INFORMATION SHEET

Establishment characteristics and work practices: **Industry sector**

The 2013 European Company Survey data provides policymakers and practitioners with information and analysis on the spread of certain work organisation, human resource and participation practices in European establishments. As employment relations and workplace practices differ substantially between sectors, this profile shows the incidence of those practices within the sector as compared to other economic sectors.

Introduction

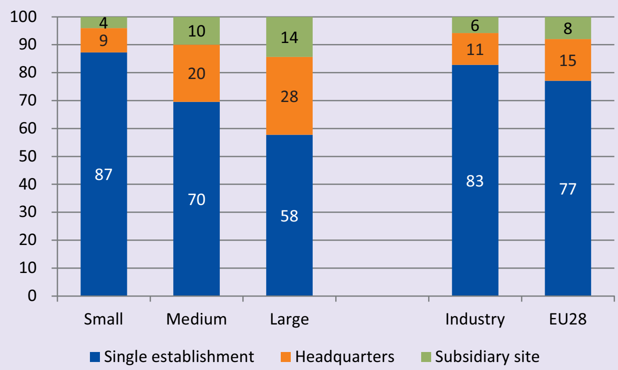
This paper is one in a series of sector profiles giving an overview of structural characteristics, work organisation practices, human resource management, employee participation and social dialogue in the industry sector. It is based on the third European Company Survey (ECS), which gathers data about companies and establishments with 10 or more employees in all economic sectors except those in the NACE Rev. 2.0 categories A (agriculture and fishing), T (activities of the household) and U (activities of extraterritorial organisations and bodies) across all 28 EU Member States as well as Iceland, the former Yugoslav Republic of Macedonia, Montenegro and Turkey.

The sector includes all activities related to mining and quarrying (NACE B), manufacturing (NACE C), electricity, gas, steam and air conditioning supplies (NACE D) and water supply, sewerage, waste management and remediation activities (NACE E). The third ECS contains responses from 8,074 establishments in this sector across the EU28. The sector profile compares aspects of establishment characteristics with the EU28 as a whole. The methodology used (latent class analysis) was developed in the overview report. Please note that percentages may not total 100 in some figures due to rounding.

Structural characteristics

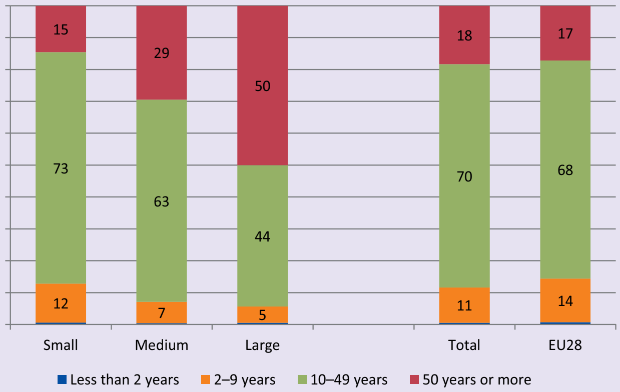
The majority of establishments in the sector (83%) are single establishments (single independent companies with no further branch offices, production units or sales units), above the EU28 average of 77%. A small proportion (11%) are headquarters (EU28 15%) and the remainder (6%) are subsidiary sites (EU28 8% – see Figure 1). Unsurprisingly, there are differences in terms of size: the smaller the establishment, the more likely it is to be a single establishment (87% of small and 58% of large establishments). Only 9% of small establishments are headquarters, compared to 28% of large firms.

