Apprentice charge out rates

February 2026

Pye Tait Consulting
info@pyetait.com
www.pyetait.com

Cert No. 10745

A report prepared by:

Pye Tait Consulting
Registered in England, Company No: 04001365, VAT No: 755 8312 14
Registered office: 5 Merus Court, Meridian Business Park, Leicester, LE19 1RJ

Tel: 01423 509 433

email (enquiries related to this report): n.charleton@pyetait.com
email (general enquiries): info@pyetait.com
website: www.pyetait.com

EMB Group
Smarter thinking

Pye Tait Consulting is part of the EMB-Group.

Contents

Executive summary

In early 2025, The Electrotechnical Skills Partnership (TESP) updated its apprentice Return on Investment (ROI) calculations following anecdotal reports that recent government announcements could detrimentally impact apprentice take-up. Findings illustrated the continued value of apprentices to the sector, with businesses realising a positive ROI, albeit at a lower return than in 2019.

A key element in determining profitability of apprentices is the rate at which they are charged out and the ROI study revealed businesses take differing approaches in this regard.

TESP therefore commissioned Pye Tait Consulting to undertake research to explore the rationale behind employers' different approaches to charge out rates for electrical apprentices. Specific objectives of the research are to explore:

- current practices and charge out rate determination,
- market acceptance and barriers,
- scope of apprentices' work, and
- recruitment and training pathways.

The findings will be used by TESP to help inform the development of guidance or support around apprentice charge out rates, particularly for smaller businesses, while considering industry wide practices.

The research comprised two stages, running between June and August 2025. Stage 1 involved qualitative interviews with 50 electrotechnical employers of varying sizes and sectors based in England. Stage 2 comprised 25 follow-up qualitative interviews with employers, most of whom had participated in Stage 1.

The summary of findings below is broadly structured to align to each research objective.

Current practices and charge out rate determination

Most (76%) interviewed businesses work on a fixed price basis – this was slightly higher for medium/large (85%) than micro/small businesses (67%).

Over half (58%) indicated a degree of flexibility in their approach to pricing up work, primarily driven by the wishes of the client, and the need to remain competitive. Others (42%) said there was no flexibility in their approach to pricing, referencing how this was driven by clients' needs and expectations.

When determining apprentice charge out rates, many (78%) businesses apply an hourly rate for their apprentice when pricing work. Most (65%) have a formal process in place for this and over half (57%) do not show the client a breakdown of costing for apprentices, either quoting a price for the job or indicating a labour rate for the team.

Of those using a formal process (of varying degrees) for determining apprentice charge out rates, most take into account associated costs (such as apprentice wages, supervision, equipment, administration, travel). Several (30%) increase charge out rates in line with wages, while some (24%) apply a charge out rate as a proportion of the rate of a fully qualified electrician (which may vary depending on the ability/experience of the apprentice).

Of those with no formal process for determining charge out rates, most said they simply assess and price a job based on the overall cost of the labour and materials. A few will incorporate an hourly rate for an apprentice depending on experience/ability.

Businesses discussed influences on charge out rates (besides covering costs) including the need to remain competitive on price, the ability of the apprentice, and (to a much lesser extent) clients dictating charge out rates or some domestic customers being unwilling to pay for an apprentice. Benefits of the current approach – besides ensuring profitability and seeing a return on investment – predominantly centre on an investment in the workforce of the future.

Just under half of interviewed businesses expressed interest in practical guidance for apprentice charge out rates. Many favoured a simple, adaptable model such as hourly rate benchmarks that could reflect costs, profit margins, and apprentice proficiency.

Some requested examples of best practice from other electrotechnical firms, including case studies to demonstrate the merits of current approaches, including comparison of flexible or fixed pricing approaches, or guidance on suggested rates and cost-covering thresholds.

For delivery, sector bodies like ECA and NICEIC, colleges, and government were suggested as credible sources for publishing guidance ideally online for easy access.

Beyond guidance on apprentice charge out rates, interviewed employers identified financial support and improved collaboration with colleges and training providers as the most beneficial areas for enhancing apprenticeship outcomes.

Rising costs were cited as a key barrier to apprentice recruitment, with tax credits and (to a lesser extent) grants proposed to offset financial risk. Interviewed employers suggested more collaboration with sector bodies and government-led initiatives to support businesses identify, recruit, and retain apprentices.

Scope of apprentices' work

Skilled work undertaken by apprentices (under supervision) typically includes electrical installations, testing, wiring, specialised electrical tasks, first and second fix, maintenance and containment. Unskilled work typically includes site preparation, shadowing, cabling and tidying up.

Interviewed employers broadly agreed that Year 1 apprentices largely shadowed qualified electricians, and helped with preparation of tools, materials and site preparation, in Year 2 they undertake wiring and cabling etc under supervision, before being more proficient and capable of most tasks by Year 4.

Most (78%) interviewed businesses ensure apprentices are able to work on a diverse range of jobs to provide exposure to all the skills they will need. Most employers have a relatively long-term pipeline of work (from six to 24 months) which allows them to plan in advance and align apprentices' tasks with what they are being taught at college. Others said they were unable to provide exposure to all skills apprentices might need, either due to the specialist nature of their business's work, a perception that colleges had not adequately prepared apprentices, or referenced the 'poor work ethic' of apprentices.

Few interviewed businesses have encountered a situation where apprentice numbers are limited onsite but occasions that do arise are typically linked to restrictions for younger workers onsite due to health and safety regulations, or due to impositions from clients on numbers.

Recruitment and training pathways

Employers recruit apprentices through a range of methods, with local colleges being the most common route, often via career fairs, open days, and work experience placements. Word-of-mouth, personal networks and online advertising also play key roles..

Strong collaboration with colleges was widely valued, particularly for candidate vetting and ongoing apprentice support. However, a minority of employers noted challenges such as limited communication and tutor shortages that were perceived to affect apprentice quality.

To identify suitable candidates, many interviewed employers rely on trial periods or temporary contracts to assess attitude, reliability, and fit. Recommendations from trusted sources and interviews are also key, while CVs are often seen as less useful for younger applicants with limited experience. Additional strategies include pre-apprenticeship roles and internal training programmes.

Retention is closely linked to recruiting the 'right' candidate initially. Employers emphasised the value of early work experience and expressed interest in best practice guidance and stronger college partnerships to improve apprentice 'stickability'.

With regards to training, most interviewed employers perceive limited opportunity to switch the current order of skills development at college with a view to potentially increase apprentice charge out rates. However, some suggested potential areas for improvement including:

- a greater focus on practical skills – sometimes attributed to perceptions of restricted access to training facilities or limited collaboration between colleges and employers (e.g. for tutors to conduct more onsite visits); this would be particularly welcomed in relation to testing,
- conducting health and safety training earlier (or possibly pre-apprenticeship) to focus more on practical skills earlier in the apprenticeship, and
- ensuring consistency in college staffing to minimise tutor turnover and assessor shortages, potentially through improved tutor conditions.

Conclusions and recommendations contains ten recommendations for TESP's consideration.

1. Introduction

1.1 Background

In early 2025, The Electrotechnical Skills Partnership (TESP) commissioned Pye Tait Consulting to update 2019 apprentice Return on Investment (ROI) calculations. Recent government announcements of increased apprentice pay rates and employer National Insurance (NI) contributions led to TESP receiving anecdotal reports of the potential negative impact this may have for apprenticeship take-up. The ROI update thus aimed to demonstrate the continued value of electrotechnical apprenticeships to the sector, and indeed the 2025 findings indicated that, for all levels of charge out rate, apprentices show a positive ROI for businesses, albeit at a lower return than in 2019.

The key elements determining profitability of apprenticeships are the costs of supervision, the amount of time apprentices are charged out, and the rates at which they are charged out for both skilled and unskilled work. The study revealed that businesses take different approaches when charging out their apprentices which include:

- **Fixed hourly rates**: Some businesses set a fixed hourly rate for their apprentice, usually lower than fully qualified employees to reflect their training status.
- **Project-based pricing**: Apprentices are included in the project cost rather than billed separately.
- **Tiered pricing**: Companies may adjust rates based on the type of work (skilled or unskilled) the apprentice undertakes and their skill level and experience.

