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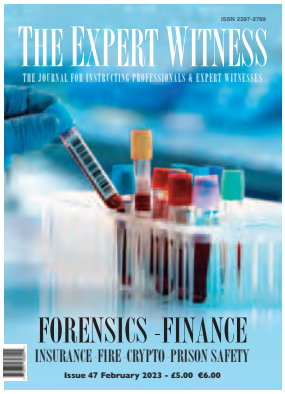

Welcome to the Expert Witness Journal

Hello and welcome to the 47th edition of the Expert Witness Journal.

This issue focuses mostly on the non-medical area of the expert witness world.

We feature the Financial and Insurance market with, articles by Sue Taylor. The very topical football financial fair play (FFP) and cryptocurrency. Also new reforms to recover millions more from the proceeds of crime. Fiona Hotston Moore explores expert witness predictions for 2023, highlighting what trends will we see in forensic accounting this year.

Forensic sciences are covered with sexual assault cases: using DNA and digital evidence to strengthen your defence strategy, how fingerprint experts can make their mark on your defence case and ecology forensics all by Forensic Access.

Improving climate change risk assessment by Ösund-Ireland MP is a must read article. Ben Adams, a Senior Associate and electrical engineer at Hawkins contributes 'do you need to high-speed test generator rotors'.

More specialist areas covered include, Police Custody 'was the deceased fit to detain in the first place?' By Joanne Caffrey, expert witness for police custody procedures, use of force and ligature deaths. And 'Not Flying the Union Flag, the Irish Language and the Northern Ireland Protocol: Are we Seeing a Potential Return to Loyalist Terrorism?' by David Lowe.

In a Question and Answer piece, we interview Dr Alexandra Pentaraki, Clinical Psychologist & Neuropsychologist for children and adults.

We are always looking for contributors, if you wish to contribute please mail us.

Many thanks for your continued support.

Chris Connelly

Editor
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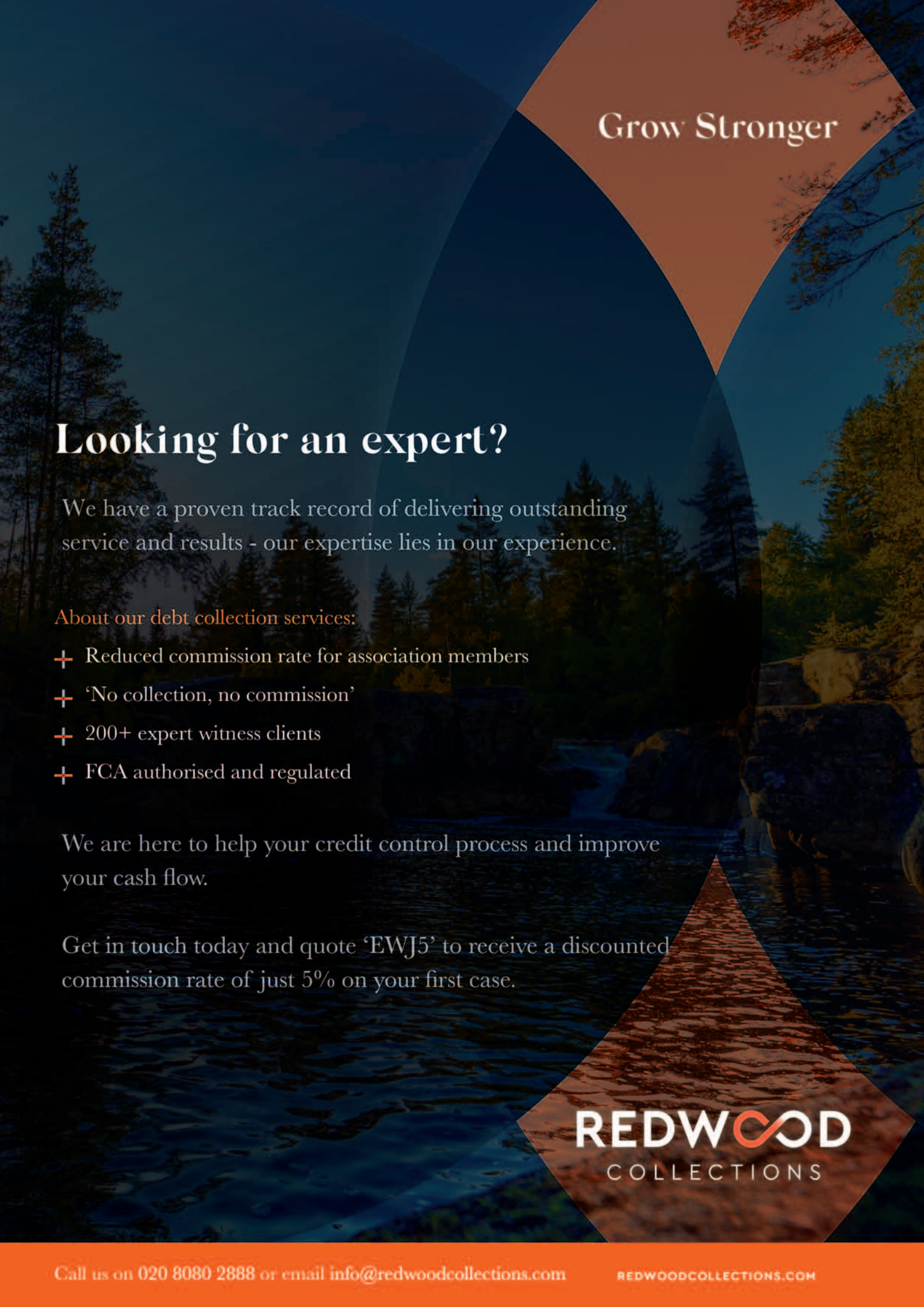
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Some of the highlights of this issue

Events

Bond Solon

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Bond Solon is the UK's leading provider of expert witness training and CPD, offering courses covering all the core areas of expert witness work. Training is delivered through a mixture of live courses, webinars and e-learning. We also hold an Annual Conference which is the largest gathering of expert witnesses in the UK.

Bond Solon have a wide range of courses, university certificates and conferences to suit your expert witness training and CPD requirements.

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We have public course dates scheduled through to the end of 2022, however please see below the dates of events coming up in the next few months.

Virtual Classrooms - Upcoming Training Dates
Excellence in Report Writing - England and Wales (1 Day)*
Starting 06 Mar 2023 09:30 in Virtual Classroom
Starting 17 Apr 2023 09:30 in Virtual Classroom

Courtroom Skills - England and Wales
Starting 07 Mar 2023 09:30 in Virtual Classroom
Starting 18 Apr 2023 09:30 in Virtual Classroom

Cross-Examination Day - England and Wales
Starting 10 May 2023 09:30 in Virtual Classroom

Civil Law and Procedure - England and Wales
Starting 09 -10 Mar 2023 09:30 in Virtual Classroom

Family Law and Procedure - England and Wales
Starting 20-21 Apr 2023 09:30 in Virtual Classroom

Discussions between Experts
Starting 05 Dec 2022 13:30 in Virtual Classroom
Meetings and discussions between experts are increasingly being requested by the courts in an attempt to save court time, reduce legal costs and bring about a settlement between the parties. These discussions between experts may feel more informal than the courtroom, but can be just as important to the outcome of the case.

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The course works systematically through the published RICS Professional Guidance and related learning materials through webinars led by experienced surveyors, lawyers and expert witnesses. This course also includes two intense practical workshops where you will work with leading industry experts and a barrister to finesse your skills.

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The Insurance Market Cycle and how it Impacts Experts

by Sue Taylor ACII, Adv. Dip. CILA

The insurance market has been around for hundreds of years, I have been in the market for just a fraction of its existence - four decades. However, that has been long enough to see that the market is cyclical in nature, being either hard, soft or somewhere in between.

During my career I have seen the following dips in the market cycles or what are described as hard markets: 1984, 1992, 2001, 2019. The end of 2018 saw the transition from the longest soft market in history to a hardening market, the year had started well, but the second half saw it becoming the fourth costliest year on record since 1980 for insured losses. The change in market conditions was largely led by reinsurers after a series of natural catastrophes the year before including:

- Hurricane Harvey August 2017. – total damage cost approx. $125bn loss to insurance industry over $20bn
- Hurricane Irma August 2017 – total damage cost approx. $70bn loss to insurance approx.$30bn
- Wildfires in Europe, the Middle East and North Africa 2017

The market had to turn because the combined ratios (the sum of incurred losses and expenses and divided by the earned premium) of reinsurers and insurers were simply not sustainable. A combined ratio of below 100% means in profit, above 100% means in a loss situation. Some ratios entering hard markets have exceeded 140%.

The insurance market was therefore already in a hardening cycle dip when along came wave after wave of major catastrophe events including:

- Australian Wildfires 2019
- Earthquakes in Turkey and Croatia 2020
- Storms and floods across UK and Europe 2020
- German floods 2021 – approx. $40bn
- European wildfires 2021
- Hurricane Ida 2021 loss to the insurance industry approx. $37bn

Then in September 2022, the reinsurance market was meeting to discuss the 2022 renewal season and after a relatively quiet year there was optimism in the air, then along came Hurricane Ian. Estimated as the second largest insured loss to hurricane Katrina in 2005 with a total estimated at $260m and an insured loss at approximately $50bn to $65bn and still counting! It will be some considerable time before final figures are known.

Insurance is now a global market and the effects of catastrophe events are felt around the globe. However, not all losses are driven by natural catastrophe events. In addition to Covid 19 which was a global event but not a natural catastrophe

Covid 19 was not a natural catastrophe, there are also local losses that impact specific markets.

The loss of the Twin Towers in 2001 impacted the global property market and the personal accident and life markets. In the UK, shortly prior to Twin Towers, there had been a whole series of major property losses in the food and drink industry, emanating from composite panels being used in the building construction. This “localised issue” led to 400% premium increases for some risks in that sector. Prior to the hard market in 2019 there had been a sharp increase in cyber losses

with similar impacts on rates with rises of 300% being seen on certain risks. A severe winter for example can have a major, short term, impact on the motor market.

The return on investment on property portfolios of insurers can also have an impact on the combined ratios of insurers along with a variety of other financial factors e.g. Brexit.

As a result of these unforeseen events the profile of the market changes as it enters hard/hardening cycle and the following are visible:

- Rate increases
- Cover reduces or is eliminated
- Deductibles increase
- Terms are imposed
- More advanced insurance technical knowledge is required to solve issues
- Claims disputes increase resulting in:
  - Longer investigations
  - Repudiations
  - Issuance of avoidance letters
  - Legal challenges
- In times of financial instability there is often an increase in arson claims or those involving fraud

So, what are the implications of the cycles for expert witnesses? As can been seen from the above, a hard market can result in claims disputes and potentially contentious claims. These disputes can impact a large variety of stakeholders and lawyers, and the courts look to insurance experts to help them understand the coverage, the insurance terminology, the process, and the state of the market at the time. Some of these disputes will result in legal challenges quite quickly and others may take five or six years to reach the courts. The degree of involvement of experts will vary but the resultant decisions can have long reaching implications.

Insurance traditionally has not been an excessively litigious area of the law in the UK. What tends to happen is that there is silence for decades on a topic and then a flurry of activity with a series of legal challenges. A recent example of this is in relation to subrogation. However, with the FCA test case in relation to COVID 19 which was rushed through the High Court and then the Supreme Court, that has now changed, and there are now numerous cases in process. They are at various stages aiming to clarify elements of the decision or address areas that were not included in the test case. Expert evidence has been sought in many areas and will undoubtedly be required in the future.

There are also the unforeseen consequences of one decision leading to another, having a much wider reach, because the circumstances or the subject matter are different. It is widely anticipated, that because of the recent decisions, the high level of activity will continue for some considerable time – the domino effect.

Add in another domino in that the Marine Insurance Act of 1906 was replaced with the Insurance Act 2015, which is still in its infancy, align that with the hard market and once again the opinion of experts may be sought.

As mentioned earlier, this hard market has seen a series of waves and eventually, it will go over the crest of the highest wave and the market will start to plateau and then soften, assisted by new capacity entering the market that is not hampered by the losses of the past. Innovation in coverage comes to the fore and is already evident e.g. the growth of parametric insurance.

Insurers and reinsurers will then be led by their specific risk modelling with the result that the market resembles "lumpy custard", a term I started using after 2001. In other words, the majority is smooth, but you come across the odd lump either by line of business, insurer/reinsurer or by territory.

When the market softens, we see the reverse effects:

- Rate reductions
- Cover enhancements
- Deductibles reduce
- Terms are lifted
- Fewer issues requiring advanced insurance technical knowledge
- Claims disputes reduce resulting in fewer legal challenges requiring expert opinion

However, because of the time lag for cases to come to court there is little initial impact for the expert of a softening market. The insurance market cycle therefore impacts the workload of the insurance expert but not necessarily in a synchronised cycle.

SUE TAYLOR

Insurance Specialist and Claims Consultant and Expert Witness

Cardiff University Bond Solon Expert Witness Certificate, ACII, Chartered Insurance Practitioner, Adv. Dip. CILA

I am a dual qualified insurance professional with over 40 years experience of underwriting, broking and claims. Holding senior roles in major brokers until becoming a consultant in 2020.

An industry recognised cross class broker and claims consultant on major and complex national and international risks with a particular focus on property and business interruption. Experience includes captives, insurance and reinsurance, the design and placement of programmes, the writing of bespoke wordings and resolving technical issues.

Co-author and major contributor of numerous leading insurance text books including Riley on Business interruption 9th,10 and 11th editions published by Sweet and Maxwell and The Basic Business Interruption Book published by CILA as well as numerous articles. I am also a well known public speaker.

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Area of work: UK and International

New Reforms to Recover Millions More from the Proceeds of Crime

The Law Commission has published new reforms to overhaul the system for recovering the proceeds of criminal activities.

The reforms, which are the culmination of a Home Office-commissioned review, would enhance enforcement powers and could lead to the recovery of millions of pounds of additional funds from offenders each year.

A "confiscation order" is a court order made personally against a defendant, compelling them to pay back some or all of the benefits from a crime they have committed, so that the proceeds are returned to the public.

While in some cases the system has been able to recover proceeds and support victims, there is strong consensus that the current regime is inefficient, complex and ineffective – with weak enforcement mechanisms restricting its ability to consistently recover criminal funds.

The Law Commission's new reforms would bolster the current system, by giving courts more powers to enforce confiscation orders and seize offenders' assets, limiting unrealistic orders that can never be paid back, and speeding up confiscation proceedings – allowing victims to receive compensation more quickly.

The Commission estimates that reforming the current confiscation regime could lead to an extra £8 million in funds being retrieved from criminals in England and Wales every year, helping to return more money to the public.

Commenting on the new confiscation reforms, Professor Penney Lewis, the Law Commissioner for Criminal Law, said:

"The current system for recovering the proceeds of crime is ineffective and letting down victims and the public

"Our reforms would make critical improvements to the current confiscation regime, allowing for millions more in funds to be successfully recovered from those who make illicit gains.

"By boosting enforcement powers, imposing more realistic and fairer orders, and speeding up proceedings, we can ensure greater public confidence in the system, and send a strong message that crime doesn't pay."

Recommendations from the Law Commission
Reforms to make the confiscation regime faster, fairer and more effective.

- **Accelerate confiscation proceedings** by establishing strict timetables for hearings, which take effect immediately after the defendant has been sentenced for their crime.
- **Give courts the power to impose "contingent enforcement orders"** at the time that a confiscation order is made, meaning that if a defendant does not pay back the proceeds of a crime within a set time, assets – including property or funds in a bank account – could instead be taken to recover the proceeds of crime.
- **Strengthen "restraint orders"**, which can be imposed by a court to stop a defendant from protecting funds or assets that might later be involved in confiscation proceedings. Place the "risk of dissipation" test – the test currently used by courts to judge whether to use this order – on a statutory footing, and clarify what could trigger the use of these orders.

● **Strengthen law enforcement agencies' responses,** through better police training and a national asset management strategy.

● **Update the provisions that factor in a defendant's "criminal lifestyle",** when assessing their benefit from crime. Confiscation from defendants deemed to have a criminal lifestyle will also include gains from their wider criminal conduct. We recommend that a defendant would have to commit fewer offences to be deemed to have a criminal lifestyle.

● Give greater consideration to the defendant's ability to pay, so that enforcement can be more effective. Defendants will be obligated to provide clearer and more detailed evidence of their financial position if they claim to be unable to pay their order.

● **Create more flexible tools to ensure better enforcement.** Give judges the power to adjust the funds that must be paid back by a defendant, depending on their personal circumstances. This would avoid situations where there is no realistic prospect of recovering the full amount of the confiscation order.

● **Set out a clear statutory objective to govern the new confiscation regime –** namely, to deprive defendants of their benefit from criminal conduct. This would provide clarity on the purpose of the regime and move away from any prior emphasis on "punishment".

Next steps

It is now for the Government to respond to our recommendations from the review.

Keeping Onside with Football's Financial Fair Play (FFP)

The worlds of accounting and football finance invariably overlap, and even more so in the modern era where the financDEial implications at the highest level can run into the multi millions and even billions. In recent years it has very much been the mission of the Premier League, the English Football League (EFL), and Union of European Football Associations (UEFA), to manage the financial stability, and long-term sustainability, of clubs involved in domestic and European competition respectively.

This has historically been targeted in two main ways:
1. restricting the spend a club can make on player wages and transfer fees by comparison to a set ratio against its revenues

2. by setting a cap for losses that can be sustained by a club across a rolling three-year period which, if breached, could see a club suffer sanctions.

Originally termed 'Financial Fair Play' or 'FFP', there is a gradual establishment move towards calling it 'Financial Sustainability Regulations' as it is felt there is no 'fair play' in comparing the financial position of traditional footballing powerhouses like Bayern Munich and Real Madrid, to more recent additions to the higher footballing echelons, such as Bournemouth and Brentford. Unpicking and understanding the financial regulations in football can seem about as complicated as trying to understand the use of Video Assistant Referee (VAR) in the modern game.

Restricting club spend

The first regulatory rule on spend has been the subject of much press coverage in recent seasons, with club income generally earned through three main revenue streams:
1. matchday income
2. broadcast income
3. commercial deal income (e.g. stadium, shirt sponsorship).

There have been accusations that such revenues are vulnerable to being 'massaged' to allow extra spend to take place. In Manchester City's case certain 'sponsorship' income was alleged to in fact be direct investment from the owner (not allowed above certain de minimis levels under the current rules to cover losses).

This restriction on revenue sources particularly irks those clubs with owners who have particularly deep pockets, for example the likes of Stoke City who, with a reported annual bonus to the chairperson of its parent betting company Bet365 of over £200 million, would have no problem at all in financially supporting the football club. The target here is very much about 'levelling the playing field', less the actual playing field, but rather the rules of the financial playing field applying to all.

UEFA have recently re-addressed this mechanism and have set new ratios (of relevant transfer and wage costs v's revenue) of 90% (2023/2024), 80% (2024/2025), reducing to 70% from season 2025/2026 onwards. Clearly, clubs need to be mindful of future revenue streams, particularly with regards to sponsorship deals which often have clauses in place that reduce their annual commitment if clubs are not performing on the pitch. Not making the Champions League, or drop-

pitch. Not making the Champions League, or dropping out of the Premier League into the EFL, for example, has significant financial ramifications, notwithstanding the parachute payments Premier League clubs dropping into the EFL receive for three further seasons.

Setting a cap for losses

The second regulatory rule adopted, both domestically and in Europe, is a financial limit on the level of losses that can be borne by a club, subject to fines, squad size restrictions or a points deduction if not adhered to. Domestically in the top flight, the current cap is £105 million across a rolling three-year period, while in Europe UEFA has recently started phasing in a revised (and increased) €60 million limit across a similar three-year rolling period (provided these losses can be covered by the club's owners or a related party). A club is assessed on its reported profit or loss, subject to certain sums that do not form part of the overall profit calculation (e.g. academy costs).

It is generally recognised that despite the rules applied by FRS102, there is still the opportunity for some clever 'window dressing' to make the accounts appear better than they might otherwise look, so any opportunity to either increase revenue, or reduce costs, would be to the advantage of a football club in meeting its sustainability targets. And this leads to the current hot topic of amortisation – let's first rewind to the curious tale of Derby County FC.

Derby County FC

Derby County, currently plying their trade towards the top of League One, were embroiled in a sporting legal battle with the EFL around both the sale and valuation of their stadium and their approach to the amortisation of players; the former point was ultimately not challenged but the point on amortisation went through several hearings and judgments. Amortisation, in simple terms, is the cost of depreciating an intangible asset over its useful economic life, which for football clubs is chiefly represented by the contractual registration fees of their playing staff.

