frequently traded for work intensification, an exchange in which time saved is reabsorbed as longer or more intense work (Bathini and Kandathil, 2019).

Exclusionary provisions decline from restrictive to transformative models: apprentice exclusions fall from 70.7% to 30.8%, fixed-term from 36.6% to 3.8%. Yet this gradient redistributes rather than eliminates inequality, as transformative agreements concentrate in already-privileged knowledge-intensive sectors. Production workers face exclusion in 34.1% of restrictive and 19.2% of transformative agreements, creating what Case E's CGT delegate (E5) described as a 'double penalty' during lockdown. The near-total absence of domestic labor provisions suggests that bargaining does not yet address telework's gendered dimensions. Addressing gender equality in flexible work requires explicit attention to household dynamics and differential career impacts (Chung and van der Lippe, 2020). Male-dominated negotiating teams tend to overlook gender implications in telework provisions (Pochic and Guillaume, 2024).

5.4 Practical Implications

The three-model typology offers organizations a diagnostic tool for assessing their regulatory position. This claim should be stated modestly: the typology describes patterns in French company-level agreements.

Case studies suggest that organizational readiness may matter as much as technological capacity. In Case D, the FO delegate described an organization 'not mature enough' despite adequate infrastructure (D1). Even in Case E, the management committee was divided (E1).

Practitioners should note the recurring gap between external communication and internal practices. Case G's management promoted generosity publicly while maintaining a restrictive stance internally (G2).

Case E's three successive agreements point to an important insight: iterative bargaining may prove more effective than a single definitive agreement. Trust was built incrementally, and each agreement incorporated lessons from the previous one. The post-pandemic dominance of integration (45.1%) suggests that incremental expansion within existing frameworks is the

politically feasible path. Significant variation in remote work outcomes persists across occupational contexts, with hybrid arrangements showing retention benefits without damaging performance (Bloom et al., 2024).

5.5 Social Implications

The findings carry social consequences beyond the workplace. Remote work policies create new forms of inequality, as eligibility gatekeeping systematically excludes categories of workers from arrangements whose feasibility was established during the pandemic.

The most immediate is a quiet redistribution of employment costs. Only 26.8% of restrictive agreements include telework allowances; 12.2% provide furniture. Even in transformative agreements, these reach only 73.1% and 57.7%. The gap between organizational savings on office space and what employees receive may amount to a privatization of work infrastructure. While the aggregate productivity effects of working from home remain unclear, the capacity to telework is unevenly distributed between knowledge workers and front-line workers who cannot (Fernald et al., 2024). Where organizations reduce facility expenses while providing minimal home-office support, telework functions less as a beneficial workplace arrangement than as a transfer mechanism.

A new occupational division is also emerging between tasks deemed télétravaillables and those deemed non-télétravaillables. This distinction may fragment worker solidarity along an axis that bargaining has not yet learned to manage. Case E's CGT delegate (E5), an electrician, signed the telework agreement despite being personally ineligible, viewing it as 'an advance' for the organization as a whole. Whether this solidarity is reciprocated remains uncertain; the tripling of production worker exclusions post-pandemic suggests bargaining gains for office workers may widen the distance from shop-floor colleagues. Human-centered approaches to technology adoption are necessary to prevent new digital arrangements from deepening existing stratification (Berg et al., 2023).

These dynamics are compounded by sectoral concentration: knowledge-intensive services predominate among transformative agreements, while manufacturing and public administration cluster in restrictive and integration categories. The risk is that telework hardens into a marker of occupational privilege rather than a broadly shared improvement.

6. Conclusion

This study set out to examine how collective bargaining shapes remote work regulation in France, drawing on 107 company-level telework agreements and seven organizational case studies analyzed through the lens of Reynaud's (1988) Theory of Social Regulation. Three findings stand out. First, three distinct regulatory models emerge: restrictive (39%), integration (36.2%), and transformative (24.8%), each with internally consistent patterns of temporal allocation, eligibility, material support, and managerial philosophy. Second, the post-pandemic period saw a shift not toward transformation but toward integration: integration agreements rose from 17.6% to 45.1%, while transformative agreements slightly declined from 26.5% to 23.9%.