Given the variability in approaches to pricing, TESP is now seeking to explore the factors which influence how employers determine charge out rates, ultimately with a view to developing guidance to assist businesses.

1.2 Aims and objectives

The overarching aim of the research is to explore the rationale behind employers' different approaches to charge out rates for electrical apprentices, examining the type of work apprentices undertake, and identifying ways to support small businesses that may not be leveraging apprentices effectively. The findings will be used by TESP to help inform the development of guidance or support around apprentice charge out rates, particularly for smaller businesses, while considering industry wide practices.

Specific objectives of the research are to explore:

1. **Current practices and charge out rate determination**
    - The current structures that companies of different sizes may have in place, and the reasons for this
    - How charge out rates are determined, and billed for, if this varies depending on circumstances, and the factors influencing this
    - Potential benefits, drawbacks, opportunities and any best practice of current approach to determining charge out rates
    - Key drivers affecting an apprentice's profitability

2. **Market acceptance and barriers**
    - Identifying barriers to charging out higher rates for apprentices
    - Examine successful strategies for increasing charge out rates while maintaining client satisfaction
3. **Scope of apprentices' work**
    - Understanding the types of work apprentices undertake to obtain a clearer view of what is classed as 'skilled' and 'unskilled' work
    - Explore areas of work an apprentice is capable of at an early stage of the apprenticeship – and any variation by type of provider or sector
4. **Recruitment and training pathways**
    - Method of recruitment (e.g. via training provider, adverts, use of networks)
    - Comparison of profitability and productivity of apprentices learning on the job vs individuals coming from full time training pathways

1.3 Methodology

The primary research comprised two distinct stages.

Stage 1 comprised qualitative interviews in June and July 2025 with 50 employers based in England. These interviews explored business practices, market acceptance and financial considerations surrounding apprentice charge out rates, the scope of an apprentice's work and the key financial consideration when employing an apprentice.

Pye Tait Consulting identified in-scope businesses with support in promotion from TESP.

Stage 2 comprised 25 employer interviews in July and August 2025 to investigate in more detail what support and guidance might be beneficial to aid businesses in their current approach to determining apprentice charge out rates. These interviews also explored methods of recruitment with the aim of understanding more about what employers might do to ensure they recruit the best candidates, and what further support might be needed.

All but one of the 25 businesses participating in Stage 2 also participated in Stage 1, resulting in 51 unique companies contributing to this study.

Job roles of interviewees included business owners, Managing Directors, Operations Directors, Commercial Directors, Finance Directors, Apprentice and Training Managers, Electrical Managers, electrical supervisors and other similar roles.

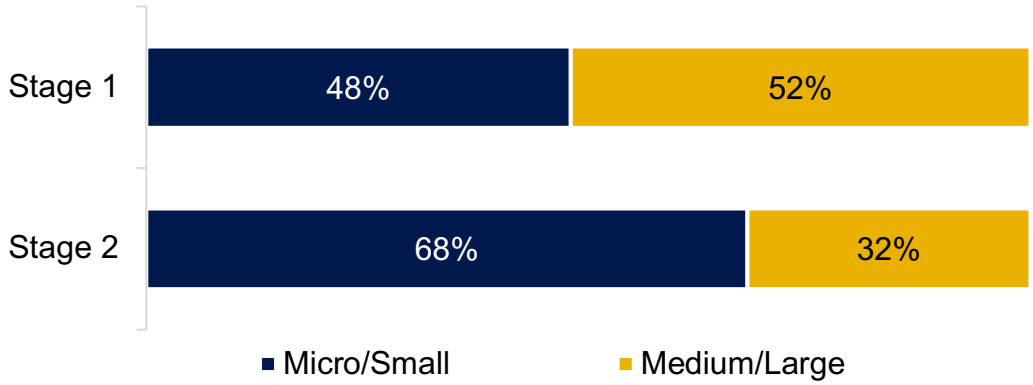
Interviews were supplemented with desk research to identify any standard approaches taken to apprentice charge out rates both within the electrical sector and looking at other sectors for any guidance on best practice, as well as information that provided guidance on charge out rates.

1.4 Respondent profile

1.4.1 Business size and location

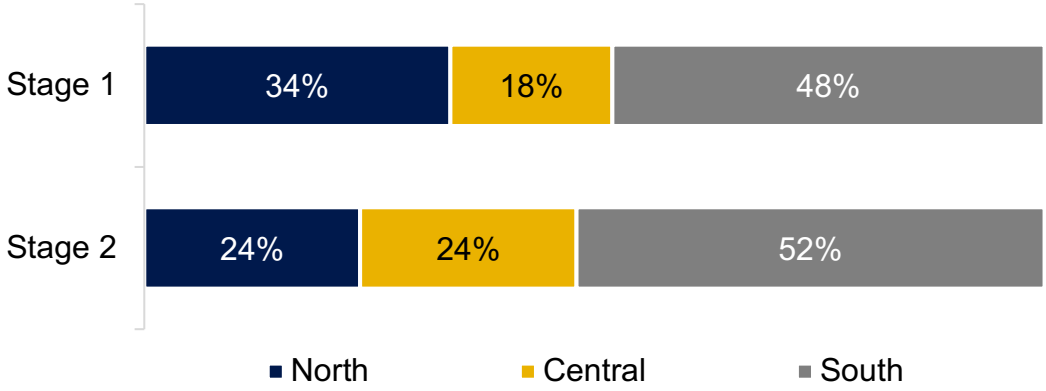
The 50 participating businesses in Stage 1 comprised a roughly even mix of micro/small and medium/large businesses, while Stage 2 comprised more micro/small employers (Figure 1). They are based or headquartered across England, with more in the South (Figure 2).

Figure 1: Employment size of interviewed businesses



Base: 50 (Stage 1) and 25 (Stage 2) businesses.

Figure 2: Location of interviewed businesses



Base: 50 (Stage 1) and 25 (Stage 2) businesses.

1.4.2 Business sector and type of work

In Stage 1, most (41, 82%) interviewed companies undertake commercial installations, around two thirds (32, 64%) conduct domestic installations and a small number (four, 8%) are active in the industrial sector. A similar profile is seen among Stage 2 firms.

Around half (26, 52%) of Stage 1 businesses work across sectors (commercial, domestic and/or industrial). For Stage 2 businesses, 17 of the 25 interviewed work across sectors.

Commercial work references included installations in venues such as shopping centres, restaurants hospitals, police stations, bars, theatres, leisure centres and schools. Domestic-

based work included repairs, inspections, wiring services and full electrical installations e.g. kitchens, bedrooms and conservatories. Industrial work mentioned included design and installation packages, installation of temporary electrics, and installation of high and low voltage for steel industry.

In terms of the type of work undertaken, around two in five (44%) undertake maintenance, referring to general maintenance, service and inspections, and more specific maintenance contracts e.g. for intruder alarm systems. Two in five (19, 40%) mentioned specialist electrical tasks such as designing, servicing and testing fire alarm systems, emergency lighting and CCTV systems. Other work referenced included (but was not limited to) testing, and repair works.

Note on report structure

The structure of this report mirrors the research objectives, with chapters 2 to 5 discussing findings in relation to each of the respective objectives before chapter 6 draws together conclusions from the research and outlines suggested recommendations.

2. Current practices and charge out rate determination

This chapter outlines how businesses price up work, how they incorporate apprentices into their costing, and the extent to which they have a formal process in place for calculating apprentice charge out rates.

2.1 Pricing work

When asked about their approach to pricing work, most (76%) interviewed businesses said they work on a fixed price basis – this was slightly higher for medium/large (85%) than micro/small businesses (67%).

Others (24%) work on either a fixed price or hourly/day rate – the majority of these are micro/small firms.

2.1.1 Flexibility in approach to pricing work

Companies provided feedback on how flexible they are when pricing up work.

Flexible: More than half (58%) indicated a degree of flexibility in their approach to pricing up work, primarily driven by the wishes of the client, and the need to remain competitive (e.g. to quote slightly lower rates when this is viewed to help win work).