Figure 1: Establishment type by size (%)



Source: *ECS 2013 – Management questionnaire*

Figure 2: Years of operation by size (%)



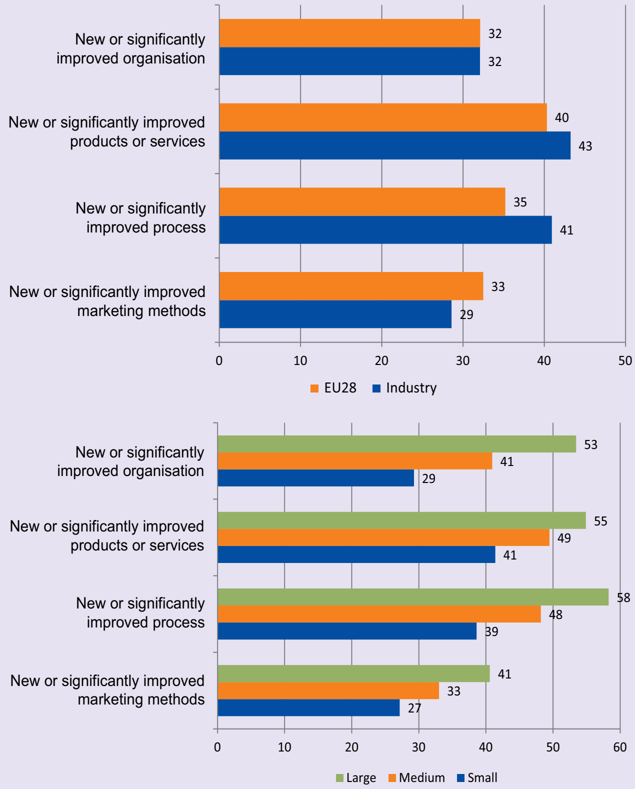
Source: *ECS 2013 – Management questionnaire*

A slightly higher than average proportion of establishments in the industry sector (70%) has been in operation for between 10 and 49 years, compared to the EU average of 68% (Figure 2). The larger the establishment, the more likely that it has been in operation for 50 years or more (50% of large and 15% of small establishments).

Figure 3 shows that the industry sector differs significantly from the EU28 average in the proportion of female employees. In 37% of industry establishments, the proportion of female workers is less than 20%, compared to 29% in the EU28 overall. The differences are smaller in terms of age and employees with university degrees.

The industry sector is (in most areas) more innovative than the EU28 average. New or significantly improved products or services were reported by 43% of industry establishments (40% in the EU), and 41% of establishments reported improved processes (EU28 35%). There are noteable differences in terms of size of innovation/change.

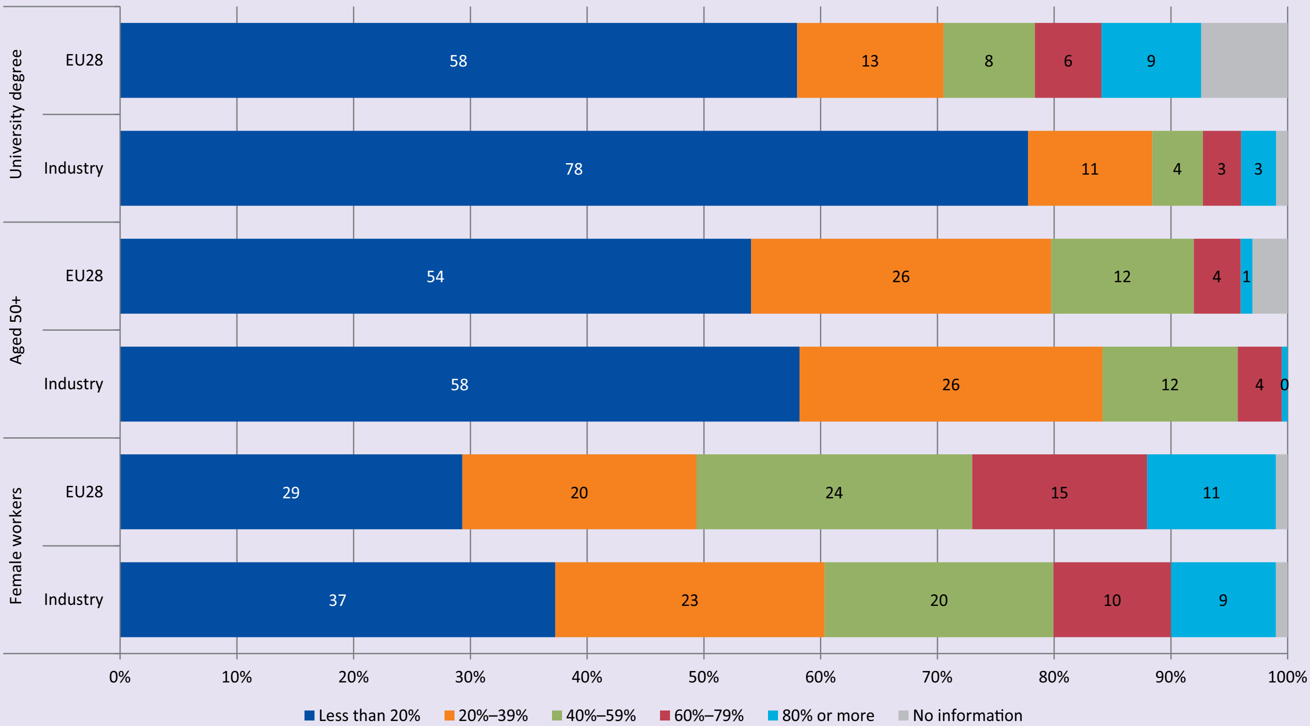
Figure 4: New or improved products, processes and marketing methods and organisational change (%)