Bearing in mind that any initial purchase of a player broadly has no immediate impact on profit (the transaction is solely reflected in the balance sheet – an asset in, countered by money going out or a creditor being established); rather it is the amortisation costs posted each year to its profit and loss, and/or the ultimate profit or loss made upon any eventual sale of a player, which impact a club's margin.

The approach adopted by Derby County, different from all other clubs, was to assess the expected 'recoverable value' of each player at each season end. The club argued this better reflected the economic use of a player as their value would not necessarily reduce on a regular basis each season, the underlying argument being some players get better over time, some worse, some stay broadly the same, but ultimately once their contract is wound down their carrying value is reduced to zero. The club argued this made accounting sense, however the impact on the amortisation costs posted to profit and loss was an estimated £30 millon of 'savings', this being the difference between the amortised amount based on Derby County's approach and the amortisation cost if a straight-line approach for amortisation, spread equally across the life of the contract, had been applied (the approach used by all other clubs).

After several rounds of legal and accounting argument were exchanged between Derby County and the EFL, a panel eventually ruled that the only economic benefit a club can rely on when purchasing a player is the benefit it draws from using that player in its matchday squad and so the only logical way to amortise that value is on a straight-line basis over the life of the player's contract. It was ruled that to apply any other approach would be to argue the existence of an "active market" per the requirements of FRS102 where you can trade players without limitation at any time, however the panel concluded this could not be argued given the inherent restriction of transfer windows, players and agents' wishes, squad size and related cost implications. The outcome was that Derby County were docked ten points which ultimately cost them their Championship tenancy at the end of the 2021/2022 season.

Chelsea FC

And this neatly turns us to the current case of Chelsea FC, bearing in mind the straight-line approach that needs to be taken to amortising any transfer fee, the only real way in which you can reduce the costs posted against profit in each year, is to extend the length of the contract. Cue the recent transfer of Mykhailo Mudryk, from Shaktar Donetsk, for an initial £62 million (rising to £89 million with add ons) making him the most expensive Ukrainian player in history. Now if this add on value was amortised over, say, a five-year contract, the club would need to bear an amortised cost of £17.8 million each year.

However, Mudryk's registration has been purchased on an extended eight and half year contract, through to the close of the 2030/2031 season, which is an amortisation charge of £10.5 million a year. That difference of £7.3 million a year directly improves the profit and loss account of Chelsea FC which, by contrast to a five-year contract, improves the bottom line over that timeline by some £36 million.

And Mudryk has not been the only purchase by the club across the summer of 2022 and the winter 2023 transfer window which, under the stewardship of co-owner and Chairman Todd Boehly, has seen player investment approaching €500 million. Other notable long-term contracts have been agreed with: Marc Cucurella (six-year deal); David Fofana (six-year deal); Benoit Badishile (six and half year deal); Wesley Fofana (seven-year deal); and Noni Madueke (seven-and-a-half-year deal).

However, problems can arise regarding such long contracts - if you sell the player after, say three or four years, any profit arising for that period will be significantly reduced as the carrying value of the player's contract will still be relatively high; or, if the player picks up a long term injury, or loses form, the club still

have the commitment (subject to selling his registration to another club) both in terms of the annual amortisation cost and the player's wages which, for the very top players, can be anything from £10 million a year upwards.

UEFA's constitution sets out that contracts should be no longer than five years in length but with the important proviso that this does not apply if local laws allow it to be longer, which is the case for the UK and most European countries. Given the increasing number of unusually long contracts recently handed out by Chelsea, however, UEFA is reportedly putting plans in place to effectively restrict amortisation periods to a maximum of five years, although the actual length of contracts could still be longer.

Sit back and watch club accountants and law teams from various jurisdictions, in the months ahead, enjoying that particular battle.

How Crowe can help

Our Forensic Services team have worked on a significant number of football related cases, including loss of profits, agent disputes, and accounting applications; we are always happy to have an initial no obligation discussion on any matters where we can add value and advice. For further information, please contact Chris Hine, (chris.hine@crowe.co.uk) Martin Chapman, (martin.chapman@crowe.co.uk) or your usual Crowe contact.

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Security for Costs Order Made Against Lead Applicants in Class Action over Cryptocurrency

by Stephanie Cook, Partner, Brisbane and Aron Cheung, Associate, Brisbane

In the recent decision of Its Eco Pty Ltd v BPS Financial Limited [2022] FCA 842, the Federal Court of Australia considered the discretion to order security for costs against the lead applicants of a class action. Kennedys acted for the Second Respondent, Billzy Pty Ltd, and were successful in obtaining security for their costs.

The decision is significant as the Court emphasised the interests of fairness and the contextual issues at play in class actions which favoured awarding security to the respondents, even though one of the lead applicants and many of the class members were individuals. It also distinguished the decision of Lee J in *Abbott v Zoetis* (No 2) (2019) 369 ALR 512.

Background

Its Eco Pty Ltd and Bethany McManus are the lead applicants of representative proceedings brought under Part IVA of the *Federal Court Act 1976* (Cth) against BPS Financial Limited and its related entities (the respondents). The respondents are involved in various ways in the provision of a cryptocurrency and the facilities by which it is obtained, stored and used. It is asserted that the group members were allegedly induced by express and implied misrepresentations to acquire and invest in the currency. The applicants claim that the currency was illiquid or incapable of being exchanged for fiat currency or for goods or services. It is on this basis, that those who invested in or acquired the currency purport to have suffered loss or damage.

It was not in issue that the lead applicants are impecunious in the sense that they are not in a position to meet an adverse costs order. Additionally, the applicants did not have a litigation funder at the time of the hearing and there was no evidence any would be forthcoming. The respondents sought orders for security for costs in the circumstances.

The law

The exercise of the Court's discretion to order security for costs, pursuant to section 56 of the *Federal Court of Australia Act 1976* (Cth), involves the consideration of a number of factors in the context of class actions including:

- the impecuniosity of the plaintiffs and the cause of such;
- whether there has been any delay in making the application for security;
- whether the proceeding has become bogged down as a result of the plaintiffs' conduct;
- strength and bona fides of the plaintiffs' claim;
- whether the plaintiffs have been deliberately selected as 'persons of straw';
- whether the proceeding is essentially defensive in nature;
- whether the applicants are suing for someone else's benefit;
- the characteristics of the group members;
- existence of a funder;
- whether the security would have been ordered if there were separate actions; and
- whether security for costs would stifle litigation.

(Kelly v Willmott Forests Ltd (in liq) [2012] FCA 1446).

The decision

In considering all of the above factors in the exercise of his discretion, Derrington J held that the considerations in this matter fell heavily in favour of an order for security for costs. In particular, His Honour noted that the action was pursued for the benefit of an apparently large number of persons who would gain from its success, both in terms of recovering judgment and an order for costs, but who were protected from an adverse costs order and were not shown to be without means. On the other hand, the respondents who were at risk of a substantial costs order had no opportunity to recover costs if the claim was unsuccessful. His Honour stated that "The unfairness principle is palpable."

In reaching this conclusion, Derrington J disagreed with Lee J's statement of general principle in *Abbott v Zoetis Australia Pty Ltd* (No 2) (2019) 369 ALR 512 that an order for security for costs should not be made in unfunded class actions or where the solicitors are working on a speculative basis. Derrington J emphasised that the litigious process must be fair, stating at [14]:

> *"One side of the record in litigation ought not to be granted the luxury of litigating without risk of the consequences of a costs order should the litigation not result in their favour. That extends to those who stand behind one of the litigants and who may benefit from the successful outcome of*

the action. Such persons should not be allowed to enable others, whether that be corporate entities, trustees or lead applicants, to act as "stalking horses" in the litigation which will enure for their benefit".

In addition, while orders for security aren't generally made against individuals in bilateral litigation, Derrington J emphasised the contextual issue in favour of doing so in class actions. His Honour noted applicants usually have recourse against the respondents or their insurers to substantial recovery in respect of their own and others' claims, as well as indemnity in respect of their costs. On the other hand, the respondents are limited to recovering costs from the lead applicants to the extent their assets permit.

Furthermore, Derrington J rejected the lead applicants' argument that the making of an order for security for costs was antithetical to the nature of class actions in the sense identified by Lee J in *Abbott v Zoetis* (No 2), namely that it provides an effective mechanism for persons with small or relatively modest claims to obtain access to justice. Derrington J considered there was nothing to suggest that the usual rules in relation to security for costs should not apply. He specifically noted that if it had been the intention of the legislature to permit class members to litigate solely at the risk of the respondent, such a policy outcome would have found clear expression in the legislation.

Accordingly, Derrington J ordered that the proceedings be stayed until the lead applicants provided the respondents with security for their costs. This included $200,000 each to Billzy Pty Ltd and PNI Financial Services Pty Ltd, and $350,000 to the remaining three respondents.

Key takeaways

As foreshadowed, the decision is significant as Derrington J emphasised that there are strong policy reasons for Courts adopting a predisposition in favour of making an order for security for costs in class actions where the lead applicants are impecunious, even if they consist of individuals and even if the order for security may stultify the action. The decision also reinforces the importance of the overarching principle of fairness in matters concerning orders for security.

The decision clarifies and reinforces a defendant's entitlement to security for costs following the decision in *Abbott v Zoetis*.

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Useful Links

Its Eco Pty Ltd v BPS Financial Limited [2022] FCA 842

Exploring Expert Witness Predictions for 2023

What trends will we see in forensic accounting this year?

In light of events that have unfolded over the last two years, from the COVID-19 pandemic to the war in Ukraine, it is difficult to try to predict what will happen in 2023. However, as expert witnesses, our work follows from recent events, making it possible to anticipate what trends will develop in the coming months.

Fraud and false accounting
Unfortunately, all signs point towards there being a surge in cases of fraud and false accounting throughout the year. Forensic accountants often abide by of the concept of the fraud triangle, which dictates that there are three components that together lead to fraudulent behaviour. These are motive/pressure to commit fraud, opportunity to commit the act and rationalisation of the action.

In times of financial pressure, there inevitably arises an increased likelihood of fraud, whether it be to obtain funds for personal needs or to misrepresent a business' financial position in order to keep operations running. In times of inflation this applies to individuals as well as businesses, meaning that we can expect to see an increased willingness amongst individuals to resort to fraudulent and illegal practices to subsidise their income.

At the same time, those managing a business or charity may be under-resourced, and thus less likely to spot the warnings signs of such activity taking place before they become an issue. With this in mind, we would advise business owners to remain vigilant of a surge in fraudulent practice throughout the coming months.

Commercial disputes
Commercial disputes, namely those arising from breach or termination of contract, typically increase in a volatile economy.

In recent times businesses have faced huge inflationary pressures, driven by supply chain issues and labour shortages. Consequently, they may seek to escape what has become an unprofitable arrangement, or conversely may be unable to fulfil their contractual commitments.

As a result, we are expecting an increase in instructions to assess the commercial losses that may arise from contractual breaches.

Disputes arising post company sales
Disputes arising out of SPAs (sales and purchase agreements), including warranty claims, are already hitting our desks, and I would expect see this to continue in 2023.

Both 2021 and 2022 were buoyant times for business sales, as firms in all sectors looked to consolidate operations to combat uncertainty. Many of these deals will have reflected the positive trading results being achieved at the time, and will include deferred or contingent consideration.

However, recent economic considerations may mean that trading performance of many firms since such deals may have deteriorated. In such situations, the buyer may look to recover part of the consideration paid or to avoid paying deferred consideration, in which situation an expert witness will be called in to advise.

Matrimonial, family and shareholder disputes
In times of financial pressure, we typically see an increase in family disputes arise. These cases include divorces, probate disputes, partnership disputes and claims of unfair prejudice.

Forensic accountants can be instructed to value family businesses to assist both lawyers and the court in attempting to secure an equitable distribution of assets

Professional negligence
Forensic accountants can also be instructed to consider whether the conduct of an accountant or tax adviser met the standard of a 'reasonably competent' professional. This involves considering the value of financial loss in claims against professionals in a range of sectors including medical, legal, financial services and construction.

Over the last decade clients have been more willing to pursue claims against those who were once their 'trusted advisers', and we can expect this trend to continue throughout 2023.

Insurance claims
With many firms incurring substantial losses during the pandemic, there has been an increase in instructions to help deal with insurance claims. The current difficult operating environment means that we can expect this to continue.

In the first instance, legal counsel will need to determine if the loss is covered by any insurance. If

so, forensic accountants may be instructed to give an expert view on the value of any loss allowing for any reasonable mitigation.

Court delays

One of the most pertinent trends of the past two years has been the delays in instructions and hearings caused by court backlogs following the pandemic. This has had a negative impact on clients, lawyers and experts alike, as a system already struggling to cope with a surge in activity post-COVID was further impacted by hiatuses arising from the sanctions on Russia.

Unfortunately, we expect these court delays and sanctions to continue and inevitably clients and experts will have to continue to manage cases while navigating extended periods of inactivity and inevitable inefficiencies.

FRP

www.frpadvisory.com

"In times of financial pressure, there inevitably arises an increased likelihood of fraud."

Fiona Hotston Moore

Forensic Services

The Galbraith Tables - A Welcome Addition to the Pensions on Divorce Canon

Link: https://mcact.co.uk/galbraith-tables/

In March 2022, Jonathan Galbraith and Chris Goodwin of Mathieson Consulting published their "Galbraith Tables". This was a useful addition to the literature available in the UK for valuing pensions on divorce – and at its launch seminar, over 700 family solicitors logged into the seminar explaining their use. Until then, the only current literature available was the 2019 *"Guide to the Treatment of Pensions on Divorce"* (denoted as the PAG report), and the Pensions on Divorce textbooks by Messrs Hay, Hess, Lockett and Taylor (currently 3rd edition, 2018) (denoted by HHLT3). What are the positives - and negatives - associated with these tables, compared with other authorities?

Accessibility
The first plus about these tables is that nothing is hidden. Not only are the figures tabulated, but the actuarial basis is provided. The former allows anyone familiar with BODMAS to carry out their own valuations of a pension. The latter allows any actuary to critique the results. It is a useful framework.

It remains to be seen if courts will generally accept proposals from parties based on these tables. Prior to now, Defined Benefit pension values have generally been seen as the preserve of a pensions on divorce expert (or "PODE", as the PAG report defines them). If Galbraith is accepted, which is more likely for smaller pensions, surely this should save divorcing parties time and money?

Clearly, where pension sharing calculations are also required, a report from a PODE is more likely to be commissioned, so in that case, the Tables may be unnecessary.

It should also be mentioned that in some caselaw, the use of offsetting is discouraged, and it is thought that pensions and other assets should be treated separately. (Cases – Martin-Dye (2006) to WvH (2020)) - It is our view that if the mechanisms involved in offsetting are clearly explained, than pension and non-pension assets can be compared without problems. This should be to the advantage of many divorcing couples, who may have differing needs regarding immediate and deferred income.

Compatability
The next issue to consider is how the Galbraith figures measure up when compared with the other authorities, i.e., the PAG report and HHLT3.

My assessment of the factors recommended for a pension of £1 p.a., payable now to someone age 60, increasing at CPI, is as follows:

Galbraith:	£33.57
PAG:	£32.38
HHLT3:	£32.38

Reassuringly, these figures all fall to be reasonably close, so Galbraith may be taken as a suitable proxy for the other bases.

However:
1) My figures involve certain assumptions, e.g., a mixture of lives with 90% male.

2) Figures are as at August 2022. They do not allow for the "Truss Effect" when market rates changed significantly.

3) Deriving these figures (apart from Galbraith) is not easy, and requires making some assumptions, and

4) Our preferred basis is some 15% below these figures, to allow for the fact that the modelling assumes an annuity **is not actually being purchased.** We therefore consider the imposition of the life office margins, which we assess as around 15%, as unfairly onerous on the pension holder.

This brings me to my next point:

Currency
Any published table is at risk of being out of date the day after publication.

However, there are two practical solutions, which our three sources above treat differently, but effectively:

Galbraith
The providers are clearly alert to market changes and published a note subsequent to the "Truss Effect" on financial markets during September 2022. They decided to consider possible changes in 2023, when a clearer picture of how permanent the market changes emerges. This is a sound professional approach.

PAG and HHLT3

Valuations are linked to market annuity rates. These change daily (possibly more frequently), so currency is automatic.

The latter two methods can therefore claim superiority regarding currency of the results. However, Galbraith is easier to check, and does not necessarily need PODE input, which increases costs.

Deferment factors

I have also looked at the factors Galbraith provides to allow for the fact that pensions not yet in payment – for example, at current age 45 with retirement age 60:

Galbraith: 0.7420

PAG: 0.8000

HHLT3: Unspecified

Where published, these figures are reasonably close.

However, looking at tables used in other legal divisions (Employment Tribunals, Ogden Tables), these are FAR stronger bases, with the factors exceeding unity in many cases.

Weakness

Galbraith Tables don't allow for increase in payment rates other than CPI: level pensions, RPI linking or 3% - 5% variants are quite common. However, conversion factors could be published – these are easy to derive for an expert.

A similar point can be made in respect for pensions in deferment, although revaluation in deferment is usually at CPI. However, for older pensions, where the member left some time ago and only an exit pension is quoted, care must be taken with revaluation:

• Revaluation may specify using RPI rates, rather than CPI ones.

• More significant, if pre 1997 pension accrual includes "GMP" elements revaluing at fixed rates, then revalued amounts often exceed the level assumed if CPI is used – sometimes by 200% and over. This is due to higher rates during the early era (a maximum of 8.5% pa), to which the pensions are "locked in". This risk is not highlighted in any of the above authorities.

Conclusion

Experts can adjust for these factors – and change the other Galbraith assumptions, if desired. This is a relatively simple spreadsheet exercise, perhaps in conjunction with a package such as "Act-fx". This supports my view regarding the value of the tables.

Actuaries have been valuing life connected income streams for nearly 200 years - so perhaps the only surprise is that no one has produced such tables for Pensions on Divorce before!

Sexual assault cases: using DNA and digital evidence to strengthen your defence strategy

DNA and digital evidence offer significant opportunities to support a fair trial in sexual assault cases. Which is why accurately reviewing forensic reports is crucial. Strong defence strategies rely on a thorough understanding of all the information provided and the confidence to challenge the evidence when needed. But defence solicitors face major challenges when it comes to unlocking the full potential of DNA and digital evidence, as we explore.

Why you're missing out on valuable evidential opportunities

Streamlined reports have their place in the criminal justice system. They help expedite cases and minimise costs. But with less information comes the need for deeper analysis. Especially in complex sexual assault cases. For instance, your client might deny their criminal involvement though the forensic report suggests otherwise, with evidence of their DNA on the victim's clothing. How can you defend your client's case in this situation?

It's not usually possible to recover time-sensitive biological evidence from the body of the complainant, if the complaint of sexual assault was made sometime after the event. But evidence could persist on other items such as clothing, even when washed. There still might be time to examine these items. And this, along with contextual information, could reveal another reason why the client's DNA and/or semen was found on the victim's clothing. In a family environment for example, semen could have been transferred by a wash.

Asking the right questions and requesting more information could help you build a stronger defence strategy. Getting to this point requires careful interpretation of the scientific findings within the full context of the case and your client's statement. But defence solicitors don't usually possess the scientific skills to do this. And it's unreasonable to think they should. They face a similar predicament with other types of forensic evidence.

Digital evidence delivers an essential human perspective

Digital evidence, such as mobile phone, cell site and social media data, offers insights into the motivations behind people's actions — both victim and suspect. In ways DNA and fingerprint evidence doesn't. It's an essential, supportive function for defence solicitors and prosecutors. But it's a complex area of forensics - an investigator needs to be able to interrogate all the data sources and piece everything together. Using a combination of digital tools and manual investigation techniques to verify evidence that can be attributed to a crime.

In law enforcement, Digital Media Investigators (DMIs) have the skills to identify and verify evidence from forensic reports that can be hundreds of pages long. But DMIs are spread thin. The task often falls on a detective constable who doesn't have enough digital experience to properly evaluate the data.

The result: limited reports are often relied upon in court. Streamlined Forensic Reporting (SFR) exacerbates the problem. Making it even more critical for the defence solicitor to scrutinise the results and challenge any oversights. Was the device of interest checked for joint possession? Has an incriminating photo's metadata been analysed to determine when and where it was taken? If such things haven't been done, you'll never know how they could have helped your client.

Leave no stone unturned with a thorough review of all the scientific evidence

All evidence, whether biological, digital, pathological or ecological, should be reviewed by experts in their relevant fields. And, where necessary, challenged on a number of levels. Ensuring that the forensic science presented in court is correct, accredited (where possible), balanced and contextually well-informed to support a fair trial.

What if you had rapid access to a team of forensic experts who review all of the scientific evidence for you? We can connect you to accredited forensic experts who will help you achieve the best outcomes for your client. By helping you understand the scientific findings in their case, identify the strengths and the limitations of the evidence and ensure that an optimal forensic strategy has been conducted - recommending further testing/investigation where applicable. In doing so, you can gain a solid understanding of the opportunities that could help you shape a more robust and effective defence strategy.