Bargaining produced moderate expansion rather than fundamental restructuring. Third, eligibility criteria, not technological capacity, serve as the primary mechanism determining who gains access to remote work.

The contribution lies in extending Reynaud's framework to virtual work, an analytical move that reconceptualizes how control and autonomous regulation interact once physical co-presence is removed. The three-model typology shows how management-imposed rules and worker-developed practices interact to produce distinct equilibria. That bargaining yields iterative, moderate compromise is consistent with TSR's emphasis on social regulation as an ongoing process. Trust emerged as a central but contested mechanism, invoked to justify both the loosening and tightening of arrangements.

For practice, the typology may serve as a diagnostic tool: organizations could locate their positioning along the restrictive-integration-transformative spectrum and identify which provisions distinguish one model from another. The framework maps empirical variation rather than prescribing a direction. Collective bargaining appears to shape remote work access in ways that market-driven approaches do not, though the resulting compromises remain partial and contested.

Several limitations require acknowledgment. The study is situated within the French system, where high bargaining coverage and specific legal frameworks condition the outcomes observed. Whether similar regulatory models emerge in liberal market economies or coordinated systems with stronger sectoral bargaining by (Hall and Soskice, 2001), remains an open question. The sector classification groups heterogeneous activities under broad labels, particularly 'Services,' limiting sector-level comparison precision. A more granular classification, distinguishing for example IT services from retail within this broad category, would be needed to determine whether sectoral context shapes model adoption. The study is cross-sectional: pre- and post-pandemic comparisons capture two snapshots but cannot trace individual agreement trajectories over time.

A terminological clarification: 'transformative' describes the degree of organizational restructuring around remote work, not a normative judgment. A transformative agreement may still include housing requirements (92.3% do), which could exclude lower-income workers. The category captures organizational form, not social outcomes.

Future research should investigate whether organizational readiness matters more than technology, whether integration represents a stable equilibrium or transitional stage, the interaction with algorithmic management, and cross-national comparison between France and systems with different bargaining structures.

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Appendix

Table A1: Pre- and Post-Pandemic Comparison of Agreement Characteristics (n=107)

Variable	Pre-Pandemic (2017-2019) n=36	Post-Pandemic (2020-2024) n=71	$\chi^2(1)$, p
Stated Objectives			
Work-life balance	91.7%	93.0%	0.06, .810
Business continuity	33.3%	69.0%	12.41, <.001*
Health protection	16.7%	76.1%	34.21, <.001*
Eligibility Exclusions			
Production workers excluded	13.9%	45.1%	10.27, .001*
Part-time workers excluded	52.8%	36.6%	2.56, .110
Seniority requirement	86.1%	78.9%	0.82, .364
Material Support			
Telework allowance provided	44.4%	50.7%	0.37, .540
Office furniture support	33.3%	29.6%	0.16, .691
Portable computer provided	88.9%	94.4%	1.04, .309

Source: Author's own work, analysis of Légifrance database. The final column reports the Pearson chi-square statistic and asymptotic p-value for the period × variable association (all df=1). Asterisks (*) mark differences significant at p<0.05; the remaining differences are descriptive and not statistically significant.

Table A2: Distribution of Agreements by Year (n=107)

Year	N	Percentage
2017	11	10.3%
2018	10	9.3%
2019	15	14.0%
2020	27	25.2%
2021	22	20.6%
2022	15	14.0%
2023	5	4.7%
2024 (Jan-Jun)	2	1.9%
Total	**107**	**100.0%**

Source: Author's own work. Note: Pre-pandemic (2017-2019): n=36 (33.6%); Post-pandemic (2020-2024): n=71 (66.4%)

Table A3: Model Distribution by Period

Model	Pre-Pandemic (n=36)	Post-Pandemic (n=71)	Total (n=107)
Restrictive	55.9%	31.0%	39.0%
Integration	17.6%	45.1%	36.2%
Transformative	26.5%	23.9%	24.8%

Source: Author's own work. Note: Entries are column percentages within each period, computed over the agreements assignable to the three-model typology (restrictive, integration and transformative, defined by the share of staff teleworking: ≤20%, 30–40% and >40%). The period × model association is statistically significant (Pearson χ^2, 8.49; df=2; p=0.014).