Source: *ECS 2013 – Management questionnaire*

More than half of large establishments (53%) introduced changes in their organisation compared to small establishments (29%), 58% improved processes (39% of small establishments) and 55% introduced new or

Figure 3: Women, older workers and workers with a university degree (%)



Source: *ECS 2013 – Management questionnaire*

improved products or services (as did 41% of small establishments).

Work organisation practices

Collaboration and outsourcing

Collaboration in the design or development of goods and services is more likely in the industry sector than in the overall economy (30% compared to 25%). In 62% of industry establishments, design and development is carried out, compared to only 46% of all EU establishments; 37% of establishments collaborate in the production of goods and services (compared to the EU average of only 29%), and in 17% production is not carried out at all (EU 41%). Sales and marketing is slightly less likely to be carried out in the industry sector (24% of establishments not engaging in it) than the EU average (27%). However, 32% of industry establishments collaborate in this field compared to the EU average of 36%.

Outsourcing of the production of goods or services is more frequently observed in the industry sector than overall (30% compared to 26%). However, no differences are observed in the proportions of establishments that outsource development and design (19%).

In the industry sector, collaboration and outsourcing are classified as 'extensive' in 36% of establishments, in line with the EU28 average. A much higher proportion of industry firms are, however, part of the limited type (40% compared to 27% in the EU28), while the moderate group is formed by a lower proportion of industry establishments (23%) than the EU average (37%).

The extensive collaboration and outsourcing type is characterised by high proportions of collaboration in all areas, with little difference between the industry sector and the EU28 as a whole. More than three quarters of establishments in this group collaborated in the production of goods and services (78%), also in design or development (65%) and sales and marketing (64%).

In the moderate type, most establishments are not involved in design or development (83%), the production of goods and services (51%) or sales and marketing (54%).

The limited type is characterised by very little collaboration.

Internal organisation and information management

Industrial establishments are usually organised in function-based departments (81%) or output-based departments, those dealing with products or services (43%). As for the latter, interestingly, industry shows a more diverse picture than the EU average (Table 2). Output-based departments are also found in moderately structured establishments to some extent (17%) and not only in establishments classified as highly structured. Geographically-based departments are reported by 18% of units, in line with the overall sample (19%). Regardless of their structure, 72% of industrial establishments adopt team working modalities, a result comparable with the cross-sectoral figure (73%).