No need to spend time sourcing and vetting the experts you need to demystify the science. Our casework managers do all the leg-work. Hand-picking pre-approved experts who have the right qualifications, experience and, where relevant, licences needed to work on your case. Your casework manager will handle the process from start to finish. Liaising with the different experts on your case and acting as a single point of contact to ensure seamless communication.

Don't miss out on the evidential opportunities DNA and digital evidence can provide. Delegate effectively, save time and strengthen your defence strategy on **01235 774870** or at **science@forensic-access.co.uk**.

FORENSIC ACCESS GROUP

A New Police Approach is Needed to Tackle Overwhelming Delays to Digital Forensics

A damning report published by His Majesty's Inspectorate of Constabulary and Fire & Rescue Services (HMICFRS) has found police forces to be "overwhelmed and ineffective" in relation to digital forensics. The HMICFRS found that there were more than 25,000 devices waiting to be examined – and this is without taking into account all the devices already in the system.

This is not news to criminal litigators who are well aware of the delays caused to police investigations by the inevitable wait for a forensic download to be completed on their client's mobile phone. While waiting, lawyers will often need to field enquiries from understandably anxious clients about what can be done to expedite the process; unfortunately, the answer is often 'nothing'.

However, it is worth remembering the Authorised Professional Practice (APP) guidance from the College of Policing on extraction of material from digital devices which states that searches cannot be speculative and must be 'strictly necessary':

Mobile telephones or other digital devices will not be examined as a matter of course. They will only be examined in investigations where there is reason to believe it is strictly necessary to acquire material to pursue a reasonable line of enquiry. […] The 'strictly necessary' condition can only be satisfied where all other less intrusive methods have been explored and it is considered that the purpose cannot reasonably be achieved through less intrusive means. For example, investigators will consider whether it is sufficient simply to view limited areas (for example, an identified string of messages/emails or particular postings on social media).

The guidance also states that consideration should be given to the CPIA Code of Practice which establishes the duty for officers to pursue all reasonable lines of enquiry, whether they point towards or away from the suspect, and to gather and retain relevant material. This duty could be considered to provide the basis for satisfying the 'strictly necessary' criterion in the situation of an investigation.

The case of *R v Bater James and Mohammed [2020] EWCA Crim 790* states it is not a 'reasonable' line of enquiry if the investigator pursues fanciful or inherently speculative research. Instead, there needs to be an identifiable basis that justifies taking steps in this context. This is not dependent on formal evidence in the sense of witness statements or documentary material, but there must be a reasonable foundation for the enquiry.

The case goes on to provide examples taken from the CPS's 2018 guidance on disclosure (titled 'A guide to "reasonable lines of enquiry" and communications evidence'):

'There will be cases where there is no requirement for the police to take the media devices of a complainant or others at all. Examples of this would include sexual offences committed opportunistically against strangers.'

Meanwhile, the Attorney General's 2020 Guidelines on Disclosure states, "it is not the duty of the prosecution to comb through all the material in its possession (e.g. every word or byte of computer material) on the lookout for anything which might conceivably or speculatively undermine the case or assist the defence" (Annex A, paragraph 39).

The Guidelines provide the example of a case which involves a complainant contacting the police to make an allegation of an offence against a person they had met that same day. In such as case, the suspect may accept that they met the complainant but deny the allegation. "The complainant and suspect communicated on a single medium. The investigator may consider it is a reasonable line of enquiry to view the messages from the day on which the two persons met as, before and after, they are highly unlikely to be relevant. They may contain material about what was expected or not expected when complainant and suspect met, the nature of their relationship, and the response after they met, all of which may cast light on the complainant's account and the suspect's account. That is unlikely to require the investigator taking custody of the phone or obtaining a large volume of data." (paragraph 13).

The Guidelines go on to compare and contrast this with the example of a complainant who alleged coercive and controlling behaviour over a period of years, including manipulative conduct over various platforms. Here, "a larger quantity of data may be relevant and require review and retention by the investigator by different means."

All of the above guides the police towards reviewing the circumstances of each individual case and seeking

an alternative to a full forensic download where appropriate: for example, where both the complainant and suspect say that they only communicated on Snapchat and did not save any messages, there is little to be gained from a download.

However, unfortunately, we are increasingly seeing a rigid approach of submitting devices for a full download regardless of the facts. Until a long-term solution is found, we can only hope that the police will apply more flexibility in their methods. The current approach is clogging up the system, causing unnecessary delay and is unfair to complainants and suspects alike.

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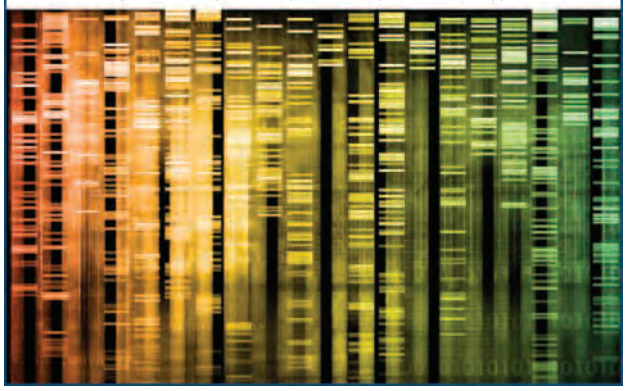
Laura Kruczynska is an Associate (FCILEx) and has worked in the Criminal Litigation team since 2015.

Laura is a key member of Kingsley Napley's Criminal Defence team. She represents clients in a range of cases involving serious and general crime. The main focus of her work is in criminal defence and police investigations, and she has particular experience of defending allegations of a sexual nature. She is organised and efficient and has significant litigation and trial experience. She is praised by clients for her ability to provide support and guidance in the most challenging and stressful of situations.



How Fingerprint Experts Can Make their Mark on Your Defence Case

When shopkeeper Thomas Farrow and his wife Anne were murdered in 1905, a bloody thumbprint found at the scene made this the first British murder to be solved and prosecuted using fingerprint evidence.

This case seemed to herald a new dawn of evidence. One where anyone who left a fingerprint at a crime scene could be caught and prosecuted. However, the reality is somewhat different. As we explore in this in-depth article which covers:

- How fingerprint evidence includes more than fingerprints
- Capturing the fingerprint
- The importance of fingerprint quality
- Analysing fingerprints - opinion not fact
- Opportunities to challenge fingerprint evidence
- What can influence fingerprint analysis outcomes?

More than fingerprints

Did you know that fingerprint evidence can include more than prints of your fingers? The term 'fingerprint' covers a wide range of areas which includes:

- The entire palm surface from the wrist to the tips of the fingers.
- The pieces of skin between the fingers.
- The friction ridges along the inner surface of the fingers and thumbs (known as phalanges)

The arrangement of friction ridge details, which make up fingerprints, are unique to each individual. They are made from raised areas of skin called 'ridges' which are separated by depressed areas called 'furrows'. Fingerprints - as in the arrangement of friction ridge detail patterns - remain essentially unchanged throughout life. And no two people have been found to have the same arrangement of friction ridge detail, including identical twins.

Prints from toes and feet can also be used to identify someone as everyone has individual arrangements of friction ridge detail - as with fingers and hands, prints can be taken from the heel to the tips of the toes. This uniqueness and the persistence of fingerprints - as well as palm, toe and footprints - means these marks provide a useful way to identify someone.

Capturing the fingerprint

Watch any police drama on TV and you'll have seen the basics of gathering fingerprint evidence. Black carbon powder is dusted onto surfaces, sticking to the sweat left by the friction ridges of the fingerprint.

These marks are then photographed or lifted using DCF tape which is fixed to a plastic sheet so it can be stored as evidence.

If the prints are on a movable item, they can be developed using specialist fingerprint enhancement equipment and techniques. The context in which a fingerprint is found is important. Which is why it's good practice to record the location and position of the fingerprint to support later analysis.

The importance of fingerprint quality
Finger and palm prints are usually left at a crime scene by chance which can often result in a limited number of prints of varying quality. This frequently leads to partial marks, like the side or tip of a finger, being deposited. However, all is not lost, as low quality and partial prints can be used to establish someone's identity - as long as the recovered print contains enough information.

Analysing fingerprints - opinion not fact
Although fingerprint evidence was presented in court for many years as fact, the forensic regulator now classes the evidence as expert opinion. Even when experts work in the same organisation and use the same equipment, techniques and approaches, they can make different judgements on the same evidence.

When fingerprints are analysed and compared, the outcomes can be classified into four different groups:

1. Identified - the mark can be confidently attributed to a particular individual as there is sufficient quality and quantity of fingerprint detail for the fingerprint practitioner to assess and match.

2. Excluded - enough fingerprint features do not match to conclude that marks did not come from the same person.

3. Inconclusive - the fingerprint mark does not contain enough and/or sufficient quality detail for a viable comparison and gives inconclusive results.

4. Insufficient - the fingerprint mark contains such low quantity and/or poor-quality detail that a reliable comparison cannot be made. The detail is not clear enough or it has been so compromised by external forces that the evidence is unreliable.

A specialist should be able to explain the limitations of fingerprint evidence to a legal team or jury.

Opportunities to challenge fingerprint evidence
When you receive a streamlined forensic report (SFR) issued by a fingerprint bureau, it will report initial fingerprint evidence findings. However, because different bureaus record different information, the information on the SFR can vary and may not give you the full picture.

Information you might expect to see includes:

- Which finger, thumb or palm print at the crime scene has been identified as the crime scene mark.
- The origin of the crime scene mark - this is not always clear, but it should include a crime scene number.
- Details of other marks previously identified in the case - you'll likely find these on later pages of the SFR.

You may also find you have additional SFRs to deal with if other marks are compared at a later stage. These additional marks are often relied on if an individual enters a not guilty plea.

When fingerprint evidence is classified as inconclusive, legal teams can bring in a fingerprint expert to carry out their own analysis of the marks. The SFR is only ever a starting point. It provides basic information that can be explored and potentially challenged by a fingerprint expert in two common ways.

Context
Marks used to identify the presence of someone at a scene. For example, someone who lawfully visited the scene could have left a finger, thumb, or palm print in a location and at an orientation that eliminates them from the inquiry.

Length of time
The moisture content of a fingerprint can have a major impact on the length of time the mark lasts upon a surface. Watery sweat typically evaporates fairly quickly, whereas fatty sweat - or sweat which combines water and fat - can last longer. Sometimes this can be weeks or months rather than days depending on the level of disturbance (like cleaning or movement of material against the print).

Once a fingerprint is deposited, the length of time it persists on a surface is influenced by:

- Its composition
- The amount of matter deposited
- The physical properties and condition of the surface
- The degree of handling or disturbance
- Its position
- The environmental conditions

As each of these factors are variable there is currently no reliable technique to accurately determine the age of a latent fingerprint.

What can influence fingerprint analysis outcomes?
A fingerprint identification is open to challenge and can occasionally be found to be wrong. As in the case of a fingerprint found at the scene of a serious terrorist incident in the US. The print was matched to one on a computer database and the match verified by three experts. However, this was later found to be wrong. So, although rare, misidentifications can happen.

Why don't we use probability to match fingerprints?
Attempts have been made to introduce fingerprint analysis technology using statistical models that aim to predict whether there's a strong, moderate or weak likelihood of a fingerprint being a match. However, all these models have failed, in part because they do not take into account the wealth of friction ridge detail which experts include in their analysis and comparison.

How fingerprint experts ensure their opinion is valid
Independent analysis
For an expert's opinion of a fingerprint to stand up in court, the analysis needs to be undertaken independently. Contemporaneous notes made by the previous expert should not be shared with the specialist or it risks jeopardising the results of their review. The independent fingerprint expert will make their own notes and will only view the original notes if there is a difference of opinion.

Objectivity
Fingerprint experts also need to ensure they remain as objective as possible in their analysis. The Forensic Science Regulator recognises that cognitive bias - including cultural and contextual biases - have the potential to influence fingerprint decision making. To prevent outcomes being based on assumptions over evidence, fingerprint experts mitigate biases by following the relevant cognitive bias guidance and undertaking training.

Making the most of fingerprint evidence
Working with a qualified and highly experienced fingerprint expert can add huge value to your legal team. Get in touch with our casework team to find out how we can help on 01235 774870 or at **science@forensic-access.co.uk.**

FORENSIC ACCESS

The Fire Safety Regulations 2022 - What you need to know

by Hannah Eales, Partner - Kingsley Napley

The Fire Safety (England) Regulations 2022 come into force today, introducing new duties under the Fire Safety Order for responsible persons.

The Regulations are introduced under article 24 of the Fire Safety Order and are intended to implement the majority of the recommendations made to government in the Phase 1 report of the Grenfell Tower Inquiry.

So, what are the changes we need to know about?

High-rise residential buildings:
A 'high rise building' is defined in the Regulations as a building which is at least 18 metres in height or at least 7 storeys;

The Regulations require responsible persons in high-rise residential buildings to do the following:

1. Provide the local Fire and Rescue Service with up-to-date electronic building floor plans and to provide a hard copy of the plans, along with a single page building plan (identifying key firefighting equipment), in a secure information box on site;

2. Provide the local Fire and Rescue Service information about the design and materials of the external wall system and to inform the FRS of any material changes to the external walls. This includes providing information in relation to the level of risk that the design and materials of the external wall structure give rise to and any mitigating steps taken. The external wall system includes windows, balconies, cladding, insulation and fixings;

3. Undertake monthly checks on the operation of firefighting and evacuation lifts as well as functionality checks on other key pieces of firefighting equipment. Any defects should be reported to the Fire and Rescue Service as soon as possible after detection if it cannot be fixed within 24 hours. The checks should be recorded and made available to residents;

4. Install and maintain a secure information box in the building, containing the name and contact details of the responsible person and hard copies of the building floor plans;

5. Install signage visible in low light/smoke which identifies flat and floor numbers in the stairwells of relevant buildings.

11 metres and above
In residential buildings over 11 metres in height, responsible persons are required to undertake annual checks of flat entrance doors and quarterly checks of all fire doors in the common parts.

Multi-occupied residential buildings with two or more sets of domestic premises
For clarity, the description above does not apply to two flats in a converted house or 'maisonette' where there are no 'common parts' through which individuals would evacuate but rather is aimed at blocks of self-contained flats.

In premises to which the regulations do apply in this category, the responsible person must now:

1. Provide fire safety instructions to their residents, including how to report and fire and what to do if a fire has occurred, based on the evacuation strategy for a building;

2. Provide residents with information relating to the importance of fire doors in fire safety.

Many Fire and Rescue Services state on their websites how they would prefer to receive the relevant information and the government, in collaboration with Fire and Rescue Services, have produced templates to assist in preparing the information required. The eagle eyed among us will note that the Grenfell Tower Inquiry's recommendations on Personal Emergency Evacuation Plans (PEEPs) and evacuation plans have not been included in the regulations this time. The government state that this is because the consultation on the issue of PEEPs highlighted the difficulties of mandating them in high-rise residential buildings and that it makes sense to link the recommendation on evacuation plans with that on PEEPs and deal with evacuation as a single issue at a later date.

Who do the new regulations affect?
The regulations impose duties on the 'responsible person'. This will typically be landlords, building owners and management companies, but ultimately anyone with responsibility as the 'Responsible Person'.

The introduction of the new regulations may mean increased enforcement and prosecution of those responsible for building and fire safety which can attract heavy sentences in terms of fine or possible imprisonment. In addition to this, the Building Safety Act will introduce even more onerous requirements later this year in respect of high-rise residential buildings. It is therefore essential that those responsible for the fire safety of a building, be that through ownership, management or simply operating from such a building, understand who is responsible, what those responsibilities are and how to ensure those responsibilities are competently met.

About the author

Hannah Eales is a Partner in the Regulatory team at Kingsley Napley LLP. She leads the firm's fire safety law practice. Hannah advises individuals, corporates, landlords and public bodies on compliance with fire safety legislation and regulations and represents and advises both those facing enforcement action in respect of fire safety matters and national Fire and Rescue Services.

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The FCA - Looking Ahead

***Niall Hearty** of financial crime specialists **Rahman Ravelli** considers issues likely to affect the Financial Conduct Authority in 2023.*

The Financial Conduct Authority (FCA) imposing fines totalling £214,250,056 last year is a figure that journalists can work into a news story fairly easily. When the biggest of last year's fines was the £107.8 million that was issued to Santander for what the FCA called "serious and persistent gaps" in its anti-money laundering controls, it almost becomes an article that writes itself. A fine of such a size will always grab the headlines.

Yet it is probably worth a look behind the headline-grabbing figures. The £214 million fines total is certainly not loose change, and nobody would argue that a nine-figure penalty is not newsworthy. But it is worth remembering that the FCA regulates approximately 50,000 firms to ensure that the UK's financial markets are operating in a competitive, honest way. Such a huge amount of money being levied in fines over a year should not, therefore, be all that surprising. It should also be pointed out that the 2022 figure is the fourth lowest annual fines total in the FCA's ten-year history. That, perhaps, is the bigger surprise, given that there has been little to suggest any obvious shrinking of the financial sector.

In fairness to the FCA, however, the number of FCA fines imposed on individuals rose from three in 2021 to 10 in 2022. The FCA's belief is that hitting individuals with fines has value as a deterrent. And the total number of fines for 2022 was 25, which is way bigger than the 2021 total of 10. The regulator has, it should be said, also started 2023 with a flourish, having already fined Guaranty Trust Bank £10.9 million and Al Rayan Bank £4 million for money laundering failings. Taking on their own, such facts can be viewed as evidence that the FCA is very much on the front foot when it comes to holding to account those who are not functioning properly in the financial sector. There may even be some merit in the argument that the low total figure for fines in 2022 can be viewed as a legacy of the pandemic, which had the potential to affect the speed and frequency of investigations from 2020 onwards.

But the FCA has much to live up to in 2023. Those who see more positives than negatives in the FCA's 2022 achievements will be looking for more of the same this year. Those unimpressed by its fines total for 2022 will be expecting better things.

In the FCA's new Customer Duty, the regulator will be looking for firms to show that they are prioritising their customers and are able to take an objective view when problems do become apparent. The Customer Duty represents what the FCA has called the setting of higher expectations for the standard of care firms give consumers. The setting of higher expectations also represents a raising of the FCA's obligations. In announcing the Customer Duty, the FCA has made it clear it is looking to "drive a healthy and successful financial services system in which firms can thrive and consumers can make informed choices about financial products and services." The onus is now on the FCA to meet its own part of the challenge that it has set the markets. If the FCA expects more from those in the financial sector, it has to ensure that happens – and identify and penalise those who are falling short. The fact that this is about to happen as the FCA's current Executive Director of Enforcement and Market Oversight, Mark Steward, is set to leave in a matter of months may make the challenge even more demanding. With Mark Steward departing after seven years, the FCA has - depending on how you view it - either an exciting opportunity to adopt a fresh approach to its obligations or the daunting prospect of replacing its mainstay at a time of change.

Just as with its fines record and its Customer Duty obligations, the departure of the person who has been at the head of enforcement can be seen in either a positive or negative light by seasoned FCA observers. These three factors are in no way an exhaustive list of FCA challenges for 2023. But maybe a year from now, they will help provide a clear assessment of the FCA's effectiveness.

Similar to existing obligations under Principal 6 of the FCA Handbook namely "A firm must pay due regard to the interests of its customers and treat them fairly" *www.handbook.fca.org.uk/handbook/PRIN/2/1.html*

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Niall is known for his in-depth corporate crime expertise. That expertise is reflected in his achievements to date and the demand for his services.

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Data Science and Machine Learning: Unlocking New Frontiers in Claims

How data science and machine learning are transforming the world of insurance and, more recently, the claims operation.

One way to think about the application of data science and machine learning is that it's a tool to aid the conversion of information (data) into action. In this context, machine learning is applied to enable better and more efficient decisions, as well as identifying previously hidden risks and opportunities. Essentially, data science helps an insurer to perform significantly better, whatever their goals.

The application of advanced analytics is already well ingrained in the world of insurance pricing and underwriting. However, it is only more recently that it has begun to exert more influence in claims operations.

In the overall insurance value chain, substantial resources and effort have been applied to better understand a customer's risk and purchasing behaviours to help charge the most appropriate price. Fresh benefits still to be mined in the pricing and underwriting space are relatively scarce. In contrast, huge untapped value is waiting to be realised by insurers reducing their claims spend or better understanding and optimising their claims processes.

Low hanging fruit

Although machine learning is increasingly recognised as a tool to reduce claims costs and deliver significant value to an insurer, this remains an area many have yet to realise value. This means there is plenty of low hanging fruit to be picked in the claims space, such as the benefits to be realised from providing a better, more tailored, faster service to the customer. These benefits can, for example, be seen by the speed at which claims are settled and how an insurer's Net Promoter Score (NPS), the global benchmark for client satisfaction, can be improved.