Key Statistical Findings

Statistically significant differences (p<0.05)

1. Objectives: health protection objectives rose from 16.7% to 76.1% and business continuity from 33.3% to 69.0%.

2. Exclusions: exclusion of production workers rose from 13.9% to 45.1%.

3. Regulatory model: the integration model rose from 17.6% to 45.1% while the restrictive model declined from 55.9% to 31.0% (period × model association, p<0.01; see Table A3).

Notable but non-significant trends (p>0.05)

4. Exclusions: part-time worker exclusions fell from 52.8% to 36.6% and the seniority requirement eased slightly (86.1% to 78.9%).

5. Material support: telework allowances rose modestly (44.4% to 50.7%) while office furniture support declined (33.3% to 29.6%).

6. Temporal flexibility: day-of-week prohibitions decreased (33.3% to 28.2%).

Data source: Legifrance database, 107 company-level telework agreements (2017-2024). Statistical analysis: Chi-square tests with significance threshold p<0.05.

Statistical Methodology Notes

All bivariate analyses employed Pearson's chi-square test for categorical variables, with significance threshold set at p<0.05. For 2x2 contingency tables with expected cell frequencies below 5, Fisher's exact test was applied. Effect sizes were assessed using Cramer's V, with values interpreted as small (0.10-0.29), medium (0.30-0.49), or large (>0.50). Tables A1 and A3 report descriptive pre- and post-pandemic comparisons across selected variables; statistically significant associations (p<0.05) are marked with an asterisk in Table A1, and the significant period × model association is noted under Table A3, while Table A2 reports the year distribution of the corpus. The three-model typology (restrictive, integration, transformative) was validated through chi-square analysis confirming significant associations between telework volume categories and multiple regulatory dimensions including material support provisions, exclusion criteria, and stated objectives.

Key Differentiating Variables by Model (Chi-square Results)

The following variables showed the largest differential effects across the three models (restrictive to transformative): Telework forfait provision (+46.3 percentage points), office furniture support (+45.5 pp), other expense coverage (+43.8 pp), part-time worker exclusion (-40.7 pp), apprentice exclusion (-39.9 pp), seniority requirement (-37.4 pp), and CDD exclusion (-32.8 pp). These patterns indicate that model differentiation reflects both increased material investment and reduced exclusionary practices as organizations move from restrictive toward transformative approaches.

Table A4: Interviewee Characteristics

ID	Case	Gender	Position	Sector	Model
A1	A	Female	Coordinator/Staff delegate	Personal services	Restrictive
A7	A	Male	Director	Personal services	Restrictive
B1	B	Female	Procurement employee	Agricultural trade	Restrictive
B7	B	Female	Quality technician	Agricultural trade	Restrictive
C9	C	Male	Union delegate	Metallurgy	Integration
D1	D	Male	Union delegate	Local semi-public company	Restrictive
D3	D	Male	Rental service manager	Local semi-public company	Restrictive
E1	E	Female	HR Director	Construction	Integration
E2	E	Male	Union delegate/CSE secretary	Construction	Integration
E5	E	Male	Union delegate/Electrician	Construction	Integration
F1	F	Female	Technical support	IT services	Transformative
F2	F	Male	Commercial engineer	IT services	Transformative
F4	F	Male	Union delegate	IT services	Transformative
F5	F	Female	Commercial manager	IT services	Transformative
F7	F	Male	Technical support	IT services	Transformative
G1	G	Female	Industrial relations manager	Insurance	Integration
G2	G	Female	Union national delegate/CSE secretary	Insurance	Integration

Source: Author's own work. Note: Table A4 lists the 17 interviewees whose accounts are drawn upon in this article, selected from a total of 57 semi-structured interviews conducted across the seven case organizations.