There are no marked differences in terms of the use of monitoring and information systems. Industry establishments score six percentage points lower than the whole sample in the use of information systems to

Table 1: Profiles of establishments – Collaboration and outsourcing (%)

		Industry				EU28			
		Moderate	Extensive	Limited	Overall	Moderate	Extensive	Limited	Overall
Group size		**23**	**36**	**40**	**100**	**37**	**36**	**27**	**100**
Design or development of new products or services	In-house with collaboration	10	65	11	30	6	57	9	25
	In-house, no collaboration	8	9	67	32	5	7	61	21
	No design/development	83	27	23	38	88	36	30	54
Outsourcing design or development of new products or services	Yes	2	39	9	19	2	43	10	19
	No	98	61	91	81	98	57	90	81
Production of goods or services	In-house with collaboration	20	78	10	37	11	64	8	29
	In-house, no collaboration	30	12	86	46	15	7	78	30
	No production	51	10	5	17	74	28	13	41
Outsourcing production of goods or services	Yes	8	56	19	30	5	54	19	26
	No	92	44	81	70	95	46	81	74
Sales or marketing of goods or services	In-house with collaboration	20	64	10	32	25	68	10	36
	In-house, no collaboration	26	18	79	44	29	14	78	37
	No sales/marketing	54	18	11	24	46	18	12	27
Outsourcing sales or marketing of goods or services	Yes	3	33	8	16	6	38	8	18
	No	97	67	92	84	94	62	92	82

Source: *ECS 2013 – Management questionnaire*

Table 2: Profiles of establishments - Internal organisation and information management (%)

		Industry			EU28		
		Highly structured	Moderately structured	Overall	Highly structured	Moderately structured	Overall
Group size		**56**	**44**	**100**	**52**	**48**	**100**
Use information systems to minimize supplies or work-in-process	Yes	67	30	50	61	26	44
Monitoring quality of production	Yes, on a continuous basis	91	73	83	87	64	76
	Yes, on an intermittent basis	7	17	12	11	22	16
	No	1	10	5	2	14	8
Monitoring external ideas or developments	Yes, using staff assigned specifically to this task	47	18	34	43	14	29
	Yes, as part of the responsibilities of general staff	40	30	36	44	33	39
	No	13	52	30	13	52	32
Keeping records of good work practices	Yes	79	46	64	78	44	62
Teamwork	No team	17	43	28	14	41	27
	Most of them work in more than one team	44	35	40	47	36	41
	Most of them work in a single team	39	22	32	39	24	32
Departments based on function	Yes	94	66	81	90	54	72
	No	6	34	19	10	46	28
Departments dealing with different types of products or services	Yes	64	17	43	70	21	46
	No	36	83	57	30	79	54
Departments dealing with specific geographical areas	Yes	30	4	18	32	6	19
	No	70	96	82	68	94	81

Source: *ECS 2013 – Management questionnaire*

minimise supplies or work-in-process (50%). The share of industrial undertakings monitoring the quality of production and external ideas or development, matches the high shares of EU averages (95% and 70% respectively). Although these results are very similar to those seen in the total observed establishments, industrial enterprises are more likely to monitor quality of production/external ideas on a structural basis than on an intermittent one. Keeping records of good practice is usual for 64% of industry establishments.

In the industry sector, 56% of establishments are highly structured in terms of internal organisation and information management (EU28 52%). Almost all establishments (91%) in this group monitor the quality of production on a continuous basis, many also keeping records of best practice (79%). In this cluster, 95% of the establishments are organised in function-based departments and 64% are structured in departments that deal with different types of products or services.

The moderately structured type of establishments, on the other hand, are dominated by units that use no information systems to minimise supplies or work processes (70%). More than half (52%) of these establishments do not monitor external ideas or developments, do not keep records of best practice (54%), are not structured in departments dealing with different products/services (83%) or geographical areas (96%).

Decision-making on daily tasks

Table 3 shows that industrial sector maintains a rather centralised decision-making structure, 62% being the share of establishments where managers or supervisors are solely responsible for the planning of daily tasks (eight percentage points above the share recorded in all the analysed sectors). Teams are also as likely to operate in the industry sector as in the EU overall. Team members decide in only 17% of industry establishments who is to perform tasks (as do teams in 20% overall).