Claims processing already uses a lot of external data, including integration into third party sources such as operators in the automotive sales market for vehicle values, demographics and sociodemographic information, and various other vehicle information to inform repair costs. Machine learning makes it possible to link all these separate threads together and help insurance companies more accurately predict future outcomes and identify earlier changing experience.

Internal impact

There is also the positive impact on the internal organisation that has the potential to be equally transformational. Machine learning can be thought of as a tool, a superpower to help claims handlers and claims teams make better decisions. Individuals can upskill, new roles will be created, all helping provide measurable improvements to customers and vastly improved profitability.

At the same time, it is important to understand that machine learning will not give the perfect answer to every question. Each individual algorithm built will have both strengths and weaknesses. That being said, it is still possible to build and improve models based on an understanding of these strengths and weaknesses. More importantly, it is by understanding how best to leverage what an insurer has, as well as how best this can be applied and integrated, that will determine the value gained.

Collaborate or fail

This is especially true when it comes to using data science to leverage unstructured data. Using an insurer's deep domain claims expertise is key to shedding light on unstructured data and translating this into something which actually makes sense. On the application of data science in claims operations, by far the greatest risk in terms of success and failure is the ability of both sides to collaborate effectively. By bringing together an insurer's in-house claims expertise with their data science and machine learning experts, it becomes far easier to approach problems in a way which leads to a joint successful solution.

Near future

It can be very tempting to focus on the short term and doing whatever is needed to make one solution work once. But it is worth keeping in mind the end state, where one insurer's claims models will be competing against another insurer's models. In a world where hundreds of models are competing, the ability to move at speed, scale for efficiency, and be the most sophisticated will be needed to succeed.

Data science is not the absolute all-encompassing, magic solution to every issue an organisation will face. Instead, being able to fully leverage machine learning means bringing together a multi-disciplined team, that combines an insurer's existing in-house claims knowledge with cutting-edge analytical and data capabilities to deliver next generation claims processing that optimises costs and transforms the customer experience.

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Improving Climate Change Risk Assessment

by Ösund-Ireland MP - February 2023

Introduction

There are two aspects to consider in terms of climate change – the emissions of greenhouse gases (often collectively referred to as 'carbon emissions') that contribute to climate change and the vulnerability or resilience of a project, asset, ecosystem or society to climate change. The common response to climate change from business and government is to reduce emissions of greenhouse gases, and the response from developers is to demonstrate how carbon net zero will be achieved. For governments, the additional need to assess, understand and minimise vulnerability or resilience to climate change is largely driven by international commitments, including Article 7 of the Paris Commitment[1]. However, there is a growing realisation of the additional need to assess and understand the risk of climate change at the business, asset or community level, and to manage this risk by determining the scale of adaptation needed to minimise exposure and vulnerability.

How carbon emissions are assessed and managed to minimise the effects of climate change is not the subject of this article. The focus is on describing how climate change risk is being addressed by business as part of ongoing risk management and by developers as part of preparing a planning application. Three approaches are illustrated based on published guidance and are shown to be similar, as all three are based on standard principles of risk management. The use of a global resource of climate modelling data is described that can support these approaches and make them more robust, using airports as an example.

Climate-related financial disclosure

For business, the need to assess and understand the risk from climate change is increasingly driven by regulation and a requirement to determine the financial materiality of climate change risk as part of financial disclosure. In addition to pension funds and issuers of standard listed shares, UK companies with more than 500 employees and limited liability partnerships with more than 500 employees and a turnover of more than £500 million are now legally required to provide climate-related information annually that is aligned to the Taskforce for Climate-related Financial Disclosure (TCFD) with this becoming mandatory across the economy by 2025[2]. This regulatory requirement is mirrored in a growing number of countries around the world, some impacting in 2023[3].

TCFD divides climate-related risks and opportunities into two major categories:

• risks and opportunities related to the transition to a lower-carbon economy; and

• risks and opportunities related to the physical impacts of climate change.

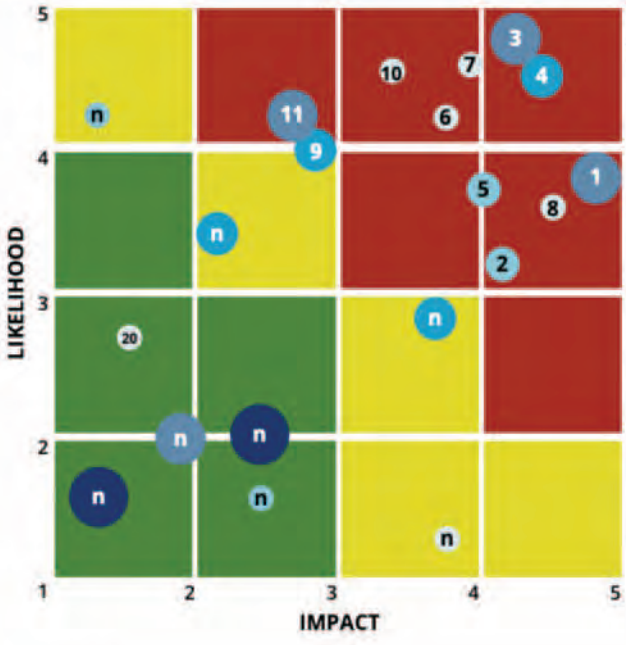
Transitioning to a lower-carbon economy may include policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change. How a government, business or community responds to this transition may present both risks and opportunities. Transition risks are not the subject of this article. Physical risks resulting from climate change can be event driven (e.g. increased frequency of storms) or a result of chronic shifts in climate patterns (e.g. sea level rise). Physical risks generally present a cost risk, either by directly damaging an asset or indirectly by disrupting a supply chain, for example. However, this is not always the case as the physical effects of climate change will vary by location. For example, climate is both friend and foe to the winemaking industry and may be a desperate battle for some ski resorts[4] with the clear implication there will be economic winners and losers. How airports, and the airlines served by them, respond to changes in demand to fly to certain destinations (i.e. a change to the market as a result of physical climate change) also presents both risks and opportunities.

TCFD guidance *"does not prescribe specific risk management frameworks or approaches as individual companies are best positioned to determine this given their circumstances. Instead, … focuses on integrating climate-related risks into existing risk management processes"*[5] . The same guidance (page 16) describes how to integrate climate change into business risk management processes, including an illustrative heat map to assess the likelihood, impact and speed of onset of a range of risks. This heat map is reproduced below as Figure 1. The likelihood scale on the vertical axis includes five ratings (from *rare* to *frequent)* refers to the frequency of a climate event occurring which, in most cases, is expected to change in the future. This will vary, hence the speed of onset description represented by the size of the marker. The impact scale on the horizontal axis also includes five ratings (from incidental to extreme) and refers to the magnitude effect that the climate event would have on the business. The combination of likelihood and impact scales enables the climate risk to be classified as either high (red), medium (yellow) or low (green).

Climate change and planning

For developers securing planning approval, climate change is one aspect for consideration as part of an environmental impact assessment (EIA). The UK Planning Inspectorate has published an EIA screening checklist *"to help ensure that an authority giving development consent for a project makes its decision knowing the likely effects on the environment".*[6]

Figure 1
TCFD Guidance: Illustrative Heat Map Based on Prioritisation Criteria



#	Risk	I	L	V	S
1	Supply chain disruption	4.8	3.7	3.8	4
2	Customer preference shift	4.1	3.3	3.5	2
3	Copper price rise >10%	4.3	4.7	2.3	4
4	Work stoppage > 1 week	4.4	4.5	4.1	3
5	Economic downturn	4.0	3.7	3.5	2
6	Supplier consolidation	3.8	4.2	3.2	1
7	Local competitors enter	3.9	4.5	3.6	1
8	New substitutes available	4.5	3.6	4.2	1
9	Cost of capital rise >5%	2.9	4.0	2.9	3
10	Tighter emission standards	3.4	4.6	2.9	1
11	Exchange rate fluctuations	2.7	4.1	2.7	4
n	...	...	...	...	...
20	Impairment of assets	1.6	2.7	1.6	1

I = Impact L = Likelihood V = Vulnerability S = Speed of Onset

LEGEND

Dots represent risk #1 - #n

Dot size and color reflect speed of onset:

Very Low Low Medium High Very High

ILLUSTRATIVE RATING SCALES FOR CRITERIA

Rating	Impact	Likelihood	Vulnerability	Speed of Onset
5	Extreme	Frequent	Very High	Immediate
4	Major	Likely	High	Rapid
3	Moderate	Possible	Medium	Medium
2	Minor	Unlikely	Low	Slow
1	Incidental	Rare	Very Low	Very Slow

In June 2020, the Institute of Environmental Management and Assessment (IEMA) published relevant guidance[7] which highlights the need to consider the design of a development, in terms of how resilient it is to climate change, and how climate change may change how the development operates and may also change the vulnerability of the receiving environment.[8] All these factors will influence the conclusions drawn from the climate impact assessment.

With reference to the Planning Inspectorate checklist and IEMA guidance, we can consider the potential impacts of climate change on a proposed development to include:

• *How the design, construction, operation or decommissioning of the development is affected, to minimise emissions of greenhouse gases that cause climate change*. This may be to comply with building codes, decarbonisation policies adopted by national or local government, or corporate commitments of the developer or investor. Note that corporate commitments may be driven by TCFD aligned financial disclosure or policies of environmental and social governance (ESG).

• *How the design, construction, operation or decommissioning is affected to ensure the development is resilient to the changing climate*. Most developments have a projected lifetime that extends sufficiently into the future when climate change effects will become more apparent and material. Demonstrating that the development will be resilient to climate change may be required to comply with building codes, national or local climate adaptation policies, and TCFD alignment of financial disclosure by the developer or investor.

• *How the presence or sensitivity of environmental receptors may change as a result of climate change, affecting the outcome of the EIA*. We should expect different environmental receptors to respond differently to climate change, becoming more or less sensitive (or vulnerable) to the potential impacts of the development that are assessed in the EIA. This is often referred to as an in-combination effect.

The IEMA guidance describes a risk assessment-based methodology for identifying potential climate impacts and assessing their severity. Similar to the TCFD guidance, this methodology requires defining the likelihood and impact (or consequence) and using a matrix to determine the risk. The IEMA guidance is not prescriptive and different definitions of likelihood and impact (consequence) scales can be used with professional judgement and justification. The resultant climate risk can be defined in different ways. For example, *significant* and *non-significant*, or ranging from *major adverse* to *moderate adverse* to *minor adverse* to *negligible*. These qualitative descriptions are subject to interpretation and the guidance refers to the role of the Climate Change Adaptation and Resilience Coordinator to ensure professional judgement is applied. Importantly, and similar to the TCFD approach, is the use of this method to first assess the level of risk and then consider the impact of implementing control measures *(or adapting)* to reduce the impact (consequence) and hence, determine the residual risk *(vulnerability)*.

Airports and climate change risks

Since at least 2012 the aviation sector has identified climate adaptation and resilience as a key topic for concern. In 2021 the International Civil Aviation Organisation (ICAO) published the Eco Airport Toolkit on Climate Resilient Airports[9] which provides a framework methodology for airport stakeholders including managers, owners, operators, airlines and governments, to identify and assess the risks that changes to different climatic conditions may have on airport operations, maintenance and future design changes. The ICAO built on this Toolkit and published a further set of guidance in 2022[10,11,12] including key steps for climate risk assessment and adaptation planning; see Figure 2.

The ICAO guidance refers to a standard five-by-five risk matrix with the risks of climate change expressed as a function of the probability (or likelihood) of the event occurring and the severity of the consequence of the impacts. This matrix is similar to the one presented in Figure 1. The outcome is often referred to as risk exposure and is a measure of the risk that the airport faces in relation to the climate impact. The level of risk can be reduced by implementing measures of adaptation, hence reducing the residual climate vulnerability of the airport.

Figure 2
ICAO key steps for climate risk assessment and adaptation planning

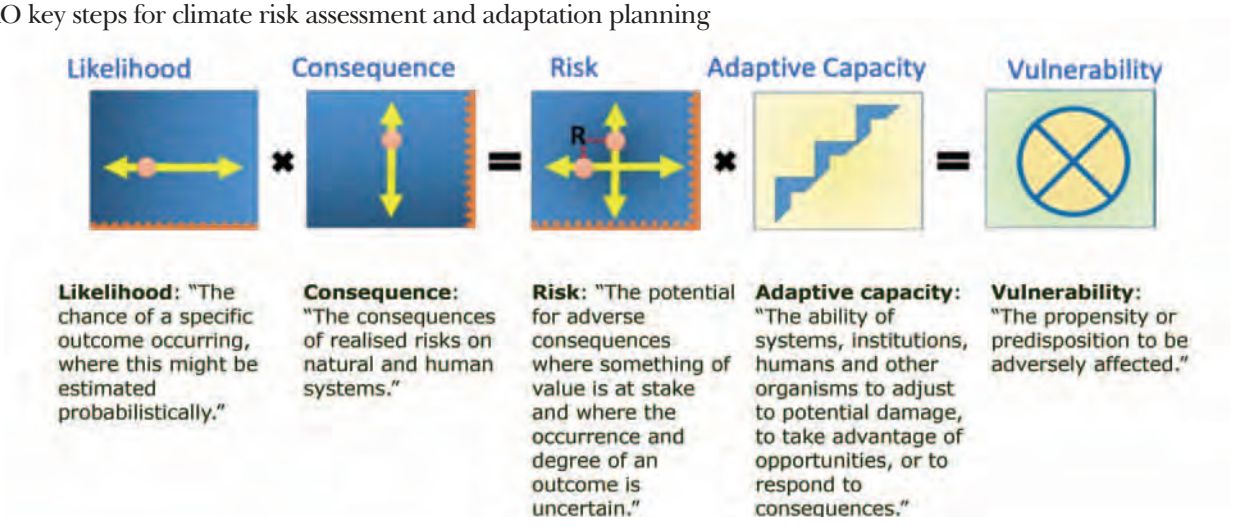
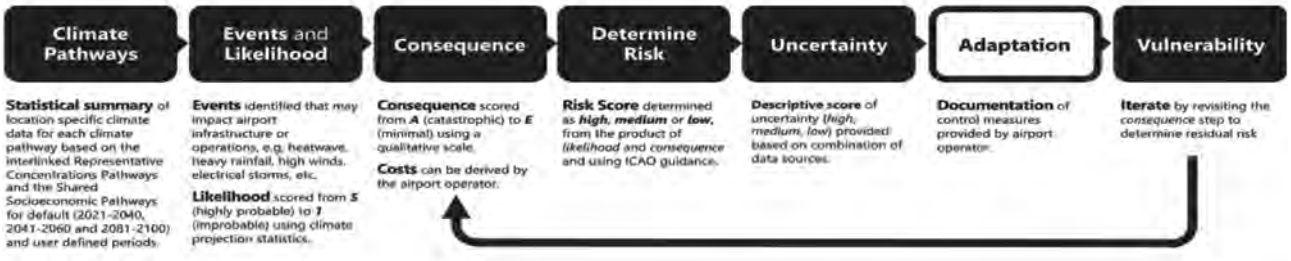


Figure 3
CRAAT method for assessing the climate resilience of airports



The ICAO guidance recommends using airport specific climate change data to determine the likelihood of risk events occurring. This has the potential to limit the need for professional judgement in this step of the process and could be applied also to the TCFD and IEMA approaches.

As an example, the Climate Resilient Airports Assessment Tool (CRAAT[13]) has been developed by Susteer AB in line with ICAO guidance. The CRAAT methodology for assessing the climate resilience of airports is illustrated in Figure 3 and includes the ICAO's key stages of likelihood, consequence, risk, adaptive capacity and vulnerability (see Figure 2). An additional step (uncertainty) is included, reflecting Inter Governmental Panel on Climate Change (IPCC) best practice. Figure 3 is revealing, in illustrating the similarities between the TCFD, IEMA and ICAO guidance for assessing climate risk, determining the extent of adaptation required and residual vulnerability. Note that CRAAT uses a quantitative approach to assessing likelihood, which is described below.

Quantified assessment of likelihood

Table 1 compares five examples of approaches to describing the likelihood of a climate event occurring. The TCFD, ICAO, IPCC AR6 (described below) and Highways Agency (HA) approaches all include descriptors, ranging from 'frequent' to 'rare' or 'exceptionally unlikely' for example. The TCFD, ICAO and Canadian risk assessment methodology (PIEVC) include numerical scales, from 1 to 5 or 0 to 7. These descriptors and numerical scales are limited in being able to determine the likelihood of an event occurring. Both the ICAO and HA approaches include a qualitative description of likelihood which support professional judgement if applied in accordance with IEMA guidance. However, more usefully, the ICAO, IPCC AR6 and PIEVC approaches all include quantitative descriptions of likelihood which could also be applied in accordance with IEMA guidance whilst reducing the potential for cognitive bias which may arise with professional judgement.

A typical climate change risk assessment includes summaries of changes in specific variables, over defined climate periods and under future climate projections. The IEMA guidance includes an example, reproduced in Figure 4. How this information is then used to determine the likelihood of climate events occurring is subject to professional judgement or with reference to more detailed data. The likelihood of a climate event occurring can be determined from a statistical analysis of climate modelling output from the Coupled Model Intercomparison Project (CMIP6[14]) that brings together a global resource of climate models and is used to underpin the Inter-Governmental Panel on Climate Change (IPCC) assessment reports.[15] The Met Office is one of the research centres that participates in the CMIP and provides access to UK specific data in both summary and raw data formats in addition to the CMIP6 data. [16]

An example of climate model output would be the maximum daily temperature at a location for every day of the year up to 2100AD. Depending on the location, this output might be available from 20 to 30 climate models in the CMIP. Using this information first requires defining a climate event in terms of:

- Intensity, e.g. maximum daily temperature, daily precipitation, etc.;
- Magnitude, e.g. >40ºC, < 0.1 mm, etc.; and
- Duration, e.g. maximum 1 day, 5 consecutive days, etc.

This definition relates to the consequence of a climate change event. For example, if an air conditioning system has a safety shut off feature based on temperatures exceeding 45ºC for a period of at least three days. With this information, we can interrogate the ensemble of climate model output to determine the likelihood of this event occurring over a specific time period. The IPCC refers to climate periods of near (2021-2040), mid (2041-2060) and long term (2081-2100). Periods relating to business plan cycles, the lifetime of the asset or planning policy horizons could be used.

Table 1 illustrates there are different scales that can be used to describe likelihood and the guidance cited in this article do not prescribe any one method. However, by providing clear numerical definitions of the likelihood scale adopted, a quantitative approach can be used, based on the ensembled output of available climate models. This is the approach adopted by CRAAT, which uses site-specific climate change data extracted from the CMIP6 archive to provide a quantitative description of the likelihood of climate events occurring at any airport in the world. The potential for error in the risk assessment as a result of variations in professional judgement being applied at individual airports is reduced. This is a pertinent point as The consequences of climate change at different airports and the local economies they serve can be very different, as illustrated by the examples of skiing and wine growing referred to earlier.

Figure 4
IEMA example presentation of a quantitative future baseline for key climatic variables

Table 9 – Example presentation of a quantitative future baseline for key climatic variables. This is data for the South East of the UK under RCP 8.5 (the highest emission scenario in UKCP18)

Season	Variable	Time period*	5th percentile	Projected change at			95th percentile
				10th percentile	50th percentile	90th percentile	
Winter	Mean Temperature (ºC)	2030s	-0.1	0.1	0.9	1.8	2
		2050s	0.2	0.5	1.7	2.9	3.3
		2070s	0.4	0.9	2.5	4.2	4.8
		2090s	1	1.5	3.6	5.8	6.4
	Mean Precipitation (%)	2030s	-9	-5	8	23	27
		2050s	-10	-5	13	34	40
		2070s	-12	-5	20	49	58
		2090s	-10	-3	27	63	75
Summer	Mean Temperature (ºC)	2030s	0.1	0.4	1.3	2.4	2.6
		2050s	0.8	1.1	2.5	4	4.4
		2070s	1.2	1.8	3.9	6.1	9.5
		2090s	2.2	2.9	5.8	8.7	9.5
	Mean Precipitation (%)	2030s	-36	-30	-9	13	19
		2050s	-55	-48	-22	5	14
		2070s	-69	-61	-30	1	9
		2090s	-85	-77	-41	-3	7

*UKCP18 provides 20-year time slices, hence: 2030s (2020-2039), 2050s (2040-2059), 2070s (2060-2079), 2090s (2080-2099).

The source of climate projections and the range of scenarios used in the project design (and therefore the EIA process) must be clearly described in the EIA report.