> 'Most of our work is fixed price – we need to compete on price to win the work. We also do the odd bits of day rate for repeat clients who know we can trust us to do the job on day rate.' Central, Commercial/Domestic, Medium/Large

Other flexibility mentioned included that:

- existing customers are happy to work with a day rate (four),
- smaller jobs are charged using a day rate (four, all micro/small), and
- regular clients or community projects (e.g. work on a local church) are charged at lower rates (three).

Unflexible: Others (42%) said there was no flexibility in their approach to pricing, referencing how this was driven by clients' needs and expectations.

Of these, half (of which most are medium/large) said they operate long term contracts and thus were bound by a fixed price to honour contractual commitments.

> 'All of our work is on fixed price; we work for main contractors who only work in this way.' South, Commercial, Medium/Large

Five others said that their clients are predominantly in the domestic market and expect a fixed price for a given job.

2.2 Costing approach for apprentices

Discussing their costing approach for apprentices, most (78%) apply an hourly rate for their apprentice when pricing up work (see further detail later in this section).

Around two thirds (65%) have a formal process for determining charge out rates for apprentices. Rates are generally calculated by considering a range of factors which may include, apprentice wages, cost of supervision, ability of the apprentice, travel, equipment, administration, pension contributions, insurance and the need to ensure a margin.

> 'We use a formal process. Broadly speaking we'll charge them out at lower rates in years one and two when they are mainly doing unskilled work and shadowing the electrician. In years three and four we charge them out at higher rates as they can do more skilled work by that point.' North, Commercial/Domestic, Medium

More than half (57%) do not show the client the costing for apprentices – instead businesses will state a price for the job as a whole or include a labour rate for the entire team which is not broken down by job role.

In contrast, ten businesses (of which eight are micro/small) said they do not have a formal process but will price a job based on the cost of labour and materials and then will build in a margin. Another micro/small company said it does not charge for apprentices.

2.2.1 Rationale for this costing approach

When asked to explain their current approach to costing for apprentices, businesses generally explained the need to recoup the costs of employing an apprentice during the course of the apprenticeship (e.g. linked to wages, supervision, equipment and associated overheads) – with recognition that the business will see the true benefits once the apprentice has qualified. Around half (26, of which 18 are medium/large) explicitly discussed how they view apprentices more broadly as an investment in their future workforce, as they will by then have an experienced member of staff who is trained to their standards.

> 'Our apprentices often go on to be leaders in the company – they understand our ways of working and the culture of the business.' North, Commercial/Industrial, Medium/Large

Several (32%) said their approach to costing apprentices helps them to be competitive on price as apprentices are a cheaper source of labour than fully qualified electricians. This can be particularly beneficial, it was suggested, for two-person jobs where one of the roles is unskilled or where the apprentice is very proficient in the skilled work that needs to be carried out (under supervision).

Eight also discussed how they will increase the apprentice charge out rate per year of apprenticeship to reflect their relative experience and type of work they can undertake – with greater experience, the apprentice will be more useful to the business and generate greater profit.

A few (six) mentioned that their approach is client-driven, whereby the business must produce fully costed bids (e.g. for local authority procurement).

A few (seven) also mentioned they had applied their approach for many years and reflected on how this method had thus been proven to enable their business to maintain success and ensure profitability.

2.2.2 Variation in approach to costing for apprentices

Businesses provided mixed feedback when asked whether they vary their approach to costing for apprentices.

Standardised approach: Around half (52%) follow the same approach regardless of the client, the type of work or the ability of the apprentice.

> 'We can't apply an ability factor to each individually as we employ a lot of apprentices and it just wouldn't be possible, though I'd accept they learn at different rates.' South, Commercial/Domestic, Medium/Large

Varied approach: Others (48%) vary their approach to costing for apprentices, in some cases adopting different approaches depending on the ability of the apprentice, the type of skilled work, whether it is skilled or unskilled work, and/or the client.

Several (28%) apply different charge out rates depending on the ability of the apprentice, noting that they will charge out apprentices more where they contribute more towards a job. Businesses related how factors which determine this are the apprentice's aptitude to learning new skills, and whether the apprentice has undertaken the specific task previously in which case they will be more proficient. A few (six) said they assess the type of tasks the apprentice will be doing before determining charge out rates i.e. whether it is predominantly skilled or unskilled work.

In terms of costing variation by client, this might be dictated by a client's costing template, repeat business or the desire to win work.

Businesses reflected on the relative merits and drawbacks of differing approaches. These are summarised in the table below.

Table 1: Relative merits and drawbacks of differing costing approaches

Approach	Perceived merits	Perceived drawbacks
Flexible approach based on the type of work the apprentice undertakes	• Aligns with apprentices' learning and experience • Takes into account the cost of an apprentice in the early years • Easy to apply when working on large sites	• Complex to apply and increases admin burden • Not always possible to plan ahead what job the apprentice will be working on • Domestic customers reluctant to pay for unskilled work • Harder to charge out apprentices in the early years
Flexible approach based on the year of the apprentice	• Aligns with the natural development of the apprentice • Charge out rates increase in line with wages	• Complex to apply and increases admin burden • Apprentice costs are front loaded

	• Profts increase in line with the apprentice's experience • Easy to apply	• Some apprentices develop quicker than others • Difficult to apply to smaller jobs in the domestic market
Flexible approach based on the ability of the apprentice	• More profitable as can increase charge out rates for jobs where apprentices are very efficient • Businesses can strategically target jobs where apprentices are very efficient • Easy to apply	• Complex to apply and increases admin burden • Charge out rates need to be regularly updated • Some apprentices learn quicker than others • Domestic customers are reluctant to pay for apprentices
Fixed charge out rate over the duration of the apprenticeship	• Easy to apply • Cost of the apprentice equally spread over the four years	• Difficult to justify charging the same rate for an apprentice irrespective of experience • Can limit profitability • Can make it harder for businesses to remain competitive on price • Lack of flexibility as jobs are priced on an individual basis

2.3 Determining apprentice charge out rates

Formal process

Of the two thirds (65%) of interviewed businesses which use a formal process (of varying degrees) for determining apprentice charge out rates, most said they take into account costs (such as wages, supervision, equipment, admin, PAYE contributions and travel – see next section) for the apprentice and build in a margin based on these factors (ranging from 25% to 100%) to determine charge out rates. Several (30%) said they increase charge out rates in line with wages over each year of the apprenticeship, while in contrast two apply a flat rate over the duration of the apprenticeship.

> 'The rate is calculated based on average wages for all apprentices and other costs including pensions PAYE contributions, travel, and equipment then we add on a margin e.g. 30-50% which is what we have calculated is enough to cover the cost of the apprentice.' North, Commercial, Medium/Large

Some (24%) apply a charge out rate as a proportion of the rate of a fully qualified electrician, of which just over half vary the rate depending on the ability and experience of the apprentice – and a few do not apply a charge out rates in years one or two – while others maintain a fixed rate of mark-up (around 50% to 60%) throughout.

In terms of other comment, two said they apply a 100% mark up to wage rates, one adheres to costing templates used by their clients, and another uses a 'man and boy' labour rate which is less than that of two qualified electricians.

Of those operating a formal process for determining apprentice charge out rates, most could not recollect how it was set up, for example noting that the system was in place prior to their arrival.

Some though were aware, with most saying it was established through trial and error. Seven calculated the costs involved in employing an apprentice and added a margin. One recalled employing an accountant several years ago to calculate the daily cost of employing an apprentice. Meanwhile, two said they looked at general guidance available in other sectors and adapted it for their apprentices, though they were unable to offer any more detail.

No formal process

Of the other interviewed businesses which do not have a formal process for determining apprentice charge out rates (35%), over half of these said they simply assess and price a job based on the available budget and the overall cost of the labour and materials, with a view to ensure they will be profitable.

> 'We'll look at the spec and make a judgement on whether we can do the job for the price. It is more a sense of: "do we think we can get the work done for that price and make a profit?".' South, Commercial, Medium//Large

Eight (16%) said they incorporate an hourly rate for an apprentice into internal costings for a job, with quoted rates varying from £20 to £30 per hour depending on the experience of the apprentice.