Establishments classified as ‘top-down’ enterprises account for 66% of the sector (three percentage points more than the overall average). In 75% of these establishments, only managers/supervisors decide and plan work organisation, compared to the EU average of 69%. In 24% (compared to 30% overall), both employees and managers take these decisions jointly. In addition, in almost all cases where teams are present (67% in this type), task allocation is decided by managers/supervisors.

The remaining 34% of establishments in the industry sector have a ‘joint’ approach to decision-making. In terms of task autonomy, decisions are taken jointly in 52% of these establishments and by employees in an additional 11%. Likewise, autonomous teamwork is much more prevalent (40% of industry establishments).

Table 3: Profiles of establishments – Task autonomy (%)

		Industry			EU28		
		Joint	Top-down	Overall	Joint	Top-down	Overall
Group size		**34**	**66**	**100**	**38**	**62**	**100**
Task autonomy (who decides planning and execution of daily tasks)	The employee undertaking the tasks	11	0	4	16	1	6
	Managers or supervisors	37	75	62	30	69	54
	Both employees and managers or supervisors	52	24	34	54	30	39
Team autonomy (who decides by whom the tasks are to be performed)	Team members decide among themselves	40	4	17	44	5	20
	Tasks are distributed by a superior	32	67	55	30	68	53
	No team	28	29	28	26	28	27

Source: *ECS 2013 – Management questionnaire*

HR Practices

Recruitment, employment and change

There are minor differences between the industry sector and the overall private economy in terms of recruitment, employment and career development. Approximately 27% of industrial establishments reduced their staff between 2010 and 2013, three percentage points more than the total sample; however, 18% of managers plan to reduce staff (in line with the EU average). The comparison highlights a higher share of respondents reporting a shortage of employees with the sector's required skills (44% compared to 39%).

In terms of recruitment and employment, it is 'business-as-usual' in 65% of sector establishments, close to the EU average of 67%. The patterns in this group are almost identical for the sector and the EU28. The large majority of these establishments had not implemented any changes in recruitment policies in the three years preceding the survey (89%) and had not faced problems in finding skilled employees (68%) or retaining them in the workforce (98%). There was practically no perceived need to reduce staff (94%).

The 'shortage of matching skills' cluster contains 20% of sector establishments. The cluster is characterised by an extremely high proportion of establishments that had difficulties in finding skilled employees (89%), a relatively high proportion that introduced changes in recruitment policies (30%) and had difficulties in retaining employees (28%). The remaining 15% form the cluster of establishments that were under pressure to reduce their workforce (EU28 14%), 77% of which have in fact cut their workforces.

Training

Industrial establishments are slightly less likely to provide training than the overall EU28, performing above average among the groups providing no or little training, and below average in the higher classes (Table 5).

In the industry sector, 71% of establishments offer time off for training to at least some of their employees, in line with the EU average. In 19% of industry establishments, this is

Table 4: Profiles of establishments – Recruitment, employment and change (%)

		Industry				EU28			
		Business-as-usual	Shortage of matching skills	Reduction in workforce	Overall	Business-as-usual	Shortage of matching skills	Reduction in workforce	Overall
Group size		**65**	**20**	**15**	**100**	**67**	**19**	**14**	**100**
Change in recruitment policies	Yes	11	30	25	17	11	32	26	17
	No	89	70	75	83	89	68	74	83
Difficulties in finding employees with the required skills	Yes	32	89	32	44	28	86	31	39
	No	68	11	68	56	72	14	69	61
Difficulties in retaining employees	Yes	2	28	14	9	3	30	16	10
	No	98	72	86	91	97	70	84	90
Need to reduce staff	Yes	6	13	78	18	5	13	78	17
	No	94	87	22	82	95	87	22	83
Changes in the number of employees	Increased	28	37	4	26	29	42	5	28
	Stayed about the same	54	44	18	47	54	43	20	47
	Decreased	19	19	77	27	16	16	75	24