TABLE 1: Likelihood metrics

TCFD	Descriptor	Frequent			Likely			Possible		Unlikely		Rare					
	Score	5			4			3		2		1					
ICAO	Descriptor	Frequent			Occasional			Remote		Improbable		Extremely Improbable					
	Score	1			2			3		4		5					
	Qualitative	Expected to occur in most circumstances. Almost certain.			Should occur at some time. Possible to occur.			Could occur at some time. Possible but not likely.		EVENT may occur in exceptional circumstances. Should virtually never occur		EVENT may occur in very exceptional circumstances					
	%ile range	>90%			>33% to 90%			>10% to 33%		>5% to 10%		5% or less					
IPCC AR6	Descriptor	Virtually certain	Extremely likely	Very likely	Likely	More likely than not	About as likely as not	Unlikely		Very unlikely		Extremely unlikely		Exceptionally unlikely			
	%ile range	99-100%	95-100%	90-100%	66-100%	>50-100%	33-66%	0-33%		0-10%		0-5%		0-1%			
PIEVC	Score	7	6					5	4	3		2		1	0		
	%ile range	>99%	70-99%					20-40%	10-20%	5-10%		1-5%		0.1-1%	<0.1%		
HA	Descriptor	Very high			High			Medium		Low		Very low					
	Qualitative	The event occurs multiple times during the lifetime of the project (60 years), e.g. approximately annually, typically 60 events.			The event occurs several times during the lifetime of the project (60 years), e.g. approximately once every five years, typically 12 events.			The event occurs limited times during the lifetime of the project (60 years), e.g. approximately once every 15 years, typically 4 events.		The event occurs during the lifetime of the project (60 years), e.g. once in 60 years.		The event may occur once during the lifetime of the project (60 years).					

Conclusions

The need to assess the risks of climate change are clear. For business it is an external risk with potential positive or negative financial materiality. From 2025 all businesses in the UK will be required to disclose their assessment of climate risk as part of financial reporting. For developers, assets need to be designed to be resilient to future changes in the climate in addition to ensuring the assessment of potential environmental impacts properly considers the impact of climate change. As dynamic, and nationally significant or critical infrastructure, airports need to consider climate change risks both as a business and as part of ongoing development.

This article provides an overview of how three sets of guidance, each with different audiences and objectives, all converge to a similar approach for assessing and managing climate change risk. There is no single definitive, prescriptive approach and this is not expected to change. Implicitly, climate change risk should not be treated as 'special' and a more robust assessment will be made if existing risk management or impact assessment framework methodologies are used. Access to data describing how the climate may change at a particular location is improving, enabling a quantitative assessment the likelihood of climate events occurring. This represents an improvement over the qualitative or semi-quantitative assessments currently used along with professional judgement.

References

1. An overview of the requirements for all Parties to engage in adaptation planning and implementation as appropriate is available on-line at https://unfccc.int/topics/adaptation-and-resilience/the-big-picture/new-elements-and-dimensions-of-adaptation-under-the-paris-agreement-article-7. The UK's Adaptation Communication to the UNFCCC is available on-line at https://www.gov.uk/government/publications /the-uks-adaptation-communication-to-the-united-nations-framework-convention-on-climate-change-unfccc-2020. Note that the UK Government is required by the Climate Change Act 2008 to produce a UK Climate Change Risk Assessment to identify risks, followed by a National Adaptation Programme to address those risks every five years.

2. The Institute of Chartered Accountants in England and Wales (ICAEW) provides a useful overview of TCFD and explains how it fits within UK reporting requirements, available at: https://www.icaew.com/technical/ non-financial-reporting/tcfd-and-related-uk-reporting-regulations#:~:text=The%20TCFD%20is%20the%20Task,change%20will%20affect%20their%20business

3. See Section D of the 2022 Status Report of the Taskforce for Climate-related Financial Disclosures (October 2022) available on-line at https://assets.bbhub.io/company/sites/60/2022/10/2022-TCFD-Status-Report.pdf

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5. See Figure 2, Task Force on Climate-related Financial Disclosures Guidance on Risk Management Integration and Disclosure, October 2020 available on-line at https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Guidance-Risk-Management-Integration-and-Disclosure.pdf

6. This checklist has been published in support of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. Questions 8.1 and 15.1 in the checklist specifically refer to climate change or climatic conditions. However, many of the questions refer to potential impacts that could be affected by climate change. For example, question 10.2 refers to the presence of protected, important or sensitive flora and fauna, which is very likely to be affected by climate change regardless of the development. https://www.gov.uk/government/publications/environmental-impact-assessment-screening-checklist

7. IEMA (2020) Environmental Impact Assessment Guide to: climate change resilience and adaptation, available online at https://www.iema.net/resources/reading-room/2020/06/26/iema-eia-guide-to-climate-change-resilience-and-adaptation-2020

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12. ICAO (2022c) Climate Change: Climate Risk Assessment, Adaptation and Resilience: Menu of Adaptation Options, published on line at https://www.icao.int/environmental-protection/

Documents/Climate%20Risk%20Assessment%20and%20Adaptation%20Report_Menu%20of%20Adaptation%20Measures_final.pdf

13. An overview of how CRAAT works is provided in: Ösund-Ireland MPP, Powell AJ, Ireland CJ (2022) A Global Approach to Assessing the Climate Resilience of Airports, 33rd Congress of the International Council of Aeronautical Sciences, Stockholm, Sweden, 4-9 September 2022 (https://icas.org/ICAS_ARCHIVE/ICAS2022/data/papers/ICAS2022_0922_paper.pdf). More information, including an introductory video, is available at www.susteer.com.

14. A full description of CMIP6 is available at https://www.wcrp-climate.org/wgcm-cmip/wgcm-cmip6.

15. Extensive information is available on the work of the IPCC at https://www.ipcc.ch/assessment-report/ar6/

16. UK climate projections are available at https://www.metoffice.gov.uk/research/approach/collaboration/ukcp

Author

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Eight Things to Consider When Appointing and Instructing an Expert Witness for Plastic Materials and Product Disputes

Eight things to consider when appointing and instructing an expert witness for plastic materials and product disputes.

Technical expert witnesses play an important role in assisting the Court in understanding the evidence or facts in a case. Cases involving plastic failure can be complex, experts are often engaged by solicitors to provide independent and impartial opinion based on factual information, in relation to matters within their expertise. The expert's duty is strictly to the Court. Here are our tips on how to effectively engage a plastics expert witness.

1. **Contact an expert consultant at early stage.** The performance of plastic products is dependent on several things ... the type and quality of the plastic, design, manufacturing process and use. Early expert input can help to identify the underlying technical issues in the dispute and understand more about the liability at stake.

2. **Select carefully.** Experts need to demonstrate their track record and experience of giving opinion on matters within their technical expertise, and to the specific requirements of the court. Making the wrong appointment could be disastrous to your case. Polymer science and technology is a vast subject area with many specialisms. Be sure that your expert has the specialist plastics knowledge you need.

3. The issues concerning plastic product failure often **complex and technical i**n nature meaning legal professionals and the court often need support to fully understand them. Select an expert who can explain their findings and conclusions in a way that meets this requirement.

4. **Instructions need to be precise and specific.** Plastic failure disputes can be complicated and difficult to describe. Courts are aware that differences in experts' opinion can be due to disparities in the instructions given and may not evidence the genuine issues in the dispute.

5. A dispute in a materials or multiple product supply over an extended time period tests your client's organisation's ability to access purchasing, supply and quality records and documents and recall events. Ensure any limitations or concerns about evidence are **explained to the expert** when providing instructions and ensure the legal representative for the other side is kept up to date on any new evidence that emerges as the case progresses.

6. **Time management is vital.** Laboratory tests and investigations can be time consuming and costly. Your expert must fully appreciate the extent of their obligations and the preparation needed to fulfil them. It is important to ensure they have the capacity to meet the procedural timetable and submit the important report on time. Ensure costs for laboratory tests are agreed with your client in advance.

7. **There needs to be independence.** Your client needs to be clear of their requirements prior to engaging a consultant to investigate a failure or dispute. If there is an expectation that an expert consultant will act as an expert witness it must be ensured that independence is maintained throughout their involvement.

8. Don't forget **personal skills.** Giving evidence by examination and cross examination can be adversarial and stressful. An expert witness needs the skills and capacity to deal with this process and not falter under the pressure.

PS Partnerships & Consultancy have 25 years' experience in providing expert witness services in plastic materials and product disputes providing national and global service coverage with wide commercial and criminal case experience.

www.PS-Partnerships.com

Ecology Forensics - Delivering Unrivalled Expertise and Range of Services

When it comes to the recovery and analysis of ecological evidence, such as human remains, there's no room for error. Law enforcement needs experienced forensic scientists accustomed to working on complex, high-profile and time-sensitive cases. Connect to our multidisciplinary team of accredited scientists, benefiting from a fast and reliable fully-managed ecology service. Read on to learn what makes our scientists a cut above the rest and how our comprehensive range of ecology services can benefit you.

Direct and rapid access to experienced forensic scientists

Top-level industry experts are at your disposal. Including Royal Anthropological Institute (RAI) accredited forensic anthropologists, as well as scientists accredited by the Chartered Institute of Archaeologists (CIfA), who've worked on some of the most high-profile cases in the UK and abroad. They can provide forensic advice and expertise 24 hours a day, 7 days a week. Or we can rapidly deploy them for scene attendance and forensics examinations.

The depth of our collective knowledge and experience makes us world-beating and is further bolstered by our extensive range of services.

Every ecology service you need in one place

Most cases that require ecology forensics, such as disaster incidents or homicides, are multi-dimensional. Requiring a range of services to help progress the investigation. We've got you covered with our extensive selection of ecology disciplines, led by our experienced and dedicated experts.

Our headline fields include:

Anthropology

Accurate bone identification and human remains biological profiling

We can rapidly identify whether bones are of human or nonhuman origin to help close scenes or progress an active investigation. If the bones are identified as human we provide advice on the best way to proceed, whether that's scene attendance or radiocarbon dating (analysing carbon in the bones to see how old they are). We can also analyse human remains to generate a biological profile, as well as record any individuating features on the bones and teeth which might assist with positive identification, including past injuries and pathological conditions.

Archeology

On-scene attendance and expert opinion of critical evidence

We can attend crime scenes and expertly advise on the search, location and recovery of human remains and other types of evidence, such as weapon cachets. All evidence and information is gathered and securely recorded. Maintaining information integrity when used in a court of law. We can also analyse ground disturbances, using methods like historical mapping, to determine important information such as a timeline of any changes. Helping to validate or discount areas, eliminating unnecessary work.

Entomology
Expert study of insects and insect life cycles
We can collect and interpret insect evidence at either crime scenes, post-mortem examinations or the area surrounding a body of interest to estimate time since death. Taking into account environmental factors to deliver precise results. Our entomologists can also analyse insect evidence to reconstruct events between death and discovery of remains. As well as advise on the packaging and storage of living insects when preservation is crucial to the outcome of a case.

Botany
Rapid collection and analysis of plant evidence
Our accredited botanists can help link people to scenes (or scenes to vehicles or objects) via the collection and analysis of plant matter which could be used as trace evidence. While our knowledge of individual plant growth rates can help to both identify and eliminate areas of suspicion. And vegetation surveys can assist with the identification of track marks indicating routes into or out of crime scenes.

This is scratching the surface of our ecology services. We also specialise in:

- **Limnology** - identifying the presence of microscopic algae (diatoms) to answer precise investigative questions, such as the location of drowning or movements of a body.
- **Palynology** - pollen and spores recovery and analysis to provide information on suspect activity and as a means to direct searches in cases such as "no body" murders.
- **Soil examination** - identifying soils as trace evidence that can provide links between suspects and crime scenes, or to create environmental profiles and assist in the direction of searches.

Our ecology service is fully-managed and tailored to your requirements. Expedite rigorous ecology investigations to help progress or conclude your case with easy access to the right expertise.

Driving the scale and quality of our ecology services
We're continually growing our services, limnology being a recent example of this commitment. Making sure you benefit from advancements in ecology forensics and have access to the biggest suite of services on the market.

As criminals become wiser to standard evidence types used by police forces, ecology is becoming even more critical to highlight trace evidence and identify human remains, among its other invaluable uses.

Leaning on external experts to support forensic investigations is one effective solution. We also offer bespoke training, covering all ecology forensics disciplines, aimed at crime scene investigators, managers and other police professionals. Develop your internal team to make sure the collection, analysis and preservation of ecological evidence is done efficiently and correctly.

Connect with our accredited forensic scientists.
Or learn more about our bespoke ecology training options by contacting us on +44 (0) 1235 774870 and **science@forensic-access.co.uk.**

FORENSIC ACCESS

Do You Need to High-Speed Test Generator Rotors?

by Ben Adams, a Senior Associate and electrical engineer at Hawkins.

For the past few years, I have convened a working group within CIGRE, or *Conseil International des Grands Réseaux Electriques,* translated as, "Council on Large Electric Systems." I aim to provide a guide to stakeholders, such as power plant operators and other interested parties, as to the requirements to high-speed test (electrically and mechanically) rotors, following any rotor maintenance carried out. In 2022 a brochure was published[1] by the working group with the input of generator specialists around the world from operations, Original Equipment Manufacturers (OEMs), third-party service providers, and consultants.

The subject of high-speed balancing generator rotors can be contentious, and the practice varies across the world. In Europe, with relatively easy access to high-speed test facilities, the default position is generally to carry out the testing. However, in Southeast Asia, Africa and South America, where there are fewer (if any) facilities, a risk-based approach is taken more often; this approach does *not include* high-speed testing. Therefore, an obvious imbalance exists between the economic impact of sending a rotor away for potential months, versus returning the rotor to service quicker without such testing.

Thus, the CIGRE brochure was designed to provide not only engineers, but also other stakeholders such as OEMs, service providers, consultants, insurers, and loss adjusters, with guidance to assist them with their decision making. The guide also offers support and methods to mitigate the risk if high-speed testing is not carried out.

How Are Electrical Generators Tested?

The electrical generators used in large power plants are formed of two major components:

- ***The Stator***—the static coil in which the electricity is generated, and is connected to the grid
- ***The Rotor***—the rotating electromagnet, which is spun by the turbine and 'excites' the stator

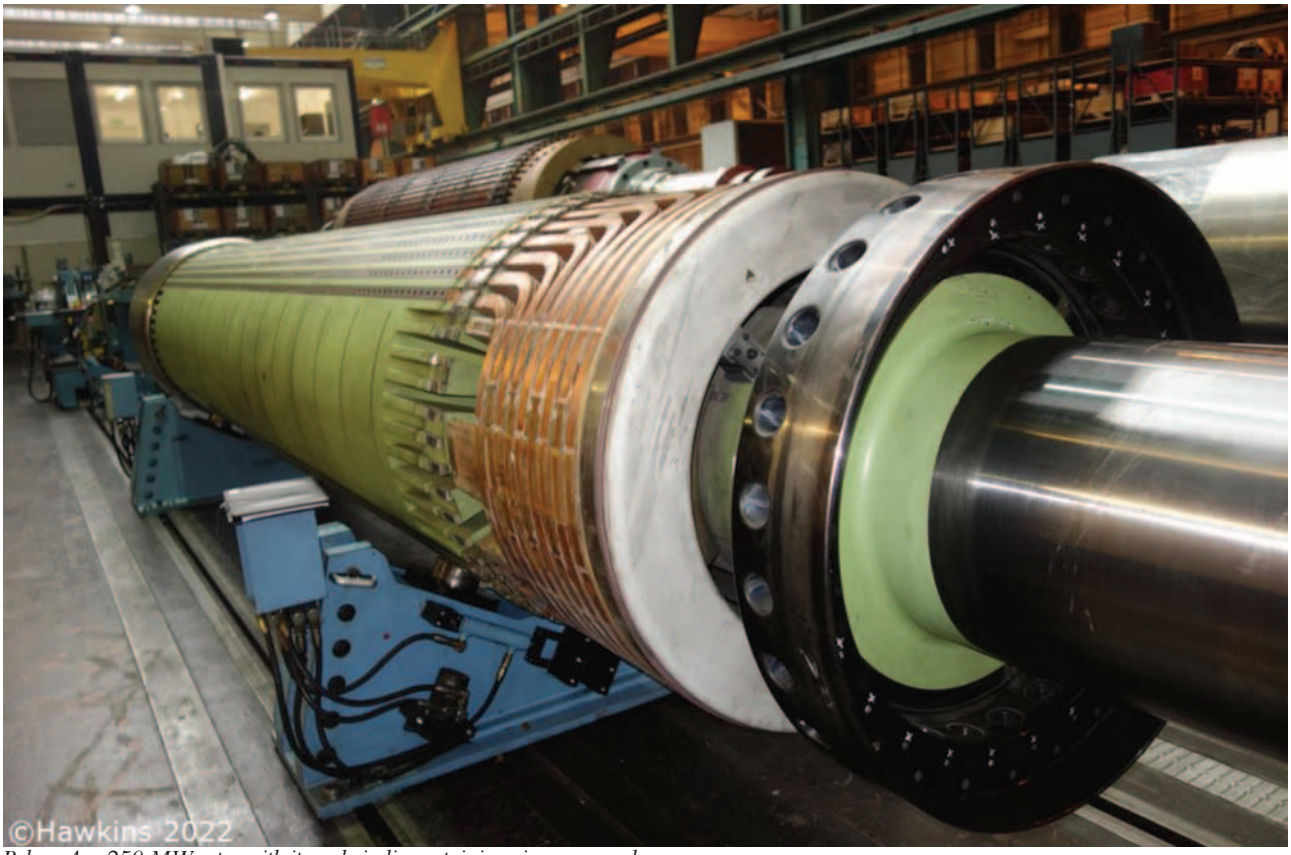
On large generators, a rotor can be cases up to 200 tonnes and spin at the grid frequency of 3,000 or 3,600 revolutions a minute.

Most large turbo generators are constructed with a large, forged steel rotor body. A copper winding, constructed of many turns of copper strips, is wound into slots machined along the length of the rotor's body. The copper is held onto the forged rotor body by wedges. At the end of the rotor, in a region called the *endwinding*, the copper is held in place using steel rings known as *endwinding retaining rings*.

With such large components spinning at high speeds, it is important that all parts of a rotor are carefully, mechanically balanced to prevent excessive vibration during operation. All components must be mechanically sound, so as not to fail due to the high centrifugal forces.

The balancing is carried out in specialist balance facilities (usually known as *balance pits, spin pits or balance bunkers)*. Such facilities are few and far between, generally at limited manufacturing locations around the world. These sites have the facility to:

- Spin the rotors up to a high speed (usually operating speed +20%);



Below, A ~250 MW rotor with its endwinding retaining rings removed

• Carry out electrical testing at speed;

• Contain any parts of the rotor, in case of catastrophic failure during a test.

In recent years, the number of these balance facilities around the world has reduced, as the various manufacturers have consolidated and sought to cut costs. As part of putting together this technical brochure, I produced the below map of both open and recently closed high-speed testing facilities. It should be noted that these facilities will have varying capabilities. The largest generator rotors will have very few locations which can accept them.

Whenever any maintenance is carried out on rotors, power plant engineers are often faced with the difficult question of whether the rotor should be rebalanced or retested at high speeds. Though retesting is generally understood to be a better, lower-risk option, there can be substantial operational and financial pressures against doing so. Depending on the rotor's geographical location, the decision to send a rotor for high-speed testing and balancing may require months of transport to and from a facility—on top of any time taken for the testing to occur. While a generator is out of service, business interruption can in be the region of $250,000 USD a day, or even higher.

In the manufacture of high-speed turbine generators, the rotors undergo a number of tests to prove their integrity, both mechanically and electrically. The rotor is monitored from standstill to running speed and overspeed as well as tested from 'cold' to operating temperature, to ensure that it does not produce high vibrations (which limit its operation in service). These tests are carried out to prove that:

• All the components of the rotor have the mechanical integrity to operate within the full speed range expected in normal operation;

• The vibration levels of the rotor are acceptable through its run-up, at both rated speed and overspeed;

• Vibration levels remain within acceptable levels;

• The rotor is thermally stable (i.e. the vibration levels stay within acceptable levels as the rotor heats up), and the thermal stability is repeatable;

• The integrity of the insulation is maintained throughout the speed range (i.e. there are neither any rotor ground faults, where a short forms between the winding and the earthed rotor body, nor any interturn faults, where a short forms between two or more turns of the winding).

These tests are carried out at the factory to prove the integrity of the equipment, ensure it is properly balanced and limit the risk of failure at the plant. If the vibration is excessive, balance weights can be fitted, and the rotor retested. This work is often referred to simply as "balancing".

Repair work or maintenance on rotors outside of the original manufacture may not be carried out at a workshop with a high-speed facility, and in some cases, such work may even be carried out on-site. If high-speed testing is required, it may add months to an outage program. It is quite usual for engineers to face pressure to reduce outage times and costs and to consider whether high speed testing of the rotors is necessary.