> 'We have no formal process. We reckon an apprentice costs us £130 per day and we'll incorporate that into our costings when pricing up a job.' South, Domestic, Medium

2.4 Influences on apprentice charge out rates

Factors which businesses said they consider when determining an apprentice charge out rate include apprentice wages, supervision time and cost, equipment and administration costs. Several (all medium/large employers) also mentioned the impact of recent increases in apprentice wages and/or employers' NI contributions as considerations.

Two in five (40%) discussed how remaining competitive on price is a key consideration for them when determining apprentice charge out rates, pointing out that if they were to build in higher charge out rates, they would not win the work.

> 'It's all about market rates. We need to tender for the work – we'll look at the job spec and make a judgement on whether we think we can it done for that budget – we'll then look at who is going in the team.' South, Commercial, Medium/Large

Several (13, of which eight are micro/small) highlighted that some apprentices are better than others, and said they increase charge out rates for those with more ability. This can be dependent on the type of job i.e. how much experience the apprentice has of doing the tasks involved, and/or the individual's propensity to learn new skills.

Seven (of which five are medium/large) explicitly mentioned making a profit from their apprentices, with three saying they apply charge out rates that will ensure the business at least breaks even and expect to make money as the apprentice gains experience. For example, two discussed how they look to break even in years 1 and 2 and expect to see positive returns in years 3 and 4.

> 'We employ a decent number of apprentices, so we have a good idea how productive they are. We'll work out how much we need to charge them out at and apply that rate to the job spec - then we'll see where we stand in terms of making money on the project.' South, Domestic, Medium/Large

A few pointed out that clients can dictate charge out rates for apprentices, or that there may already be fixed pricing arrangements agreed as part of contracts. Further, some micro/small firms said there can be a reluctance to pay for an apprentice for domestic installations.

2.5 Benefits of businesses' current approach

Businesses highlighted four key benefits of their current approach to determining charge out rates for apprentices.

Workforce of the future: Around half mentioned that their current approach allows them to invest in the workforce of the future, and view apprentices as a long-term investment in the business. Four said they are pipeline of future leaders of the business, while four others commented on being able to train apprentices to their standards to 'fit' with the company and its ways of working – this latter point was also linked to retention as businesses form a strong relationship with their apprentices for long-term employment. Others discussed how apprentices enable the business to grow organically, particularly if recruiting older, skilled workers is difficult, or how this helps the business realise its growth potential.

> We have directors who were apprentices. You're also training them to your standards – i.e. you are delivering a product of good quality that is standardised.' South, Commercial/Domestic, Medium/Large

Linked to this, a few highlighted the satisfaction gained from helping an apprentice to progress within the company, while others more broadly noted that apprenticeships are an important route for unskilled individuals into work.

Covers costs: Approximately half highlighted the benefits of their approach as covering the costs of employing an apprentice, including ensuring they can cover the costs of supervision and other associated overheads.

Maintaining competitiveness: Two in five (40%) interviewed employers commented that their current approach to costing apprentices enables them to be competitive on price. A few discussed how apprentices are a cheaper source of labour, or how employing an apprentice enables them to charge customers less.

Profitable: Some (20%) said a benefit of employing apprentices is that it is profitable for them. While they cover costs in the first year, these businesses said they would expect to see a return of their investment from year two or three onwards as the apprentice becomes more competent and productive.

When asked about ways to ensure apprentices generate revenue, businesses said they place apprentices in jobs where they know/feel the apprentice will perform tasks well to allow

them to charge out more in those instances. One indicated tasks in which apprentices can become proficient at relatively quickly, including lighting surveys, containment, and PAT testing. Alternatively, employers align work with course content covered at college, so that they can get the best from their apprentices. Other individual comments included:

- using a continual stream of apprentices (those in years 3 and 4 cover the costs of those in years 1 and 2),
- using a rotation system across different departments to ensure an apprentice learns a wide range of skills, and
- ensuring they recruit the 'right' candidate in the first place.

3. Optimising approaches

This chapter looks at potential improvements businesses could make to their current approach to determining charge out rates, their appetite for support and the type of support that might be beneficial.

3.1 Improving current approach to charge out rates

Most interviewed businesses (66%) are unsure how to improve their current approach to determining charge out rates for apprentices. A couple noted that rates are dictated by clients, while other individual comments included a belief that they cannot improve their approach, that this is under continual review within the business, and that more funding for apprentices could help.

However, two did make suggestions about improvements. One suggested adopting a more flexible approach to charge out rates as every job is different, as is every apprentice. The other reflected how they should revisit their calculations for charge rates more often as that has not been done for years.

Businesses highlighted several factors that may constrain their capacity to increase charge out rates, including instances such as when:

- apprentices undertake low-skilled tasks more aligned to a labourer's role,
- the apprentice is present only to gain experience, and
- work is scheduled months in advance, making it difficult to know who will be on the job and the level of experience they will have.

Considerations and potential learnings for employers (considering) employing an apprentice when reviewing how to determine charge out rates included:

- ensuring that all costs associated with the apprentice are covered, including (but not limited to) wages, supervision, equipment, administration,
- increasing charge out rates depending on the year and/or ability of the apprentice, or aligning apprentices' work with what they can do best to ensure they are profitable for the company, and
- ensuring the business is competitive on price, to offer a fair rate to customers that is competitive in the wider market, while balancing associated apprentice costs.

3.2 Businesses' appetite for support

Just over half of Stage 2 businesses (14, of which 10 are micro/small) do not believe that support or guidance is required. They feel their current approach is tried and tested, and has functioned well for many years, and thus do not perceive value or impact in receiving external guidance. Two noted that, to be meaningful, guidance would need tailoring to the nature of the company and suggested that standardised guidance for the entire sector may not be beneficial.

Four (three of which are micro/small) mentioned that external support or guidance would be desirable and beneficial. They would welcome external suggestions, advice, perspective and inputs, and mention that any type of information would be welcome to inform and complement their current approaches. Two mentioned that guidance could be of particular potential use to newer businesses and which may lack experience hiring apprentices.

Three were unsure about the value of potential guidance and support, depending on how informative and practical guidance is, and the extent to which any support or advice might help improve their current approach.

3.3 Potential support

Type of support

When asked about the type of support or guidance on charge out rates for apprentices which might be beneficial, several reflected how the perceived value of any such support would depend on each individual company, each apprentice, the nature of work and what each individual business feels is fair to charge customers.

A few suggested that guidance on the rate per year for the apprentice could be beneficial but, bearing in mind the previous point, mentioned that a simple approach (which could be easily adaptable by companies) would be best. Yearly rates, it was suggested, could then be adjusted as needed to account for costs, profits, and experience/ability of the apprentice, to ensure companies can maximise returns on the most productive apprentices.

> 'For smaller businesses a rate per year for the apprentice, it could be just a rate that covers the cost of the apprentice (i.e. including wages supervision, tools etc) or a rate that build in a margin to make a profit on them. Apprentices in years 3 and 4 tend to be far more proficient, and there are certainly times when the business could charge far more for those apprentices if they know they are very proficient at doing that particular type of job.' North, Commercial, Medium/Large

Three would like to see examples of best practice, for instance examples from other electrotechnical companies to see what approaches work for other companies. Having sight of exemplar rates that other companies are charging was suggested, along with a threshold rate that companies could charge, or guidance on a suggested charge out rate for a given baseline cost for an apprentice to ensure they cover associated costs (e.g. wages, supervision, etc.). One would welcome guidance on hourly rates to cover costs per year of the apprenticeship.

Two would appreciate guidance on the relative merits and drawback of different approaches – for instance a comparison between flexible and fixed rate approaches.

Delivering support

When asked who could develop this guidance or support, most suggested industry or sector bodies would thus be best-placed to publish any guidance on apprentice charge out rates. ECA was mentioned commonly in this regard, with acknowledgement that not all employers are members, but that any guidance could be published online. One also suggested guidance could be published on NICEIC's website.

Several suggested colleges could develop guidance, mentioning how they are in close communication with training providers and know apprentices well, so could be well positioned for this.