Source: *ECS 2013 – Management questionnaire*

Table 5: Profiles of establishments – Training (%)

		Industry					EU28				
		Selective	Encompassing	No training	On-the-job training only	Overall	Selective	Encompassing	No training	On-the-job training only	Overall
Group size		**65**	**19**	**12**	**5**	**100**	**63**	**21**	**10**	**5**	**100**
Time off provided by the employer for training (proportion of workforce)	None at all	20	8	100	82	30	21	7	100	83	29
	Low (up to 19%)	34	16	0	16	26	30	14	0	15	23
	Medium (20–79%)	30	33	0	2	26	35	33	0	1	30
	High (80% or more)	16	43	0	0	19	14	45	0	0	19
On-the-job training provided by employer (proportion of workforce)	None at all	28	0	98	0	29	26	0	98	0	27
	Low (up to 19%)	34	0	2	0	22	29	0	2	0	19
	Medium (20–79%)	37	14	0	2	27	43	14	0	2	30
	High (80% or more)	1	85	0	98	22	2	86	0	98	24

Source: *ECS 2013 – Management questionnaire*

offered to almost all (80% or more) employees, the same proportion as the EU average. Marginal differences can be observed between industry establishments and the overall economy in terms of on-the-job training. Most establishments (71%) of the industry sector provide this option to their employees, as do 73% of EU establishments overall.

There is also very little divergence between the industry sector and the overall economy when it comes to the classification of training types. The majority of industry firms (65%) have a selective approach to training, meaning that in most establishments at least some employees have access to training.

The encompassing type covers 19% of industry firms offering both types of training to a majority of employees, and 12% do not offer training at all (which is slightly above average). Another 5% only offer on-the-job training, but most of these do not give employees paid time off for training.

Working time flexibility

Industry establishments are below average in terms of flexibility in start and end times (Table 6). Only 26% offer this option to most of their employees, compared to 31% in the EU28. On the other hand, the possibility to have time off to compensate for overtime is possible for all employees in 56% of industrial enterprises, slightly above the overall average (54%). Part-time work is slightly less common in the sector, with 37% of establishments reporting they have no part-time workers, compared to 34% in the overall economy.

Just under half (47%) of industry establishments form a group that offers ‘limited’ working-time flexibility to its employees, close to the EU average of 45%. This cluster is characterised by a high proportion of establishments that do not give their employees flexibility in their working time (62%) and where working time cannot be accumulated (48%).

Table 6: Profiles of establishments – Working time flexibility (%)

		Industry				EU28			
		Encompassing	Limited	Selective	Overall	Encompassing	Limited	Selective	Overall
Group size		**17**	**47**	**36**	**100**	**20**	**45**	**35**	**100**
Flexibility in starting and finishing times	None at all	1	62	23	37	1	59	23	35
	Low (up to 19%)	0	9	28	14	0	8	23	12
	Medium (20–79%)	24	7	40	22	20	7	43	22
	High (80% or more)	75	22	9	26	78	26	12	31
Accumulation of overtime	Yes, possible for all employees	82	46	57	56	79	44	54	54
	Yes, possible for some employees	9	6	26	14	11	7	28	15
	No	9	48	17	30	10	50	18	31
Part-time work	None at all	34	48	25	37	31	43	25	34
	Low (up to 19%)	48	37	55	45	49	42	54	48
	Medium (20–79%)	17	12	18	15	19	13	19	16
	High (80% or more)	1	3	2	2	2	3	2	2

Source: *ECS 2013 – Management questionnaire*

Table 7: Profiles of establishments - Variable pay-schemes (%)