Potential Issues and Repairs

Work on a generator rotor can take many forms, from removal of the retaining rings to a full rewind of the

Above, Locations of high-speed balance facilities (red showing recently closed facilities)

rotor winding with new copper, as well as potential mechanical modifications to the rotor forging.

In rotors, the voltage is generally low, in the range of a few hundred volts, with maybe just a few volts between individual turns. However, the high current will create a large amount of heat (over a megawatt of resistive heating in larger generators).

The major challenge for rotor insulation systems is the mechanical complications caused by several constraints:

1. When operating at speed, the rotor needs to be finely balanced to prevent high vibrations;

2. As the rotor heats up, internal components can either move through thermal expansion or become stuck if their slip planes do not allow for free movement;

3. If there are any electrical shorts between the turns of the winding, the resistive heat created will not be distributed throughout the rotor equally;

4. If the rotor heats unequally, the thermal expansion of the steel will cause the rotor forging to bend slightly (into a banana shape) and create higher than normal vibration.

It is quite common for repairs to be made on a rotor, and for it to pass all the electrical tests without problems in the factory at standstill, but once the rotor is up to speed, faults can appear. This can be for a variety of issues, but usually where the insulation is punctured under centrifugal forces.

Two types of electrical fault can occur: an interturn fault, and an earth fault. Interturn faults are much more common and may have little effect on the operation of the machine, although some faults will lead to high vibrations. If the vibration levels are high enough, they may limit the operation of the generator and may require the rotor to be rewound. In many cases, interturn faults can either be managed, or sometimes balanced out in situ, at the power plant.

However, it is not recommended to operate the generator with a rotor earth fault. One earth fault is not too problematic, as a single earth fault means that there is no circuit and current will not flow. However, should a second earth fault occur, a large detrimental current can flow through the rotor body or retaining rings and cause substantial, potentially irreparable damage.

Conclusions

The CIGRE brochure concluded that the lowest risk option will usually be to have the rotor tested for electrical integrity and mechanically balanced at a high-speed facility.

High-speed and overspeed testing have several benefits including: checking the mechanical integrity of the equipment to operate at speed; ensuring that the rotor is balanced and remains stable throughout the operational envelope of the generator; and checking the electrical integrity at speed.

A compelling financial argument to avoid such tests can still be made due to: the relatively difficult access to a high-speed facility; the potential transport issues (distance, handling, and customs implications); the cost of the testing; and the time taken for the work. However, if the decision is made not to carry out a high-speed balance, along with electrical and overspeed testing, there are several potential problems that may occur, such as electrical faults or high vibration, which can only be detected when operating at speed. These can be mitigated through the following:

- Using competent contractors;
- Maintaining the appropriate working environment;
- Cleaning to excellent standard / excluding foreign material during work;
- Regular testing where possible;
- Robust QA and QC throughout;
- Consideration of the potential to attach weights for balancing at the site after installation

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Ben Adams is a Senior Associate and electrical engineer in Hawkins' London office. Prior to joining Hawkins, Ben worked for several power companies providing technical support on 'heavy' electrical equipment, including failure investigation of generators, transformers, motors and switchgear across the world.

www.hawkins.biz

Coroner's refusal to issue a Prevention of Future Deaths Report following death in prison custody inquest was lawful

R (Diarra Dillon) v HM Assistant Coroner for Rutland and North Leicestershire [2022] EWHC 3186 (KB)

An inquest touching upon the death of Eshea Nile Dillon, which occurred in prison, led to the family applying for a judicial review of the coroner's decision to not issue a PFD report.

Mr Dillon experienced breathing difficulties in his cell and called for assistance by pressing his cell bell. A prison officer provided advice but did not enter the cell as he was unaware that he was able to without another officer present.

The jury returned a narrative conclusion and did not conclude that anything done (or not done) by prison officers contributed to Mr Dillon's death. The coroner heard evidence in relation to staff understanding of emergency procedures, first aid training and reaching prisoners in emergencies and decided not to make a PFD report in light of the MOJ's implementation of actions (spot checks to be done to ensure staff understanding on those points) would address those risks and the threshold for issuing a PFD report therefore was not met.

Following a judicial review, the Court held that the Coroner had not been irrational in refusing to make a PFD report. She had been entitled to consider the Ministry of Justice's implementation of actions required to address risks relating to prison officers' understanding of emergency procedures. This included the introduction of spot checks and a new Compact. The Prison Service's 'commitment to take action' was also a factor that the Coroner was entitled to take into account in deciding that the threshold and formality of a PFD report had not been met.

The court endorsed the Chief Coroner's Guidance at paragraph 4, which states that PFD reports should (among other things) be meaningful and, wherever possible, designed to have a practical effect.

This case demonstrates the practical effect of the discretionary nature of PFD's and the importance of interested persons answering questions on risk reduction, management and mitigation.

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Building Services - The Soul of Buildings

by Rose Campbell – Forensic and Expert Services Manager, CEERISK Consulting Limited, UK

Buildings require special services such as mechanical, electrical, and public health (MEPH) systems to bring it alive. These comprise of lighting, telecommunications, heating, ventilation, building and energy management, smoke ventilation, sprinkler, fire alarm, hot water, cold water, soil and rainwater systems to name a few.

The extent of Building Services is measured based on the percentage of the construction cost. For example, building services in hotels are 30-40% of the cost while in nuclear plants, this figure rises to 60-70% of the overall cost. Building services in hospitals account for 40-50% of the construction budget.

Costs are related to the specialised needs of each type of building. The NHS, for example, has complex requirements stemming from their specialised occupancy and human activities within. One operating theatre requires specialist lighting, comprehensive heating/cooling and sophisticated ventilation system to prevent bacteria growth and infections on top of the standby power supplies, medical gases and comprehensive audio-visual systems.

While all buildings require reliable power supply to operate, some, like hospitals, have critical power needs, which must be met through presence of redundant supplies and standby generators. To ensure that the essential power supply generator and UPS systems function as intended, allowing the occupants to carry on working, tests simulating "black building" scenarios to mimics a total power failure are carried out and overseen by building service engineers

Some industrial plants require specialised ventilation systems to operate properly. Pharmaceutical and electronic fabrication plants must meet strict cleanliness levels in addition to highly critical ambient temperatures. Therefore, HVAC systems are designed to provide the required environment for these plants to operate.

Building Service Expert Instruction

With the critical requirements of different buildings, comes the potential of failures that impact operations causing damage to contents and equipment and costly interruption of services. These failures and damages give rise to complex legal disputes involving technical interpretation of contract clauses as well as detailed analysis of incident circumstances. Here are few examples to consider.

Interruption of Services

CEERISK experts have investigated situation where a hospital has claimed for failure of critical infrastructure that powers essential services including ventilators and other life support machinery.

After attending site, as well as interviewing witnesses and studying commissioning reports, it was determined that the hospital modified the main distribution switchgear in a way that created a weak link such that a when a single fuse blew, the entire supply was interrupted.

This resulted in a dispute between a hospital and designer of the electrical system regarding the latter's responsibility to provide redundant connection to the hospital.

Even in situations where continuous access to a power supply is not necessary, disruption of power supply, results in costly business interruption. This can become a contractual matter involving the responsibility the electric utility and its obligation to maintain continuous and reliable power.

Construction Latent Defects

The variety of situations where electrical building services have failed are broad, ranging from defective electrical services installed in buildings by contactors, to defective electrical equipment provided by a manufacturer.

It is not always evident whether defects occurred during the construction phase, manufacturing of parts, or if it is the result of poor maintenance and abnormal operations of the building. Typically, to determine the root cause and establish liability of the responsible party, detailed forensic investigations are required. These can involve different destructive and non-destructive tests that can in some cases be both costly and time consuming.

Consequential Damage

In some cases, small failures of building systems lead to costly consequential damage to contents. In one case dealt with by one of our experts in the USA, failure of a pump in the HVAC system (costing $100 to repair) at a pharmaceutical plant caused temperature variations that led to the spoliation of over $12M worth of products.

A similar scenario at a pharmaceutical plant in Belgium, where failure of a switch in an HVAC evaporator failed and caused damage to over $10M worth of products. In that instance, the wiring of the

temperature alarm system was incorrect which prevented technical teams from being informed of the incident.

An earthing connection failure at a chip fabrication plant in Idaho, USA led to power quality anomalies causing damage to several very critical pieces of equipment and interruption of services. CEERISK experts investigating the incident determined that the installation defect caused the loss.

Instructing Building Services Experts

During the design and construction process, Building Services Engineers work alongside clients, architects, fire officers and building inspectors through the design, construction, testing and commissioning process to ensure that buildings are safe to be occupied by the public and comfortable to live in.

In the event of a failure in any of the systems, Building Service Engineers possess a close knowledge of the expectations of each system as they relate to the overall operation of the building. Because the problems that arise within Building Services can be specifically technically orientated, appointing Building Services Expert early can quickly highlight and solve problems, saving time and money.

"Whenever investigating a defect or failure of building services, it is more likely that the root cause involves multiple contributing factors that should be investigated by the expert," says Mamoon Alyah, MD of CEERISK. "The building services expert should have a broad experience and be able to evaluate multiple systems."

Issues related to root cause or other technical disputes require the appointment of a competent building services engineer to look into them, investigate root cause, sort through issues brough up by different parties and provide a detailed, clear and concise expert report to assist the court.

Simon Barrows, one of CEERISK's experts, observed that, "litigation typically centres around contracts, whereas the root cause is usually something technical."

"The Building Regulations state that Building Services Engineers must be brought in early to a building design programme to ensure buildings are energy efficient, sustainable and safe to occupy," Simon says. "I think that an expert should be appointed to a help with ADR providing assistance to mediate and solve a problem, obviating the need to enter into litigation."

In the experience of multiple CEERISK experts who have worked closely with different parties on legal disputes, it is in everyone's interest to consult the expert early in the process when it looks like there is a technical dimension to the dispute.

CEERISK Consulting is a global engineering firm that specialise in provide expert services to solicitors and corporations in matters involving engineering disputes. Headquartered in London, the firm has worked with leading legal firms in the UK, USA, Singapore and the Middle East. More information is available at **www.CEERISK.com**

What to Consider When Seeking a Timber Expert Witness

When a dispute arises with timber or wood-based products, whether it's a cosmetic defect, failure which leads to shorter than expected service life or to personal injury, it's important to consult an expert witness in timber to provide good, clear judgement on the case. ***Phil O'Leary****, Technical Manager at BM TRADA, explains what to consider when looking to appoint an expert witness.*

Timber, with its impressive environmental credentials, is becoming a popular material choice in many industries. We need look no further than the construction industry to see this. The demand for wood products is increasing rapidly across both the residential and commercial building sectors given the material's sustainability and carbon capture benefits. Moreover, it is fast to build with, and a study by MTW Research found timber frame housebuilding was expected to see a £70m increase in 2022, while the sector is projected to increase by over £150m by 2026.

However, the more uptake there is in the use of wood, the more opportunity for poor specification, utilisation or construction by unskilled or untrained operatives. In turn, arguments over accountability will naturally arise, and liability claims and cases are all the more probable, especially when wood is now being used on large-scale structures and developments and for an increasing range of products.

Indeed, there are many cases of timber failing to perform as designed or intended for various reasons. These range from roofs to floors, retaining walls to scaffolding boards. The latter has led to personal injuries and accidents, whilst others have often resulted in costly remedial works and prolonged delays in build programmes.

That said, the causes of failings in timber structures or products are typically triggered by a combination of one or more of the following: quality of material, poor design and specification, poor installation and erection practices, and workmanship.

Employing timber expert witnesses – what to consider

Given the significant impact and consequences of timber failures, determining who is at fault is often a crucial point when it comes to disputes. If disputes result in litigation, the importance of employing an

expert witness in timber is key. (https://www.bmtrada.com/timber-services/timber-expert-witness_)

At this juncture, there are a few key points to bear in mind. This includes having knowledge and experience in wood as a raw material, to wood processing and specification, through to familiarity with legal processes and service capability with investigation and document review. It's worth noting that this is a highly specialised field, with wood and timber experts with the appropriate understanding in these areas is few and far between.

All about experience

First and foremost is the aforementioned experience of working with wood. Even without taking into account human error with design and construction, wood is one of the most complex building materials in use. From hardwoods to softwoods and the various panel products such as plywood and particleboard, and the engineered solutions such as I-joists and cross-laminated timber (CLT), there are many different species and products which are in use today. Comprehending how these different types and categories work and interact is crucial in a dispute. A good understanding of European and UK Standards and product standards is also crucial.

In cases where expert witnesses are involved, often there will only be one or two experts that are appointed to provide their judgement on the case. This is typically one expert witness employed by each party, or one acting on behalf of both sides (an important point to know here is that an expert witness' duty is to the court, not to the party that appoints them). However, even with this, consider whether that expert that can call upon other timber colleagues who may have their own specialisms in timber and their professional experiences and opinions. For example, BM TRADA has experts in various fields of timber with many years of experience, who are members of various standard and technical committees both at National and European level, of whom can pool together to support in a case.

Also look at what resources the expert has available to them to help undertake any investigative works. For instance, laboratory examination and testing, and the resulting gathering of data and evidence, are often important to accurately determine the timber defects and causes. This is why BM TRADA holds samples of many wood species in its conditioned timber specimen library (also known as a xylarium) at High Wycombe, UK and has a dedicated Timber Technology Laboratory. This facilitates easier laboratory and examination, especially when looking at assessing not only rarer varieties of timber but also the construction and make up of products.

Using sight, on-site

As well as laboratory and personnel capabilities, often, site assessments will be necessary. Here, having an expert witness who has the right tools and instruments to analyse and assess defects, together with the know-how of where to look, is a major point of difference. Quite often, a timber expert witness will need to go to site and deploy their skill and experience in gathering evidence and data.

Being able to test for fungal decay and rot, wood preservation, condition of coating and finishes, strength grading of structural timbers, identify insect and causes of staining, and assessing detailing and construction of timber elements are also skills often required of a timber expert witness. Meanwhile, evaluating structural connections for strength and design is another facet of a timber expert witness' job.

Looking at legalities

While all of the above tests an expert witness' competency, something that cannot be overlooked during the selection process is their familiarity with the legal processes, and, most importantly, how they cope when cases go to court.

There are a number of proceedings prior to this stage. This includes document reviews, exchanges with opposing expert witnesses, and preparing Part 35 Expert Witness Reports to submit to court.

Should a case not be settled outside of court, expert witnesses will likely need to attend court and testify to statements made in their reports. At this point, having a professional with good detail orientation and the experience of handling these occasions is a must. As can be expected, any mistakes over statements when facing barristers can be very costly and will weaken a case, as well as undermining authority on the matter.

Where to look for an expert witness in timber

While times have certainly moved on from directories and there is an abundance of ways to search for an expert witness, quite often, the best starting point is checking the Expert Witness database. (wwww.expertwitness.co.uk) Beyond that, check that the expert witnesses you have shortlisted are part of The Academy of Experts, which BM TRADA is a member of. This is an independent professional society and accrediting body for expert witnesses.

By having an approved expert witness, grey areas on disputes and cases can be prevented, and parties can better understand if they have a good case to go to court or reach the settlements they are asking for.

For more about BM TRADA's timber expert witness services, please visit **www.bmtrada.com/timber-services/timber-expert-witness**

About the author
Mr Phil O'Leary

Phil has over 25 years of experience in the design, specification, structural grading, supply, installation and performance in service of timber, including 20 years of experience as an expert witness.

He also acts in expert determination and as an expert adviser. Phil has investigated and reported on diverse matters relating to timber, wood-based panels and associated products.

www.bmtrada.com

What is a Forensic Architect?

by Niralee Casson, an Associate at Hawkins & Associates

The definition of a forensic architect can vary between cases, companies and jurisdictions, similar to the role of an architect. The role and service provided also depends on the construction stage that expertise is sought. However, the overarching role of a forensic architect is to provide an independent, unbiased, expert opinion on an alleged defect or non-compliance involving a property.

Forensic Architect as Investigator

Pre-Construction

A forensic architect can provide pre-construction services. These can include assessing whether the design complies with planning laws, building regulations, fire safety and accessibility standards; and the quality and content of drawings produced by the design team, including construction information and specifications.

Post-Construction

The most common role for a forensic architect is to investigate when something has gone wrong in a building that is related to a design or construction defect. This requires assessing the adequacy of the design and construction information against the terms of the contract and the standards at the time of construction. It also includes determining whether the building had been built and maintained in accordance with that design information. The forensic architect can advise on remedial works and assist in establishing where design liability might lie.

Forensic Architect as Expert Witness

If a design or construction defect case is taken to trial or arbitration, a forensic architect can support a legal team in understanding the defect in question: its cause, design liabilities and the remedial works required. As architects often take on the role of Lead Designer, Contracts Manager and Design Coordinator on a project, a forensic architect can comment on standards of care, industry practices, procurement routes, consultant appointments and building contracts. A forensic architect is also well placed to provide an opinion on the performance of another architect, including their professional responsibilities. When looking for a forensic architect to act as an Expert Witness, their understanding of Civil Procedure Rules Part 35 and their overriding duty to the court is key to evidencing their independence and credibility in court.

Forensic Architect as Adjudicator

Adjudication

Many building contracts and consultant appointments include clauses that provide for alternative dispute resolution, such as adjudication. Where an adjudication is sought, the parties might agree to appoint a forensic architect as the adjudicator where an architect's skills are especially relevant to the dispute. This could be regarding the competency of an architect, or a dispute over the wider project process. A forensic architect is particularly suited to providing an opinion when construction contracts, multiple disciplines, or ill-defined terms (such as practical completion) are called into question.

Expert Determination

To support collaboration across the many roles in the construction industry, having an independent, unbiased, expert opinion can allow on-site issues to be resolved quickly. This can help reduce the delays caused by disputes that have the potential to impact tight construction programmes. At any point in the project, when a dispute arises, the parties can agree to an expert determination. Appointing a forensic architect to provide an expert determination can result in a fast and binding resolution of design disputes without the need for lengthy and expensive litigation.

Forensic Architecture or Engineering

At Hawkins, the Built Environment team spans multiple disciplines, including fire, civil and structural engineering, and architecture. Many of the team's investigators are multi-disciplined, such as our Civil Engineers who also investigate fires and who can carry out simple fire stop and spread investigations. We only allocate cases to those investigators with the relevant expertise, as shown in this example:

1. A fire breaks out in one fire compartment of a student accommodation block and spreads to several other compartments, causing extensive damage.

2. One of our specialist **Fire Investigators** will carry out the initial investigation into the root cause of the fire and who was responsible.

3. If the reason for the fire spread also needs investigation, the investigation will be handed over to an investigator who has fire stop and spread expertise, such as one of our **Fire Engineers** or specialist **Civil Engineers.** Some of these experts are also Fire Investigators, so no hand-off may be necessary, if they were the original investigator.

4. If costs of remediation and repair are recoverable, or being defended, a **Forensic Architect** may become involved in the investigation, such as to review contracts, appointments, design and construction drawings. A Forensic Architect can also assist in determining whether the defect occurred during the design of the detail or during the construction of the wall and who was responsible for the defect.

If the case is one of Professional Indemnity against an Architect, one of our Forensic Architects should always be instructed.

How can we help?

The Forensic Architecture team at Hawkins can navigate the complex information surrounding construction projects. Our areas of experience cover the wide-ranging architectural profession, including all construction stages, different procurement routes and the roles and responsibilities of the architect.

Our analysis can help insurers, building owners and legal advisers determine the cause and effect of, and liability for, defects in the design and construction of the built environment and support with ongoing mitigation of further risks.

About the author
Niralee Casson graduated from the University of Nottingham in 2011 with a bachelor's degree in Law. She then undertook her architectural studies whilst working full-time at Assael Architecture, an AJ100 practice in West London, culminating in qualifying as an Architect in 2019. Her background in both architecture and law led her to become a Forensic Architect with Hawkins in 2021.

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When Might You Need a Property Expert Witness?

by Stephen Hobbs, Partner and RICS Registered Expert Witness, Vail Williams LLP

An Expert Witness is someone called upon to provide an expert opinion on a matter in which they are recognised as an industry expert, in a dispute in a Tribunal or Court of Law.

But when it comes to property, what sort of situations might require an expert opinion in?

Stephen Hobbs, Partner and RICS Registered Expert Witness at property consultancy, Vail Williams LLP, discusses.

In almost all cases where I am appointed as an Expert Witness, I am either instructed by solicitors or end up working closely with solicitors, where they are acting for one of the parties to a legal dispute.

A dispute that requires an opinion from an Expert Witness can be about anything from medical negligence or claims of faulty workmanship, to disputes over the rental value or market value of a particular property.

When acting as an Expert Witness, the overriding duty is not to the client, but to the tribunal where we are giving evidence.

It is the solicitor's job to advocate for a particular point on behalf of a client, but it is the role of the Expert Witness to give a true and honest opinion which is independent and unbiased, and falls within the scope of our expertise, experience and knowledge.