> 'I prefer to do everything online, and so through an email or on a portal is best. It could come from colleges because we always take the apprentices from the colleges. That way they are all on the same page and suggesting the same level of rates etc.' South, Commercial, Micro/Small

A few suggested the government could provide guidance, arguing this would provide such advice with credibility.

3.4 Additional support

Employers were asked what other types of support, if any, would be beneficial when employing electrical apprentices. The most popular suggestions related to finance as well as support through colleges and training providers.

With regard to finance, there is a feeling amongst employers that rising costs often disincentivise taking on an apprentice, which can be a considerable financial risk. Therefore, they proposed tax credits and to a lesser extent grants to counteract this, to provide such incentive for businesses. One employer elaborated that a financial incentive to take on slightly older apprentices (in their 20s), to be able to offer higher wages, could aid retention.

> 'As employers we need incentives to take on apprentices, so I would have wanted more tax credits to help us with costs and make this profitable for us.' South, Domestic, Micro/Small

With colleges and training providers, some employers would like to see a greater degree of communication and feedback on apprentices' progress from colleges and training providers. Others feel that:

- teaching could be more aligned to work performed onsite, and
- increasing tutors' salary and decreasing workloads could help boost numbers of electrical tutors which, in turn, could help produce more, higher quality apprentices.

A few also suggested greater collaboration with other bodies, including sector bodies to assist in the recruitment of apprentices, or with national government to instruct local authorities to prefer to contract work to businesses that are making an effort to employ apprentices.

Finally, three would like to see more guidance and sharing of best practice around good recruitment practice.

4. Scope of apprentices' work

This chapter outlines the types of skilled and unskilled work carried out by apprentices and what their workload typically comprises from Years 1 to 4 of the apprenticeship.

4.1 Type of work undertaken

4.1.1 Apprentices' contribution to skilled work

When asked to define the skilled work undertaken by their apprentices (under supervision), businesses gave the following feedback.

- **Electrical installations:** including installation of lighting, cables, new or additional electrical feeds and connections, circuit systems for fire, security and security alarms, as well as control systems and mechanical installations.
- **Testing:** including PAT testing, routine testing after installation and periodic testing of installations (EICR).
- **Wiring:** including general wiring tasks, wiring lighting onsite, or wiring consumer units and distribution boards.
- **Specialised electrical tasks:** some referred to specialised electrical tasks relevant to their company, including connecting distribution boards and transformers, installing fire alarms, tray works, maintenance and service of fire and security systems, and LED lighting.
- **First and second fix:** referenced as skilled work, including cable installing as first fix and light switches, plug sockets and ceiling lights as second fix.
- **Maintenance:** including general maintenance of electrical wiring and lighting, as well as commercial electrical systems.
- **Containment:** including cable trays and trunking.

4.1.2 Apprentices' contribution to unskilled work

When asked to define the unskilled work undertaken by their apprentices (under supervision), businesses gave the following feedback.

- **Site preparation, preparing tools, and preparing materials:** refers to gathering required materials equipment for the job (including understanding what tools to use) and making sure the site is ready to undertake work.
- **Shadowing:** assistance to help a qualified electrician on general electrical tasks, to gain experience in practical skills, and/or to shadow them in their work to observe and learn.
- **Cabling:** relating to arranging and preparing cables, cable pulling, and running cables ready for first fix.
- **Tidying up:** including clearing the site and tidying up to make the site is tidy after completing a job on a given day.

4.1.3 Apprentice tasks from Years 1 to 4

When asked what tasks apprentices undertake in Years 1 to 4 of their apprenticeship, employers were generally in agreement irrespective of size/sector, and discussed how:

- in Year 1 the most common tasks are shadowing, preparation of tools and materials and site preparation,
- in Year 2 apprentices tend to be involved in wiring and cabling, second fixings, and other specific tasks under supervision,
- when apprentices become more skilled in Years 3 and 4, they perform actual installations and testing under supervision, and
- by Year 4 apprentices are expected to be much more proficient and should be capable of doing most tasks of a fully qualified electrician.

Two in three interviewed businesses mentioned the natural progression and transition between the stages, with most pointing out that, from year 3 onwards, apprentices will undertake more advanced and skilled work as they naturally progress and learn more (e.g. more complex installations and testing). During this learning period, apprentices are expected to take on more responsibility, show initiative, and be much more competent (albeit still being supervised), having obtained a wider array of skills.

> 'They will be working under supervision, but making decisions on what the job requires, such as materials, or in what order the work will be completed, to discuss problems and work on solutions. They will be preparing to undertake work on their own.' South, Commercial, Micro/Small

However, a few employers said they expect apprentices to hit a milestone of skilled work earlier (e.g. in year 2), or some cases where employers hire older apprentices in the expectation that they more productive from the outset, meaning they will have some exposure to skilled tasks in year 1.

4.2 Apprentice skill development

4.2.1 Exposure to skills

When asked about the extent to which apprentices can gain exposure to, and practical experience of, all the skills required to work as a qualified electrician, most (78%) interviewed businesses said they ensure apprentices work on a diverse range of jobs which means they are exposed to all the skills they will need.

- For medium/large companies, their pipeline of work allows them to plan ahead to allow the apprentice to gain exposure to a wide variety of skills.

> 'Due to the type of contracts we are involved in, which cover a cross section of industry, we are able to offer the apprentices a variety of opportunities to experience working on different projects.' South, Commercial, Medium/Large

- For micro/small companies, their size often means that all members of staff need to be involved in all aspects of the work.

> 'We work across a wide range of sectors, covering fire, security and CCTV. The apprentice will be involved in all areas of our business which gives exposure to all the skills they will need once qualified.' North, Commercial, Micro/Small

Five did mention some problems in this regard including the 'poor work ethic' of apprentices or perceptions that the practical skills taught in college did not meet the business's expectations, which meant they were unable to assign apprentices to certain tasks.

One said they can only expose an apprentice to a narrow range of skills due to the specialist work they undertake.

4.2.2 Anticipating future workstreams to shape development

When asked about their future pipeline or plan of work, over half of interviewed employers noted a relatively long-term pipeline of work (from six to 24 months) which allows them to plan in advance what their apprentices will be doing and, where possible, aligning apprentices' tasks with what they are being taught at college. This longer pipeline commonly relates to the stability afforded from work for larger clients with long contracts.

> 'We can plan months and years in advance. We work on some big contracts which means we can plan ahead what our apprentices will be doing.' South, Commercial/Domestic, Medium/Large

Many said they have regular maintenance contracts which provide a guaranteed pipeline of work longer term which helps with planning what the apprentice will be doing.

Several said they have a varied pipeline of work, which might vary from two weeks to two years depending on the size and type of the contracts they are winning, and noted that this variability can make planning ahead more challenging.

> 'If we win big contracts to work on new builds, this can be over a year, if not, it could be weeks or months.' Central, Commercial/Domestic, Micro/Small

Nine (of which six are micro/small) have a pipeline of work of less than six months, but this is not viewed to restrict their ability to plan tasks in advance.

> 'Our pipeline can vary from two weeks to two months – it just depends on the size of contracts we are winning. If we have won some commercial work, the pipeline tends to be longer.' North, Commercial/Domestic, Micro/Small

4.2.3 Limitations of onsite apprentice numbers

Most interviewed firms (82%) have not encountered a situation where apprentice numbers are limited onsite. Several (mostly medium/large businesses) said they are not required to inform the client the make-up of the workforce onsite, and two related situations where they had to explain the benefit of having an apprentice as part of the team.

> ‘We have experienced clients who say they would prefer not to have an apprentice on site. They usually change their mind when we explain that the apprentice needs to gain experience and that it would cost them a substantial amount of money to replace them with a qualified electrician.’
> Central, Commercial/Domestic, Micro/Small

A few have experienced situations where apprentice numbers for younger workers were restricted onsite due to health and safety regulations regarding people under 18.

Four have faced restrictions due to their client imposing restrictions on numbers e.g. NHS/hospital, local authority (housing), domestic, a royal building, and a government project.