		Industry				EU28			
		Extensive	Limited	Moderate	Overall	Extensive	Limited	Moderate	Overall
Group size		**9**	**47**	**44**	**100**	**10**	**46**	**44**	**100**
Payment by results	Yes	68	7	45	29	75	8	52	34
	No	32	93	55	71	25	92	48	66
Individual performance based payment following management appraisal (bonuses)	Yes	85	9	70	43	85	9	69	43
	No	15	91	30	57	15	91	31	57
Group performance-based pay	Yes	78	2	36	24	80	2	37	25
	No	22	98	64	76	20	98	63	75
Profit-sharing	Yes	96	10	41	31	98	8	37	30
	No	4	90	59	69	4	92	63	70
Share-ownership	Yes	24	1	5	5	27	1	5	5
	No	76	99	95	95	73	99	95	95

Source: *ECS 2013 – Management questionnaire*

Establishments that are part of the selective flexibility type account for 36% of the industry sector. Flexi-time is offered in 77% of these establishments, but only a small proportion (9%) offer it to most staff. Most industry establishments of the 'selective type' have at least some part-time staff (75%), but the proportion of establishments in which the proportion of part-time workers does not exceed 20% is comparatively large (55%) for both the industry sector and the overall EU economy.

Less than one fifth (17%) of the industry establishments constitute the encompassing type of work time flexibility (compared to 20% overall). Within this group, 75% of establishments have a flexi-time scheme in place for more than 80% of staff. Likewise, in 82% of establishments, the opportunity to accumulate overtime is open to all employees. Of these establishments, 66% employ at least some of their workforce on a part-time basis.

Variable pay

There are minor differences in the use of variable pay schemes between the industry sector and the overall economy (Table 7). Industrial establishments are more likely to adopt payment by results schemes (29% compared to the EU average of 34%). Approximately the same averages for all the other variable pay forms addressed are seen both in the sector and the EU figures, with bonuses based on management appraisal the most common (43%).

Table 8: Profiles of establishments – Direct employee involvement (%)

		Health				EU28			
		Low effort and little change	Moderate and unsupported	Extensive and supported	Overall	Low effort and little change	Moderate and unsupported	Extensive and supported	Overall
Group size		**29**	**16**	**55**	**100**	**28**	**15**	**57**	**100**
Number of instruments deployed for employee involvement	None	11	4	1	4	9	3	1	3
	1–4	83	80	62	71	83	79	59	69
	5–7	6	17	37	25	7	17	40	28
Management attitude toward direct employee participation (%)	Positive attitude	65	42	91	75	68	43	92	78
Level of direct involvement of employees in decision-making in most important change in past 3 years according to manage	Not involved	4	8	2	4	4	7	2	3
	Informed only	10	44	15	18	9	43	14	17
	Consulted	0	23	12	10	0	25	12	11
	Involved in joint decision-making	2	24	43	28	2	24	43	29
	Not applicable (no major change happened)	84	1	27	40	85	1	28	40

Source: *ECS 2013 – Management questionnaire*

The ‘limited’ cluster of variable pay covers 47% of establishments in the sector (EU28 46%). Within this cluster there are practically no share-ownership or group performance-based pay schemes in place; less than 10% of establishments in this group use payment by results, group-based payments or profit-sharing.

A very small proportion of industry firms (9%), but also overall (10%), offer an extensive range of variable pay schemes to their employees; for instance, 96% offer profit-sharing and 85% pay some kind of bonus.

Just under half (44%) use a moderate range of variable pay schemes (in the industry sector and the EU28). Payments for individual results (bonuses) are paid in 70% of these establishments, while payment by results is used by 45%. A further 36% have group performance-based pay in place, and 41% have a profit-sharing scheme.

Employee participation and social dialogue

Direct employee participation

There are few differences in the overall degree of involvement of employees in decision-making processes, with industrial establishments displaying a negligibly lower degree of involvement (Table 8). In 18% of firms in the industry sector and in 17% in the EU on average, employees were only informed about major changes; only in around 11% were they actually consulted. Industrial managers show less confidence in the impact of the employees’ involvement on the performance of their company (75% compared to 78% overall).

The ‘low effort and little change’ type covers 29% of industry establishments, in line with the EU average. Establishments in this group are the most likely to offer no opportunity to involve employees; in 84% of these establishments no major change had taken place.