But when might you need an Expert Witness in a property dispute?

Claims of property valuation negligence
If a lender loses money on a property loan, they might refer back to the valuation advice they were given when the loan was made.

An Expert Witness may be required to carry out a retrospective valuation to determine whether the advice given was reasonable, or whether it could have been negligent.

Claims of negligence can also arise against solicitors who provided a lender with legal advice when a loan is made, which subsequently turns out to be potentially negligent, compromising the bank's ability to rely on its security to recover the loan.

Disagreement over Market Value
Occasionally, Expert Witnesses are needed to provide independent property valuation advice when a dispute arises over the market value of a building or land.

This is particularly relevant when there is an 'option' to purchase at a later date, at a price to be determined in the future when market values have changed.

Similar disputes can arise between developers and landowners when a purchase price is agreed and contracts are close to exchange, but one party stalls due a dispute over market value.

Enhanced value and overage
Sometimes, when a landowner agrees a deal to sell land to a developer, they agree an overage agreement. This means that if the developer obtains planning consent for the site, a proportion of the enhanced value of the site would go to the landowner.

However, there can be disputes over the enhanced value of the site. These require the independent opinion of a valuation expert to assess – one way or another – whether the landowner has been paid the correct overage value.

Vail Williams works with a range of law firms to provide Expert Witness advice as part of their disputes. For more information or to discuss your requirements, get in touch.

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Stephen Hobbs is a partner and RICS Registered Expert Witness at Birmingham-based property consultancy, Vail Williams LLP.

He leads the valuation team in Birmingham providing advice to lenders, investors, developers, local authorities and private clients.

A recognised Expert Witness, Stephen is called upon to provide retrospective valuation advice to instructing solicitors and their clients and has appeared in Court and at Mediation proceedings.

Vail Williams

Police Custody - Was the Deceased Fit to Detain in the First Place?

by Joanne Caffrey, Expert Witness for Police Custody Procedures, Use of Force and Ligature Deaths.

Who has the right to authorise a detainee as fit to detain? If they die in custody, who is responsible for authorising fitness to detain?

Many custody sergeants (custody officers) believe that if the health care professional (HCP) signs a detainee as being fit to detain, that this alleviates the risk from them, and places liability onto the HCP. Wrong.

The Police and Criminal Evidence Act (PACE), and comparable for Scotland and Northern Ireland, is clear that only a custody officer can authorise detention, and continued detention, of a person.

A HCP can only 'advise' the custody officer regarding their belief the detainee is fit to detain. They cannot 'authorise' the detention of the detainee.

A common theme in the cases I get involved with can focus around this issue, whereby the custody sergeant, in their defence, state that the HCP signed the person as being fit to detain, so they continued to detain them. The detainee then died in custody or suffered harm and the custody sergeant is surprised that they are being held liable for this decision. So let us take a look at this specific police custody area of law and practice.

The role of the custody officer is one which requires a risk assessed approach to balancing PACE, Codes of Practice, the College of Policing Authorised Professional Practice, Human Rights, and other safer custody lessons learnt to provide an independent and impartial service to detained persons to ensure their rights, entitlements and welfare are safeguarded and progressed during their detention. This involves teamwork with civilian detention officers and health care professionals (HCPs) for a holistic and coordinated approach, for prevention of deaths in police custody. The sergeants, detention officers and HCPs are all employed to safeguard a detainee and have autonomy within their role, but the custody officer is the responsible person for compliance with detention laws and practices.

The National Decision-Making Model is commonly known as the NDM. The NDM is used throughout the College of Policing detention and custody guidance and is adopted within the police and prison sectors, throughout the UK. The NDM outlines a process for decision making. The first stage is to gather information and intelligence. This means taking into consideration information provided, but also being proactive with an investigative mindset to look for risk

factors. On the basis of the gathered information and intelligence, an officer will be able to make an assessment of the threat and risks faced, and consider the relevant guidance available.

If the information provided is inaccurate or misleading, and/or staff are not proactive looking for risk factors, this can result in an inadequate risk assessment with insufficient control strategies being deployed. This can increase the risk for death or serious injury in custody.

Intoxication is a significant risk factor. The Independent Police Complaints Commission (IPCC) conducted a review of deaths in custody for the period 1998/99 to 2008/09 titled; 'Deaths in or following police custody: An examination of the cases.' The report stated that: "Nearly three quarters of people in the sample (72%) were linked to alcohol and/or drugs" and "There were examples of individuals linked to alcohol, drugs or both who were not checked and/or roused as frequently as they should have been, and who were not adequately risk assessed because of their intoxication.

The Report of the Independent Review of Deaths and Serious Incidents in Police Custody Rt. Hon. Dame Elish Angiolini DBE QC, January 2017[1], states that for the HCP "Their primary function is to address the health and wellbeing of the detainee, their patient".

The IPCC investigation made the following comments:
• "The most common recommendations for improving force policy centred on officer training in first aid and liaison with" HCPs.

• Custody staff should have refresher training every 12 months.

• "Over the 11-year period the majority of deaths in custody were linked to alcohol or drugs, with both factors featuring in between 60% and 80% of the deaths."

• "Research going back more than 20 years has identified drunken detainees as one of the most common groups to die in police custody."

So, if research is showing that for now over 30 years, those intoxicated are the most likely to die in police custody, why do we still have failures to recognise and manage the risk of intoxication?

The Report of the Independent Review of Deaths and Serious Incidents in Police Custody Rt. Hon. Dame Elish Angiolini DBE QC, January 2017 states that:
• Section 3.5 "Police guidance on observation of detainees is set out in the College of Policing Authorised Professional Practice (APP) on Detainee Care. The guidance states: "Subject to medical direction, this (Level 2 observations) is the minimum acceptable level for detainees who are under the influence of alcohol or drugs, or whose level of consciousness causes concern"

• Section 3.6 "According to the submission to this review from INQUEST, non-compliance with observation procedures is 'persistent, widespread, and identified repeatedly over time and across numerous police forces'. They provide evidence of a large number of cases in which Coroners and juries have made findings and cite several detailed case studies where failures to comply may have been a factor in the deaths. Inquests have identified failings by custody sergeants, other police officers, civilian detention staff, nursing staff and Forensic Medical Examiners."

• Section 3.11 "There have also been failures linked to mistaking serious medical conditions for intoxication, or when there is intoxication, failing to recognise that it may be masking other serious injuries or conditions. This was recognised by the IPCC as far back as 2008 in its report 'Near Misses in Police Custody: a collaborative study with Forensic Medical Examiners in London', which recommended: "The message needs to be reinforced that apparent symptoms of intoxication may in fact be the result of an injury or medical condition, and that intoxication may mask or be found in conjunction with serious health needs."

The initial consideration is concerning should they even be detained at police custody? Some common principles exist which include:
• If a person detained for an evidential breath test registers more than 150 micrograms of alcohol the HCP must be called.

• If someone appears to be drunk and is showing any aspect of incapability which is perceived to be as a result of that drunkenness, officers should treat that person as drunk and incapable. Drunk and incapable individuals are in need of medical assistance in hospital and officers should call an ambulance immediately.

• If they cannot walk or stand unaided, they are to be treated as drunk and incapable.

From my knowledge and experience, the four levels of observations are commonly downgraded to avoid additional demand on limited staff. The higher the grading, the more time consuming on staff to keep entering the cell and conducting full and proper rousing procedures as per PACE. If a detainee has a degree of impairment from alcohol or drugs, the minimum requirement is for level 2 rousing checks for all persons under the influence and subsequent escalation depending on the perceived level of intoxication. A person considered to be heavily intoxicated will, therefore, require a level 3 or 4 observation regime. Intoxication plus risk factors will also increase the control measure for a higher level of observation. A detainee's unwillingness or inability to participate in a risk assessment should be seen as an additional risk factor. Alcohol and/or drugs are a poison in their own right and detainees can die of alcohol/drug poisoning and/or overdose.

The HCP should medically assess all detainees believed to be under the influence of drugs, regardless of the amount.

A minor level of intoxication will require the level 2 rousing procedure, which must be carried out as per PACE Code C, Annex H, whereby the detainee demonstrates within every 30 minutes the level of

suitable capability, as their condition may deteriorate as substances are absorbed and processed and by body. Dropping the hatch and listening to the sound of breathing, or receiving a grunt for the detainee does not meet the required standard. Detainees who are snoring may have an upper airway obstruction.

PACE is clear as to what must occur: "If any detainee fails to meet any of the following criteria, an appropriate healthcare professional or an ambulance must be called. When assessing the level of rousability, consider: Rousability - can they be woken?
• go into the cell
• call their name
• shake gently Response to questions - can they give appropriate answers to questions such as:
• What's your name?
• Where do you live?
• Where do you think you are? Response to commands - can they respond appropriately to commands such as:
• Open your eyes!
• Lift one arm, now the other arm!. Remember to take into account the possibility or presence of other illnesses, injury, or mental condition; a person who is drowsy and smells of alcohol may also have the following:
• Diabetes
• Epilepsy
• Head injury
• Drug intoxication or overdose
• Stroke."

Where a detainee fails to respond to rousing at the appropriate level, or if there is a decline in their condition or their level of consciousness (for example, if speech becomes incoherent), officers must seek immediate assistance from the HCP or transfer the detainee directly to hospital.

In addition to intoxication, there may be suspicions concerning mental ill health crisis. This would increase the risk to level 3 or 4 observations, if indeed they are detained. At section 4.2 of Dame Anglioni's report she records "Certain characteristics commonly feature in cases of death involving mental ill health in the police custody context. These include the ability of police officers to recognise and interpret symptoms of mental ill health, rather than attributing disturbed behaviour to drunkenness or drug abuse." And "Once physically restrained there is often insufficient or no appreciation of the acute medical vulnerability of the detainee and no focus by officers on the need to divert immediately such individuals away from police custody to appropriate emergency health facilities."

There may also be a tendency for some officers to consider that a detainee may be 'faking' a condition. However, police officers cannot afford to make such assumptions. It may lead to deterioration in a detainee's condition going unnoticed and prove fatal. Alcohol withdrawal syndrome can also be life threatening.

Although the HCP may be used for gathering samples as evidence, they are not part of the investigation team and their priority is the health and wellbeing of their patient. The custody officer should satisfy themselves that a thorough medical risk assessment has occurred, and consider the HCP's advice alongside other received information and risk factors.

PACE, Code C 3.9 states "The custody officer is responsible for implementing the response to any specific risk assessment" which means any recommendations provided by the HCP can be increased, to err on the side of caution. If the HCP recommends that a detainee is fit to detain, the custody officer can still decide to send the detainee to hospital or to gain a second opinion.

The custody officer must make sure a detainee receives appropriate clinical attention as soon as reasonably practicable: PACE Code C 9.5.

The custody officer must also consider the need for clinical attention as set out in Note 9C in relation to those suffering the effects of alcohol or drugs: PACE Code C 9.5B.

Whenever the appropriate healthcare professional is called in accordance with this section to examine or treat a detainee, the custody officer shall ask for their opinion about:
• any risks or problems which police need to take into account when making decisions about the detainee's continued detention;
• when to carry out an interview if applicable; and
• the need for safeguards:PACE Code C 9.13.

There is no standard risk assessment model for the British police service but risk assessment should be guided by the National Decision-Making Model (NDM). Having taken into consideration the information from arresting and escorting officers, the HCP, the detainee, suspected risk factors, police computer systems, guidance documents, force policy and legal requirements, the custody officer must make their decision concerning fitness to detain and what control measures are required. The decision rests with the custody officer, not the HCP. The visits and rousing procedures may be conducted by detention officers but the responsibility for the care and safety of the detainee still sits with the custody officer. They need to ensure that visits and rousing procedures are conducted as per the custody officer's directions.

The recommendation by the HCP that a person is fit to detain does not alleviate the custody officer of their legal responsibilities. As stated in the British Medical Association (BMA) guidance for healthcare of detainees in police stations it states "it is for the custody officer to determine whether a health care professional or a forensic physician needs to be called or whether the detainee should be given additional monitoring or observation."[2]

Returning to the original question which I posed: 'Who has the right to authorise a detainee as fit to detain?' this rests with the custody officer. The role of the

HCP is to advise the custody officer. The custody officer does not remove their legal responsibilities under PACE by following the HCPs recommendation that a detainee is fit to detain. They must act based upon all available considerations of the National Decision- Making Model.

Author

Joanne Caffrey, Expert Witness for Police Custody Procedures, Use of Force and Ligature Deaths.

With experience as an expert witness includes advising upon, approximately, 200 cases. These cases are distributed between England, Wales, Scotland, Northern Ireland, Republic of Ireland and the Isle of Man.

The cases involve custody sectors of police, prison, mental health, immigration, security staff and the children's sector. (Custody commences from the point of initial contact & arrest).

Joanne has provided services for a public inquiry, coroner, fatal accident inquiries, civil, criminal and misconduct cases. She has been engaged by legal teams representing the defence, and the prosecution/claimant. There has been repeat business from the police federation. police ombudsman agencies and the Crown office.

Main areas of service concern:
- Death during restraints
- Serious injury during restraints
- Ligature deaths

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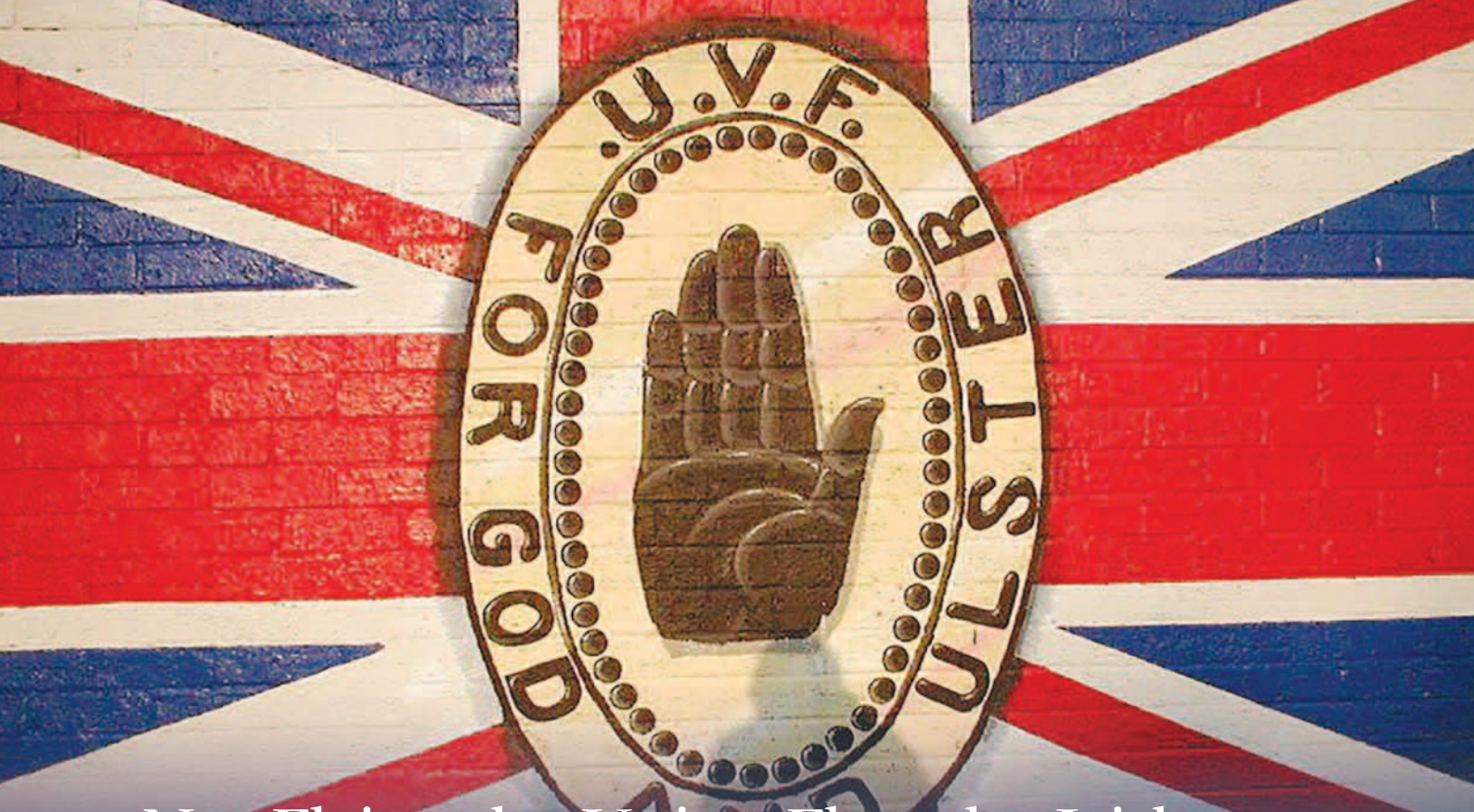

Not Flying the Union Flag, the Irish Language and the Northern Ireland Protocol: Are we Seeing a Potential Return to Loyalist Terrorism?

by David Lowe

Introduction

The focus of this article is an analysis of the potential for Northern Ireland's loyalist terror groups to return to political violence following their 1994 ceasefire and the 1998 Belfast/Good Friday Agreement (GFA) that effectively brought the 1968-1998 Irish Troubles to an end. While loyalist groups have maintained their ceasefire, during this period they have been active in organised crime, including drug trafficking and dealing that resulted in a joint operation between the Police Service of Northern Ireland (PSNI), An Garda Siochana (Irish police) and the UK's National Crime Agency to tackle this. As these are not political crimes, they have not been investigated by the PSNI's counter-terrorism unit and the UK's Security Service (MI5) as they have done with dissident Republican groups like the New IRA (NIRA). Although since the 1994 loyalist groups' ceasefire they have not been involved in acts of terrorism in either Northern Ireland or the Irish Republic, in 2022 they made it clear that they will no longer observe the GFA peace process. Since the decision by Belfast City Council to stop flying the union flag over Belfast City Hall in 2012 all year round, the last ten years has seen an incremental move by loyalist groups towards violence that could cross over into political violence. Should they do so, such activity could result in dissident republican groups like the NIRA carrying out revenge attacks on loyalist communities.

In assessing the current situation, this article examines how in the last ten years loyalist groups have become increasingly forceful in defending the territories their communities reside due to what they perceive as an erosion of their culture, history and political influence in Northern Ireland by analysing their response to the decision to stop flying the union flag over Belfast City Hall, the introduction of legisaltion that promotes the Irish language and culture and, of greater concern, the Northern Ireland protocol. The content of this article is part of a wider research project I am currently involved in in Northern Ireland on drafting a hate crime Bill and developing a wider strategy to safeguard those from being drawn towards paramilitarism and hate crime, with a focus on young people.

Loyalist Groups Defending Their Territory

Between 1966 to the 1994 ceasefire, loyalist paramilitaries were responsible for 997 murders, 75% of whom were civilian Catholics. This loyalist violence was underpinned by a hand painted slogan loyalist prisoners put up in jail during the Irish Troubles that said, 'Better to die on your feet than live on your knees in an Irish Republic'. The GFA, did not bring about a

diminution of loyalist groups like that seen on the republican side with the Provisional IRA. In December 2020 it was reported that loyalist paramilitaries have an estimated membership of 12,500, posing a 'clear and present danger'. Loyalists do not view themselves as a danger, rather they are 'the people of Ulster' and do not see themselves as terrorists or criminals, rather they see themselves as defending their territory from all enemies. Defending loyalist territory is an important issue with the rationale having echoes of the slogan of dying on their feet.

Geographical space has been flagged as a potential factor in radicalisation that includes 'places of vulnerability' and 'gateways' which can facilitate both exposure to extremist ideology and create and sustain social connections to people who endorse such ideologies. This can apply to all paramilitary groups in Northern Ireland, both dissident republican and loyalist, and, as seen in certain towns and cities in Britain, can arguably also apply to the influence of the far-right in relation to hate crime. It certainly applies to loyalist groups. Using the examples of two loyalist areas, the Shankill in West Belfast and the West Bank in Derry, both surrounded by nationalist/republican areas, it is very evident in these areas. Walking around Derry's city walls by the West Bank, one of the murals sums up how loyalists feel about their community, saying 'Londonderry West Bank Loyalists. Still under siege. NO SURRENDER'. Regarding the Shankill, it is a sectarian product of the militancy of the Troubles, especially because of its direct experience of republican violence. Republican violence during the Troubles spawned a paramilitary mindset in the Shankill against republican communities between which it is geographically hemmed. Post the GFA, this loyalist mindset is still present due mainly to what is seen as imprudent planning resulting in building houses that will be occupied predominantly by Catholics on land close to the Shankill that has resulted in the community's lack of confidence in mainstream local politics. This explains why housing segregation driven by paramilitary groups is rife in Northern Ireland, which is more prevalent with loyalist groups, who carry out punishment beatings and shootings on those within the community, they see as a threat.