5. Recruitment and training pathways

This chapter focuses on recruitment methods, the extent of the collaboration between businesses and colleges/training providers, and how employers identify the best candidate for the role as an apprentice.

5.1 Current methods of recruitment

Interviewed employers related various ways in which they recruit apprentices.

Colleges: Three in five use local colleges as a recruitment route for apprentices. Employers explained they go to colleges to talk to students, and how they liaise with colleges to participate in job fairs, open days, career days, offering work experience, and discussing apprenticeships opportunities with students.

> 'We attend career days, have good relationships with colleges and offer youngsters work experience, which gives us the opportunity to see how people are in the workplace and gives them a chance to see if they like the type of work.' North, Commercial, Medium/Large

Word of mouth: Several use word of mouth recommendations from previous contractors, work colleagues, or local colleges.

Personal networks: Several have used personal networks such as friends and family to recruit apprentices, explaining that such individuals tend to have a better work ethic and progress quicker.

Adverts: One in five have used adverts via various channels such as their own website, social media, or job boards to recruit their apprentices and reported receiving large numbers of applicants.

Training providers: A few have sourced a list of candidates through training providers but there were mixed views on how successful the process had been. Two reported successful outcomes, while two others were disappointed as they felt the list had not identified or produced suitable candidates.

> 'We used to get a list but it didn't work out as we didn't get good quality apprentices and they didn't have the right attitude to work. We now recruit via friends and family – it has worked better for us.' South, Commercial, Micro/Small

5.1.1 Collaboration with training providers

Commenting further on the nature and extent of collaboration with colleges and training providers, many discussed the good relationship they have. Employers cited the benefits of providing a good source for recruitment and referrals – particularly, for some, through career fairs opportunities; and satisfaction with the vetting their college takes to identify suitable candidates – as well as close communication and feedback on current apprentices.

> 'We have a good relationship with the college. We have regular catch ups to discuss our apprentice – what is going well or not, and we'll work together to try and iron out any problems.' North, Commercial/Domestic, Micro/Small

Two had experienced a perceived lack of communication, feedback, and site visits from colleges, while another two suggested that tutor shortages are resulting in lower quality teaching and producing less capable apprentices.

5.1.2 Determining the 'right' candidate to recruit

Asked how they determine suitable candidates to recruit as apprentices, and lessons learned in this regard, around half of interviewed employers have used trial or probationary periods to determine the correct candidates, with three noting they have used temporary contracts during this period. Individual references were also made to pre-apprenticeship programmes, or an internal training programmes prior to an apprenticeship. This allows the business to gauge the performance and potential of candidates and to assess whether they have the desirable attributes for the role before committing to taking them on a permanent basis.

Several (most micro/small businesses) noted that word-of-mouth recommendations from friends, family, schools, and local businesses notably increase the likelihood that the candidate would be a good fit.

> 'It's always good to trial them first for a short period of time to see how they get on, to observe their attitude and time management. If we have a recommendation from friends or family, it's usually good candidates.'
> Central, Commercial/Domestic, Micro/Small

Several rely on colleges and training providers to provide suitable candidates, with one elaborating that the vetting process training providers take to ensure they have suitable grades is important in this regard.

Furthermore, several said they are generally confident in relying on their ability to identify such candidates during the interview process. Attributes typically sought include having the correct 'attitude' (e.g. punctuality and a willingness to learn and work hard) while, for a couple, personality and interests are also factors. One business said it only recruits older apprentices as they feel they display better behavioural traits at work.

In addition, two feel that CVs can be unhelpful for identifying the correct candidate as younger individuals may often not have had the opportunity for much/any prior employment or work experience. Two others reflected that there is a degree of luck involved in recruitment, despite efforts to filter the best candidates.

Boosting apprenticeship retention

In terms of methods to improve 'stickability' of candidates, most interviewed employers referred back to ensuring they hired the 'right' person in the first place, by having robust approaches in place around probation, trial periods or temporary contracts.

A few suggested that candidates could have access to more work experience prior to starting their apprenticeship, so that such individuals can make a judgement as to whether they enjoy the work and see, earlier on, if it is a suitable career path. However, two stated this is not something they currently offer – one explained they cannot obtain insurance cover.

Furthermore, two employers each stated that:

- they would be interested in guidance and examples of best practice from other employers in ensuring candidate stickability,
- they would welcome more interaction and collaboration with colleges (e.g. through feedback, reviews, site visits), and
- their current system and approach work well for them as it is.

5.2 Pathways to full-time employment

Employers were asked to reflect on any differences observed in the profitability and productivity of apprentices learning on the job compared to individuals coming from full time training pathways. Around half were unable to comment, having no experience of taking individuals from full time training pathways.

Many of those who have taken individuals via both routes said they generally see no difference between them, although four mentioned those coming from full time training still need to gain experience on the job to learn practical skills. A few went further to suggest those from full time training pathways are less prepared as they lack practical experience and/or have forgotten the skills they were taught.

> 'Quite a lot have done Level 2 and transfer to an apprenticeship. We've also had those who have done their Level 3 and need their portfolio of work. I haven't seen a big difference between either route in terms of productivity – they generally need at least two years before they can sit an end point assessment.' South, Commercial/Domestic, Medium/Large

In contrast, one company said it had a positive experience recruiting those who had done a T Level, saying 'they are a year and a half ahead of those learning on the job'.

> 'We get very few applicants who have done T Levels but it seems as though those on T Level courses get the pick of the best jobs in the sector.' South, Domestic, Medium/Large

Preparing full time learners for life in the workplace

When asked what might help business to ensure candidates undertaking full time learning courses have the practical skills required, display the right behavioural traits in the workplace, and have sufficient knowledge about health and safety prior to starting work, several again suggested these are developed through probationary or trial periods, or through the use of temporary contracts lasting three months. Further, two recommended an aptitude test at the end of the trial period to understand how much has been learned.

> 'A three-month trial contract would solve the problem. If the individual does not have the practical skills or can't learn them in the three months then the employer is not obliged to keep them on.' South, Commercial/Domestic, Medium/Large

Two employers would like to see apprenticeship candidates have more opportunities for work experience (e.g. summer placements), suggesting this would give candidates an idea as to whether the sector and role is for them, and to prepare them with basic skills. One further stated this aspect could be more similar to T Level courses which provide placements.

Other individual suggestions included the following.

- Colleges could focus on developing candidates' practical skills rather than focusing primarily on theoretical aspects.
- Hiring a slightly older candidate who may have a better attitude or more developed skills.
- Developing and sharing examples of best practice in recruiting the right candidates.
- Preparing school children better to introduce them to the world of work.

5.3 Apprentice training

When asked about the order in which apprentices learn skills, most interviewed employers did not see opportunity to move this order around to allow employers to increase apprentice charge out rates (if apprentices developed skills earlier) or were unable to provide detailed comment. A few stated they are generally happy with the current approach and did not have suggestion for change.

Ten did, however, suggest potential areas where they think improvements could be made.

Seven (five of which are medium/large) highlighted a lack of practical skills of apprentices and linked this to their concerns about their limited access to training areas, and the need for greater collaboration between colleges with employers for improved outcomes (one suggested more onsite visits from tutors). Two suggested teaching learners basic practical skills prior to, or at the start of, their training.

Five discussed aspects of health and safety and suggested more could be done prior to the apprenticeship starting which could then allow more time for teaching practical skills the apprentices need onsite when they start work.

> 'If college could teach them how to do the basic things on site earlier, they would be more work ready e.g. sweeping up, tool prep (knowing the right tools that will be needed for each job), laying cables – that would make them much more efficient workers.' Central, Commercial, Medium/Large

Other individual suggestions included greater focus in college on:

- behavioural traits, as they find younger people often lack good time keeping, enthusiasm on the job, and communication skills,
- commercial, if teaching predominantly focuses on domestic work, and
- completing a test inspection report.

A small number raised concerns about staffing within colleges, reflecting that turnover of lecturers can cause problems if teaching is duplicated or inconsistent, and that assessor shortages can affect timely delivery of end point assessments.