In 55% of industry establishments the ‘extensive and supported’ type of direct employee participation (compared to 57% of EU28 firms) is prevalent. In 43% of establishments in this group, employees were involved in joint decision-making about major changes.

Another 16% of industry firms (and 15% overall) form the ‘moderate and unsupported’ group in terms of employee participation; 44% of employees in this group were just informed about major changes, 23% were consulted and 24% were actually involved in the joint decision-making.

Workplace social dialogue

The ECS 2013 shows that an official structure of employee representation is present in 38% of establishments in the industry sector, above the 32% of establishments in the EU28.

Marginal differences were observed between the industry sector and establishments in the EU28 in terms of resources and available information for employee representatives, very slightly above average for both categories in the sector than the EU average (Table 9). Influence on decision-making was also slightly higher in the industry sector than the EU average.

Of those industry establishments where employee representative structures are present, 54% of representatives reported they were involved in joint decision-making (both in the industry sector and overall). However, 11% of employee representatives said they were not involved in major changes. In 19% of industry establishments, employees were at least informed – the same proportion as the EU28 average.

The average scores for trust in either management or employee representatives were almost the same in the industry sector and the EU averages. Industrial action took place in 21% of industry firms, slightly higher than the incidence in the EU28.

The extensive and trusting type comprises 39% of all industry establishments. Employee representatives are comparatively well resourced and enjoy a very high level of provision of information. The management is highly trusted in this cluster and in 91% of establishments in this group, employees are involved in joint decision-making. Industrial action took place in only 9% of these establishments.

Compared to the extensive and trusting type, the perception of employee representatives in establishments in the ‘moderate and trusting’ cluster is that they are not so well resourced, get less information and are less involved in joint decision making. Nevertheless, a relatively high level of mutual trust is reported in this cluster, coupled with a low incidence of industrial action (10%).

The extensive and conflictual type comprises 24% of establishments in the industry sector (23% in the EU28). Employee representatives are substantially involved in decision-making in half of these establishments, and many feel they have some influence on decisions taken in the establishment. Even so, employee representatives’ trust in management is well below average of the four types, as is management trust in employee representation. Nearly half (46%) of industry establishments in this group had been involved in some form of industrial action in the three years preceding the survey.

The limited and conflictual type (13%) is characterised by lower mutual trust levels, a notable incidence of industrial action (29%) and a high proportion of establishments that do not involve their employees in decision-making at all, as perceived by the employee representative (50%). The ‘available information’ score is the lowest of the four.

Table 9: Profiles of establishments – Workplace social dialogue

		Industry					EU28				
		Extensive and trusting	Moderate and trusting	Extensive and conflictual	Limited and conflictual	Overall	Extensive and trusting	Moderate and trusting	Extensive and conflictual	Limited and conflictual	Overall
Group size (%)		**39**	**24**	**24**	**13**	**100**	**39**	**26**	**23**	**12**	**100**
Resources (score 0–100)	Average score	59	48	57	39	54	60	48	55	37	52
Available information (score 0–100)	Average score	89	75	73	33	71	87	74	70	30	69
Employee representation influence on decision making (score 0–100)	Average score	62	25	45	11	42	62	24	46	10	42
Trust in management (score 0–100)	Average score	82	63	63	49	72	82	77	63	50	73
Trust in employee representation (0–100	Average score	68	66	60	61	66	70	69	61	62	67
Employee representation involvement in decision making (in %)	Not involved	0	14	3	50	11	0	15	3	52	11
	Informed	1	37	17	41	19	1	37	18	38	19
	Consulted	8	23	30	6	17	8	24	25	6	16
	Involved in joint decision-making	91	26	50	2	54	91	24	54	3	54
Industrial action since 2010 (%)	Occurred	9	10	46	29	21	7	9	42	34	19

Source: *ECS 2013 – Management and employee representative questionnaires*

Further information

The report *Third European Company Survey: Overview report* is available at: http://bit.ly/3ECS2015/

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