5.3.1 Integrating testing

Most interviewed employers confirmed they undertake testing in their work, including routine or periodic testing. There is consensus that businesses introduce apprentices to testing at the end of the second year or start of the third, aligning to when these aspects are taught at college – although for two they introduce apprentices to the basics earlier, and for a few this depends on the individual.

A few commented that apprentices can often struggle with testing, putting this down to either difficulty for qualified electricians to demonstrate testing to apprentices in detail, given the job is time-pressured, or perceived lack of focus within college teaching.

To help with testing outcomes, most employers suggested that apprentices could undertake more practical work at college to strengthen their testing skills and competence through more hands-on (and less theory-based) work which covers a broader degree of site variation. Two also suggested tutors visit apprentices onsite more, to better understand what apprentices are struggling with.

5.3.2 Integrating containment

Most interviewed employers confirmed they undertake containment activity. There appears to be variation as to when containment work starts for apprentices – ranging from early on to much later – with others varying this depending on the individual and type of work undertaken.

Some mentioned that containment is more straightforward for apprentices to get to grips with compared to testing, with the caveat that college education may not be sufficient and requires support and advice from experienced staff at work.

> ‘The college environment is nice and neat where they get to practice in a perfect world, but this is not realistic: trunking doesn’t lie flat, bends are rarely 90 degrees. Apprentices need to see how they can overcome these problems.’ – South, Commercial/Domestic, Medium/Large

Suggestions to help with containment outcomes again predominantly focus on providing more exposure for apprentices to hands-on practical learning in college. One also suggesting loaning of apprentices between companies (e.g. where businesses do not undertake this) to provide exposure which could be facilitated by colleges, and another mentioned more site visits by tutors to work with apprentices.

6. Conclusions and recommendations

The research presents a detailed picture of current practices, challenges, and opportunities in the recruitment, training, and deployment of apprentices within the electrotechnical sector.

This chapter summarises the emerging findings and highlights both the strengths and the challenges currently shaping apprenticeship practice within the electrotechnical sector. Employers demonstrate a strong commitment to developing apprentices, recognising their value in sustaining the future workforce, yet can face barriers relating to cost pressures, skills alignment between college and workplace, and variability in commercial approaches such as charge out rate determination.

The following recommendations are grounded in the research evidence and are designed to be actionable, sector-led interventions that respond directly to the needs expressed by employers. They aim to enhance the quality, consistency, and sustainability of apprenticeship provision, while supporting the electrotechnical industry more broadly in the electrification of infrastructure, the delivery of new housing, and retrofitting of existing building stock – essential for the UK to meet its climate commitments in achieving Net Zero.

Current practices and charge out rate determination

Most businesses operate on a fixed price basis, with medium/large firms more likely to adopt this model than smaller enterprises which may have a more variable approach.

Most apply a formal process to determine apprentice charge out rates, typically factoring in direct employment costs, supervision, and overheads. Others link rates to apprentice wages or set them as a proportion of a qualified electrician's rate, adjusted for ability and experience. A significant minority operate without a formal process, instead pricing work based on labour and materials or applying an hourly rate.

Key influences on rate-setting include maintaining competitiveness, recognising apprentice capability, and achieving a return on investment. Beyond profitability, employers also see their current approaches as enabling longer-term workforce development.

There is some appetite for sector led guidance, ideally simple, adaptable, and benchmarked, delivered by trusted industry bodies, as well as examples of best practice to draw on. While appetite is not overwhelming, it should be borne in mind that this research sought views only from businesses who have already hired apprentices and who thus may require guidance less if already confident in their approach.

Rising costs are increasingly seen as a potential barrier to apprentice recruitment, with financial incentives such as tax credits proposed to mitigate risk. Recruitment could also be strengthened, employers believe, through coordinated sector body initiatives, government support, and the sharing of best practice.

Recommendation 1: Disseminate the findings from this research as widely as possible among the sector using a variety of promotional avenues to maximise reach – to share case studies of approaches to apprentice charge out rates, and the relative merits of differing approaches deployed by businesses.

Recommendation 2: Undertake further research with businesses that have not employed apprentices in the last two years, to understand the reasons for this, what barriers they perceive to exist, and what incentives, guidance or support might encourage them to recruit an apprentice in future.

Recommendation 3: Develop and publish standardised apprentice charge out rate guidance by creating a simple model for determining apprentice charge out rate, with hourly rate benchmarks that can be easily adapted to reflect wages, overheads, profit margins, and apprentice proficiency. This guidance should be made available online for easy access, with endorsement from trusted sector bodies.

Recommendation 4: Advocate for financial incentives and risk mitigation by lobbying government to introduce tax credits to offset the cost of employing apprentices – especially in the early years of an apprentice and particularly for micro and small businesses – and working with policymakers to ensure funding mechanisms are accessible, predictable, and aligned with sector needs.

Scope of apprentices' work

Apprentices undertake a range of skilled and unskilled tasks, with responsibilities expanding progressively from shadowing and preparation in Year 1 to near full proficiency by Year 4.

Most employers are able to ensure exposure to a broad range of work, though some face constraints due to apprentice readiness, perceived limitations in college provision, or the specialist nature of their business.

Longer-term work pipelines allow many employers to align onsite tasks with college learning, though variability in project timelines can occasionally make forward planning more challenging.

Restrictions on apprentice numbers are rare, but where they occur, they are typically linked to age-related health and safety rules or client-imposed site limits.

Recommendation 5: Seek to ensure that all apprentices can gain exposure to all the skills they need as a qualified electrician by piloting the facilitation of an apprentice loan scheme between businesses. This could be undertaken through an opt-in process of ECA-member businesses, with apprentices loaned to another local businesses for a set period.

Recommendation 6: Lobby government for any client-imposed cap for onsite apprentice numbers to be removed (or increased) which, while not common, appears to occur mostly on public sector infrastructure projects – this would enable apprentices to gain the experience they need and remove any perceived barriers to further apprenticeship recruitment.

Recruitment and training pathways

Colleges are the primary recruitment channel, while word-of-mouth, online advertising, and, to a lesser extent, training provider candidate lists are also used. Strong college partnerships are valued for candidate vetting and ongoing support, though some employers report communication gaps or tutor shortages affecting apprentice quality.

Selection processes often use trial periods, temporary contracts, and personal recommendations when recruiting apprentices, with early work experience and initial test of 'fit' seen as critical to future retention.

Employers see limited opportunity to amend the order of skills development to increase apprentice charge out rates, but some suggested greater focus on practical skills within college (particularly on testing; and including more onsite tutor visits) or covering health and safety earlier (even pre-apprenticeship).

Recommendation 7: Engage with colleges to explore the potential to increase the focus on apprentices developing practical, real-world skills – to shift the balance slightly away from theory-based learning to devote more time to onsite-relevant training and support, particularly on testing, to help bridge the gap between the classroom and workplace. Further, exploratory discussions with colleges should also identify whether health and safety training could be undertaken earlier such that electrical skills training is not unduly delayed.

Recommendation 8: Advocate for improved tutor conditions in relation to pay and workloads to incentivise teaching as a career, thereby provide stability in delivery, and boosting teaching quality and effectiveness.

Recommendation 9: Continued promotion of the electrotechnical sector as a career – for instance through encouraging employers to engage with schools (e.g. via open days, or offering work experience), or through ongoing awareness drives such as via the Electrical Careers website – will help young people recognise the sector as a potential career and drive the recruitment pipeline.

Recommendation 10: With employer input, develop a best practice toolkit targeted at electrotechnical businesses potentially interested in taking on an apprentice, including guidance on trial periods, candidate assessment, and behavioural skills development, to aid in apprentice recruitment and retention.

Appendix A: Case studies

The four case studies below have been selected (and approved by the companies concerned) as demonstrations of how electrotechnical businesses approach apprentice charge out rates and the benefits this brings for their company.

A fixed-price approach to remain competitive while investing in tomorrow's workforce

Stuart Bradley is the Director of Beecal Electrical Limited, a medium sized electrical business providing services to the commercial, industrial and private sectors, undertaking electrical installations in shopping centres, hospitals, hotels and police stations, plus other commercial and domestic work.

Stuart explains how Beecal Electrical typically uses a fixed-price approach when pricing work to ensure it is competitive and can win work, although will sometimes apply a day rate for repeat clients. Calculating the hourly rate for apprentices involves ensuring that associated costs are covered, including wages, supervision, equipment, and other administrative overheads.

> "We don't normally provide a breakdown of roles of people in the team. We'll calculate what hourly rate is required and add that costing as part of our fixed price quote. We see apprentices as an investment in the future – we want to cover costs early on in the apprenticeship and would hope to make money from them as they progress into years 3 and 4."

Explaining the rationale behind this approach, Stuart says that staying competitive on price and covering associated apprenticeship costs are the two most important factors which influence how Stuart determines charge out rates for apprentices. Stuart reflects how Beecal Electrical operates in a competitive market and thus prioritises the need to win work and views an apprentice as part of future workforce development alongside this. In this way, Stuart hopes that apprentices will remain in the company once qualified, as they understand their ways of working and will have established relationships with clients, thus driving future profitability.

The approach to costing apprentices is not client driven, so does not vary by client or type of work; further, the same charge out rate is applied for both skilled or unskilled work and nor does the charge out rate vary based on the experience or year of the apprentice. In setting up this framework, Stuart says this was partly a 'trial and error' approach.

> "We made an educated guess of what sort of rate we would need to charge out for apprentices, then we looked more closely at their overheads (wages, supervision, tools, admin) and added that into our costings for each job."

Balancing the need to remain competitive, and the need to invest in the future workforce, Stuart reflects how their approach to costing apprentices, although uncertain at first, has ultimately proven successful and yielded substantial benefit to the business.

> "We have a good pipeline of work so we must be competitive. We are also building a workforce of the future who know the way we work and get on well with our clients."

Covering costs and staying competitive: building a pricing model that works from day one

Scott and Jennie are the Directors of Comtech Services UK Ltd – a small business providing electrical services chiefly to the commercial and industrial sectors, with some domestic work. It offers updates and improvements to electrical systems for major and minor renovations, and undertakes maintenance and repairs, as well as services to car parks, retail parks and street lighting.

Comtech costs work on a fixed price basis, with each quote built from an underlying hourly rate and an allowance for travel time to site. According to Scott, this system has been used for many years, and has proven popular with clients, who value the predictability and fairness of pricing.

When it comes to including apprentices within costing, Scott explains the careful, structured approach, whereby the apprentice's hourly rate is calculated to fully account for all associated overheads.

> "We account for all overheads such as wages (also allowing for time he is at the training provider), supervision (proportionately lower when an apprentice is good), tools, insurance, and other training in that costing."

In the case of Comtech's current apprentice, who is already performing at a high level, supervision needs are relatively low, making cost recovery easier. However, Scott says the methodology used remains the same, regardless of the apprentice's skill level, as the rate is designed to ensure that all costs are covered, particularly in the early stages of training.

As the apprentice's skills develop, it allows the company to increase their wages and also charge out rates for tasks where the apprentice is highly proficient – in this regard careful work planning for the apprentice is very important.

> "If you have a lot of new build housing to do, we can get them box-fitting, they become very proficient at it very quickly or mounting containment – they can be very good at that. Containment is a perfect job for an apprentice – installing a lot of tray or trunking is something they can do onsite to give us a real push."

Comtech's rationale is straightforward in that, without recovering the real cost of employing an apprentice, the business would undermine its ability to train effectively. At the same time, the business remains conscious of market pressures – quoting too high a rate risks losing work to competitors. This balance between full cost recovery and competitive pricing is, Scott reflects, a key consideration for every job. Experience has shown that not all apprentices have the same ability, and so Comtech's model is designed to account for this.

> "The main factor for us is to make sure we cover the costs of the apprentice. The skill level of the apprentice can have a big impact on this. When we quote for work, we still need to be competitive on price if we are going to win it, so that must be a consideration and will impact – if you charge too much, you won't win the work."

The framework used today was developed somewhat through trial and error, analysing total costs and working backwards to determine the apprentice charge out rate required to cover their costs. The lessons Comtech would share with others is that getting the numbers right from the start is essential; and that while apprenticeships carry an upfront cost, a clear,

realistic pricing structure enables businesses to invest in future talent without eroding profitability.

By embedding apprentice costs within an established pricing model and holding firm to competitive, market-sensitive rates, Comtech demonstrates how smaller electrical businesses can support skills development in a sustainable way, strengthening both its bottom line and the wider industry.

As a large Mechanical and Electrical employer, Darke & Taylor specialises in multiple sectors including commercial, high-end residential, life sciences and historic/listed buildings, offering design, installation and maintenance of mechanical, electrical, fire & security, Data/IT, cabling and renewables systems.

Matthew Hyde, Apprentice and Training Manager, explains how apprenticeships play a central role in the company's growth and long-term success. Apprentices are integrated into project teams from the outset, gaining hands-on experience while being supported by experienced colleagues. This approach helps them build both technical ability and a deep understanding of the company's culture and quality standards.

For Darke & Taylor, apprenticeships are a strategic investment. They take a standardised approach to developing and supporting apprentices, which ensures clients receive the highest level of service while apprentices gain exposure to a wide variety of skills. The early years require significant support and training, but as apprentices develop their skills, they become increasingly productive members of the workforce. Over time, this investment delivers a strong return by providing a pipeline of highly skilled, loyal employees who have been trained to deliver work above the regulatory standards and achieve the company's standards across all projects giving customers consistency across the business.

Matthew highlights that apprentices not only strengthen the company's own future capacity but also contribute to tackling wider skills shortages across the industry. With a consistent and structured approach to apprenticeship training, Darke & Taylor is helping to build a sustainable future for both the business and the sector.

> "We see apprentices as an investment in the future business. We like to train apprentices, so they work to our standards, learn our culture and deliver good quality work."

By embedding apprenticeships at the heart of the workforce strategy, Darke & Taylor has created a model that ensures business resilience while helping the next generation of electricians to succeed.

A less formalised approach drawing on experience when pricing up work

Richard Hoskings is the managing Director of Electrical Services (Cornwall) Limited, a medium sized business offering a comprehensive range of electrical and plumbing services for domestic, commercial and industrial settings across Cornwall, and which has been trading for over 80 years.

Richard explains that most of their work is in the domestic and commercial sector and is generally carried out on a fixed price basis as that is what customers prefer. Determining apprentice charge out rates when pricing work is, Richard explains, about striking a balance between what pay rate is dictated by the government and a fair charge out rate to ensure costs will be covered, while also ensuring the business remains competitive on price. No formalised process is used, and there exists no standardised structure for costing, for example, based on the apprentice's experience, or to charge different rates for skilled or unskilled work.

> "We'll include a rate for apprentices in quotes for work. This rate is calculated using what the apprentice is paid and their individual experience, a first-year apprentice would be far less than say a third year.

Electrical Services (Cornwall)'s approach to costing apprentices does not vary either based on client or type of work. Pay rates and experience are the two main factors that influence how Richard determines charge out rates for apprentices.

Richard explains that, as apprentices gain experience, they become more efficient, receive greater responsibility and perform – under supervision – a greater proportion of the work of a qualified electrician, meaning jobs can be completed quicker which results in a greater margin for the business. Electrical Services (Cornwall) works on a wide variety of jobs, ensuring the apprentice does gain exposure to, and experience of, all the practical skills they will need. Where possible, Richard will try and align their work to what they are being taught at college.

> "We know the market and how to continue to be competitive. We do find apprentices are not only financially viable to our business but an invaluable source of upcoming skills, although real returns tend to be in years 3 and 4. We're happy to cover costs when they first join us as these apprentices are the only way our company will have quality, well trained and valued trades persons of the future"

While Richard's approach is largely based on his experience, he does look at the broader costs associated with employing an apprentice such as wages, supervision and equipment. Reflecting on the approach, Richard says employing apprentices is critical for companies it has definitely worked for Electrical Services (Cornwall) as business continuity and profitability are maintained.

> "Training apprentices definitely is the key to a sustainable future, we have always trained the best candidates male and female knowing we will get the very best trades person at the end of their training – we see the initial stages as an investment."