At a Northern Ireland Committee meeting at Westminster in 2022, evidence from Northern Ireland's Committee in the Administration of Justice (CAJ) confirmed that because of their background people know it is not safe to move in and live in certain areas. At the meeting evidence was also submitted that people from minority and ethnic backgrounds were being 'severely impacted' by housing intimidation, leading the CAJ to say there is cowardice in public bodies and politicians not to call out the link between hate crime (both racist and sectarian) and the paramilitaries. The CAJ's evidence to Westminster's Northern Ireland Committee is a very rare official moment where paramilitary activity is linked to hate crime that goes beyond traditional tensions between republican and loyalist communities, and it is having a detrimental impact on those from minority and ethnic backgrounds living within these communities. While intimidation like that seen from loyalist groups above is traumatic for nationalists or republican sympathisers living in loyalist areas, at least there is a fall back of obtaining support from neighbouring nationalist/republican communities. It is worse for those from minority or ethnic backgrounds, for example Syrian refugees where some members of both republican and loyalist communities will see as them as the other taking over housing and possibly gaining employment at the cost of those unemployed in traditional communities. Apart from the PSNI, they have little support or protection within either community.

While it is accepted that to walk through areas like the mainly republican Creggan community in Derry with unionist/loyalist symbols or the Shankill with republican/nationalist symbols presents an obvious danger to personal safety, in November 2022 a positive move was made the Department of Justice to open the Flax Street security gate in the predominantly Catholic area of Ardoyne in North Belfast after being permanently closed for 30 years. Surrounded by Protestant communities, compared to other Catholic areas in Belfast, the Ardoyne is a relatively small community where the peace wall with the Flax Street gate was erected to provide safety for that community. It was decided that after being closed for 30 years, the Flax Street gate can open from 06.30-18.00 where the opening of the gate not only allows ease of movement for Ardoyne residents, it also ensures the residents of newly built townhouses and the Brookfield Mill major redevelopment will be dovetailed with the Ardoyne. Welcomed by the Ardoyne community, Democratic Union Party (DUP) politicians said there was alarm at this development adding that any changes to interface structure should take place with the consent of residents on both sides of the interface, not made unilaterally. The neighbouring residents of the Protestant Woodvale area had previously expressed their opposition to the Brookfield Mill development and the opening of the Flax Street gate. The DUP and the Woodvale residents' response reinforces the siege mentality and the loyalist perception on securing the defence of their territory. In relation to the loyalist groups, any programme or initiative to develop geographical areas that will result in the mixing of communities be it from traditional Catholic, Protestant, minority or ethnic communities will be an anathema to them as they see such moves eroding their control over communities, a control that allows loyalist groups to continue virtually unhindered with their organised crime activities.

Loyalist Groups' Response to Belfast City Hall no Longer Flying the Union Flag and the Irish Language Act 2022

This in addition to other political developments that loyalists claim and continually peddle within their communities the erosion of their culture. Using two examples, the first was the 2012 decision by Belfast City Council's policy committee to recommend the Union flag no longer fly over City Hall from 365 days a year, only 20 days for special commemorations such as the Monarch's birthday. This triggered sectarian violence during protests in December 2012 involving

up to 1,000 loyalists. The violent protests continued through December 2012 resulting in 40 police officers being injured, rioters arrested, live rounds fired in Belfast and Alliance Party premises being damaged. The flag dispute was seen as a lightning rod for widespread disaffection amongst loyalists and was exploited by the Ulster Volunteer Force (UVF). Stating this was a political decision designed to erode their culture, the UVF encouraged young males under the age of 18 years to join its youth wing, the Young Citizen Volunteers, who the UVF deployed in the violent flag protests.

The second example is the Identity and Language (Northern Ireland) Act 2022. Due to the impasse in 2022 between the DUP and Sinn Fein, as a Bill it failed to be introduced at the Northern Ireland Assembly in Stormont. Ironically the Act, sponsored by the Northern Ireland Office, went through its passage with the UK Government in Westminster receiving Royal Assent in December 2022. The two SDLP MP's, Colum Eastwood and Claire Hana supported the Act where Eastwood said he will use the Act as a vehicle to introduce cultural aspects of the New Decade, New Approach deal as they look to promote a 'New Ireland'. The Act does not solely introduce the Irish language, it also covers Ulster Scots, seen as a Protestant language that come to the northern Irish counties during the migration of Scottish citizens in the 1600's. The Act amends the Northern Ireland Act 1998, introducing section 78F(2)(a) that states everybody in Northern Ireland is free to choose, affirm, maintain and develop their national cultural identity and express that identity in a manner that takes account of the sensitivities of those with different national and cultural identities and respects the rule of law. In relation to Ulster Scots, section 3 of the Act adds section 78R to the Northern Ireland Act, where a Commissioner must be appointed with a primary role to enhance and develop language, arts and literature associated with Ulster Scots and the Ulster British tradition in Northern Ireland. Regardless of this, loyalists still see the Act as further erosion of their culture and as evidence that both Westminster and Stormont are pandering to the requests of republicans, in particular Sinn Fein. This dissension and fear is another propaganda element used by loyalists to potentially initiate violence.

The Northern Ireland Protocol: Return to Loyalist Terrorism Violence?

Perhaps of greater threat to the GFA peace process and an increase in loyalist violence is the Northern Ireland Protocol. Brexit caused an issue in relation to the border with Ireland resulting in a conundrum for politicians in Northern Ireland, the UK, Ireland and the EU, the Northern Ireland Protocol. Following the GFA, with both the UK and Ireland being EU member states the freedom of movement of people, goods and services applied allowing post the Troubles greater ease in crossing the border. However post-Brexit this has caused a problem as, along with the freedom of movement, EU customs law would only apply in Ireland and not in Northern Ireland. To ensure no hard border was formed, an agreement between the UK, Ireland and the EU was to place the border in the Irish Sea resulting in the anomaly that although part of the UK, Northern Ireland was still subject to EU customs law and the jurisdiction of the Court of Justice of the European Union, with goods coming over to Northern Ireland from Britain being checked at the ports like Belfast and Larne before entering Northern Ireland. At the time of writing this position has not been resolved and has polarised positions among Northern Irish political parties and communities.

When the UK applied to join the EU in 1973 (which was then known as the European Economic Community) the DUP opposed it. While the majority of Northern Ireland's electorate voted Remain in the 2016 Referendum, two thirds of the unionist/loyalist electorate voted Leave in the belief that leaving the EU would enable them to regain their sovereignty and oppose further integration between Ireland and Northern Ireland. The fact the Protocol is still in place, for loyalists and most unionists, it is seen as an issue that not only erodes their sovereignty but is a step to ending the state of Northern Ireland due to further integration with Ireland ultimately leading to unifying all 32 counties. Recent Northern Irish elections is beginning to show cracks in the unionist block as people in unionist communities are increasingly shunning unionist politicians, who they see as leading them into poverty and Protocol pessimism and are opting for either progressive political parties like the Alliance party or, of greater concern, into the arms of loyalist paramilitaries. Regarding the latter, during the centenary year of the creation of the state of Northern Ireland in 1921 under the Government of Ireland Act 1920, young males from loyalist communities carried out violent protests around the peace gate in Springfield Road and other parts of Belfast regarding their opposition to the Protocol as they felt unionist parties were not defending Northern Ireland's place in the UK, with working class loyalists feeling forgotten and marginalised. This is building on the loyalists' narrative that the rot set in after the GFA where Sinn Fein and its allies used the agreement to chip away at Northern Ireland, removing royal symbols, remove the union flag from Belfast City Hall and erect Irish language signs. As seen in the 2012 flag protests, once more loyalist groups recruited and used young people to carry out violent protests.

In March 2021 the Loyalist Community Council (LCC), a legal organisation that represents loyalist terorist groups the UDA, UVF and Red Hand Commando, wrote to the UK Prime Minister saying they were withdrawing its support for the GFA. Although the LCC's chairman, David Campbell, said the LCC was determined that loyalist opposition to the Protocol should be peaceful and democratic, there is the underlying, veiled threat that loyalist opposition may not always be through peaceful protest, as seen in the April 2021 protests. At that time, Billy Hutchinson, the leader of the Progressive Unionist Party (the UVF's political wing) said that while loyalists were angry, the

political process needs to take these fears away adding that in relation to the prospect of loyalist violence, '…it's not the time to rachet all this up'. The impasse in forming an Executive in the Northern Ireland Assembly at Stormont following the May 2022 elections, where the DUP is currently refusing to form an Executive by submitting a Deputy First Minister to Sinn Fein's First Minister, that the DUP says is over the Protocol issue adding it needs to be resolved before they will form an Executive. This has led the Secretary of State for Northern Ireland, Chris Heaton-Harris having to make decisions to overcome the impasse. Consideration is being giving to having another Assembly election at some time between January to April 2023. Another alternative is direct rule of Northern Ireland from Westminster, with one other consideration mooted being a joint rule between Westminster and the Irish Government in the Dail. The latter is a total anathema to loyalists and as a result, in November the LLC wrote to all the leaders of the unionist parties warning of 'dire consequences' should joint rule of UK and Irish governments be imposed on Northern Ireland. This led to Billy Hutchinson saying that tension among the loyalist communities is greater than at any point since the 1994 ceasefire, adding the tension is real and should not be ignored. Loyalist blogger, Jamie Bryson sees the Northern Ireland Protocol as a powder-keg situation saying the Irish Sea border should not be tolerated as it results in an economically united Ireland causing further erosion of unionist/loyalist culture and sovereignty.

In meetings I had with unionist party leaders (except the DUP who did not reply to my request), the leaders raised two main themes. One was they were convinced that joint rule of Northern Ireland by the UK and Irish governments would not happen, with Billy Hutchinson saying he did not want to see violence over this issue, adding that politics needs to work and can only be done if the UK government listen to the tension. The second was that the loyalist groups do not currently have the capability to reach the level of violence they did during the Troubles and if there was violence, it would be like that carried out during the 2021 protests.

The threat of a return to terrorist activity by loyalist groups emerged in March 2022 when two suspected UVF members hi-jacked a lorry at gunpoint and forced the driver to drive a device, he thought was a live IED, to Holy Cross church in north Belfast, close to where the Irish Foreign Minister, Simon Coveney was speaking at a peacebuilding event. This forced Coveney to abandon his speech and leave the area immediately, although it was later found to be a hoax device. On 20 November 2022 four East Belfast UVF members were arrested and charged with possession of a firearm with intent to endanger life following a PSNI operation where they seized eight handguns and three pipe bombs. While the March incident can be perceived as a stunt making a statement of their intent, albeit a dangerous intent, the November arrest of UVF members reveals that loyalist groups do have the capability to carry out terrorist acts. It is worth noting the PSNI did not charge the four UVF members with terrorist offences such as planning or preparing terrorist acts as it was part of an investigation into criminal activity linked to drug trafficking and dealing. It does reveal that loyalist groups still have access to both firearms and IED's should they wish to carry out a terrorist attack. Following the bomb hoax in March, terrorism is a potential move loyalist groups could take. No doubt loyalists are monitoring political moves linked to governance of Northern Ireland from the Dail. In Fine Gael's November 2022 Ard Fheis, the then Irish Tánaiste, Leo Varadkar stated the Irish government needs to engage more with all communities in Northern Ireland, adding the current stalemate at Stormont is 'not a realistic option'. Due to the coalition agreement with Fine Fael, on the 17th December 2022 Varadkar became the Taoiseach. Clearly Varadkar will look to support moves over setting up an Executive at the Northern Ireland Assembly and in dealing with the Protocol. As seen with the Coveney incident in March 2022, loyalist groups will see this as interference in Northern Ireland by the Irish government resulting in further erosion of their sovereignty, potentially triggering loyalist groups to return to terrorist violence, as indicated in the LCC's letters to unionist party leaders.

Conclusion

Both the loyalists and dissident republican groups are exploiting the current political and socio-economic conditions to influence and recruit young people, posing a threat to programmes currently in place to safeguard people, in particular young people from being caught up with the paramilitaries and hate crime. Dissident Republican groups have been involved in many terrorist acts post the GFA since 2009, including the murder a PSNI officer in 2011, a prison officer in 2012 and a journalist, Lyra McKee, in the Creggan area of Derry in April 2019, riots in the Bogside, Derry in 2018 and 2019, where NIRA encouraged young people to get involved. More recently, in November 2022 NIRA varied out an IED attack on two PSNI officers in Strabane and, again in November 2022, forcing a delivery driver at gunpoint to deliver an IED outside Waterside police station in Derry. While loyalist groups have so far eschewed carrying out terrorist attacks, as seen above, the threat is there, and that threat is real. As stated, during the Troubles many loyalists attacked civilian Catholics and in defending their territory it is not inconceivable that loyalist groups return to this strategy. If they do, dissident republican groups do have the capability to respond in kind. This situation and the Northern Ireland protocol issue is not something many in Britain should see as a minor, irrelevant issue happening across the Irish Sea that is of no or little consequence to those living in Britain. If there is an escalation in terrorist violence in Northern Ireland it could increase dissident republican groups' capability to do what they did during the Troubles and start a terrorist campaign in Britain, mainly England.

Dr David Lowe is a retired police officer and is currently a senior research fellow at Leeds Law School, Leeds Beckett University researching terrorism & security, policing and criminal law. He has many publications in books and journals in this area including his recent book 'Terrorism Law & Policy: A Comparative Study' published by Routledge in 2022. David is an expert panel member of the UN's UNESCO chair on radicalisation and extremism and is currently involved in two main projects one in Oldham regarding the recruitment of young people by Islamist and extreme far-right groups and one in Northern Ireland assisting in the drafting a hate crime Bill, along with a strategy to safeguard young people from being drawn towards paramilitary activity and hate crime. David is regularly requested to provide expert commentary to UK national and international mainstream media on issues related to his research areas and he provides an expert witness service. **(Email d.lowe@leedsbeckett.ac.uk)**

'I Thought it Meant 'OK': Non-Verbal Communication and the Potential Link to Right-Wing Terrorist-Extremist Activities

by Julia Jones, Leeds Beckett University

Introduction

When verbally communicating with others, it is often the case that non-verbal cues, such as the use of the hands, are employed to enhance or emphasise the message that is being communicated. The way in which we use body language when speaking may even help us to remember things, or can potentially, even change the information retained and received by an audience. Non-verbal communication makes up most of the interpersonal communication, with a claim to be four types:

1. aesthetic communication,
2. physical communication,
3. signs,
4. symbols of communication.

This article will focus on physical communication and will argue how the clarity and strengthening of laws pertaining to terrorism and extremist activism should be considered. As interactions become more sophisticated when we apply a technological lens, it is important to note and consider how non-verbal exchanges such as 'simple' hand gestures, are used with no concrete legal instruments to counteract, or outlaw their use, at least in the UK context.

Understanding Gestures

It is perhaps assumed that when communicating, gestures are universally understood. This seems not be the case. For example, the 'thumbs up' sign is seen in some cultures as a 'job well done', however, the same gesture in Australia, Greece or the Middle East means 'up yours' or 'sit on this'. Another example is the crossing of the fingers. In Britain it is associated with wishing someone good luck, although the same gesture in Vietnam is believed to represent female genitalia.

According to the Anti-Defamation League (ADL), some gestures and haircut styles have been used or adopted by different extremist and terroristic movements. An example of this is Dylann Roof. A white supremacist, Roof killed nine worshippers in an African American chapel in Charleston, South Carolina in 2015. His 'bowl' style haircut was used to create an 'avatar' for extremists on the social media platform 'Gab' who called themselves the 'DC Bowl Gang'.

Regarding hand gestures, it is important to consider the place of vulgar gestures. In 2016 The Office of Communication (Ofcom) published a guide that summarised views of participants in research on the acceptability of words and gestures that may cause offense on television and radio. Within this guide, 148 words and gestures were identified as potentially offensive and considered on a scale between 'unproblematic' and 'strongest'. Of these 148, six were classified as 'gestures' ('blow job', 'Iberian slap', 'Middle finger', 'Two fingers', 'Two fingers with tongue (cunnilingus)' and 'wanker'). It is submitted where there is a clear directive on what some gestures mean, other different factions are free to use them as they see fit, meaning some gestures have a distinct connotation alongside a clear understanding of level of acceptability. There are other gestures however, where parties may deem them acceptable and others unacceptable.

Understanding Right-Wing Extremist & Terroristic Gestures

Different forms of non-verbal communications have been adopted by different groups to communicate with each other and avoid prosecution. Convicted right-wing extremist terrorist Brenton Tarrant who carried out the terrorist attack on two mosques in Christchurch, New Zealand killing 51 Muslim worshippers, used a symbol during his New Zealand court appearance signalling 'White Power'. This gesture is similar to the signal of 'OK' and dates back to the 17th Century with a meaning that things were alright, consensual and approved. In 2017, a 'hoax' okay gesture was made by a member of the online platform '4chan' to signify a hate sign – with the 'W' formed by the outstretched digits and the 'P' formed by thumb and forefinger as meaning 'white power'. This was successful in turning a general sign of acceptance into a potential connotation synonymous with the far right, particularly if it is made below the waist. There seems to be little legal actors can draw upon when communications are non-verbal that are interpreted in different ways by various people – signalling to the polysemic nature of signs, slurs and symbols.

The Norwegian neo-Nazi right-wing extremist Anders Breivik who in 2011 detonated a van bomb outside the Norwegian parliament in Oslo killing eight people, then went on a killing spree, shooting and

killing 69 participants at a Workers' Youth League Camp on the island of Utoya, gave a Nazi salute during his parole hearing in court earlier in 2022 signifying his support for the Nazi regime. In the UK neo-Nazi and National Action member, Jack Renshaw, who was convicted for planning a terrorist attack on the UK MP, Rosie Cooper in 2019 also gave the Nazi salute whilst being escorted from the courtroom after being sentenced.

The Nazi (or Roman) salute is synonymous with the glorification of Adolf Hitler and the 1933-1945 Third Reich, although its origins are thought to originate from Jacques-Louis David's 1784 painting, The Oath of the Horatii. The gesture was so popular at the time, a similar pose was adopted for the Olympics and was first noticeably used in 1921, with the difference being that the hand is raised more to the side rather than the front of the body. The Olympic salute caused issues in the 1936 Berlin Olympics when the Austrian team greeted teams with the Olympic salute; it was not given as recognition of the Nazi regime.

Legislation

The legal position in the UK seems a difficult one for authorities to navigate. There are two options for the police to use. The first is the Counter Terrorism and Border Security Act where section 1 amends section 12 Terrorism Act 2000 by introducing section 12 (1A) that attempts to encompass the digital age and prohibits the public support of expression or belief that someone may be part of, or encouraging support, for a proscribed organisation. This support could be in the form of an item of clothing, a flag or an emblem which could encourage terrorism or support for terrorist behaviours if collected or viewed by others. For example, National Action member Jack Coulson was convicted of having a terrorist handbook (having previously being convicted of making an explosive) in 2018 and 'boasting' how he wanted to kill a female MP. A photograph shows Coulson's bedroom wall covered in right-wing and Nazi symbols and him wearing a Nazi uniform.

The Counter Terrorism and Border Security Act brings about complexity when it comes to gestures because they are not covered by the legislation. On the 6th of June 2020, a petition was raised, calling for the introduction of a law on making the use of Nazi symbols and salutes punishable by decree, however this petition was closed on the 6th of February 2021 after receiving 3,432 signatures. The legislation was intended to be like the German Strafgesetzbuch (Section 86a) which bans 'flags, insignia, uniforms and their parts, slogans and forms of greeting' associated with political parties they consider unconstitutional, or surrogates of such organisations. Section 86a additionally prohibits symbols that could be mistaken as being banned symbols (because they are so similar); these are therefore also banned.

If the UK implemented legislation like the German Strafgesetzbuch, there are important factors to consider. The first is its counter-productive effects. By highlighting banned symbols, it might provide a message to supporters the importance of those symbols and consequently, make them more 'valuable'. Additionally, authorities would have to consider each individual case on its own merits. For example, when arresting Nathan Worrell, the police found pieces of paper with 'offensive matter' written on them as well as fireworks, a candle with a fuse wire wrapped around it, match heads, three volumes of the book 'The Black Book on Improvised Ammunitions' and a copy of 'The Black Book of Arson'. It could be easy to suggest that each of the items seized were relatively harmless, however by putting the evidence together, the jury found Worrell guilty of racially aggravated harassment and possession of articles for use of terrorist purposes.

The second piece of legislation authorities can draw upon is Section 4a (2) Public Order Act 1986 (an offence of using 'any writing, sign or other visible representation which is threatening, abusive or insulting'). Application of this offence potentially requires video evidence to prove the 'visible representation' because it would theoretically 'need to be seen to be believed.' What makes this problematic is how this could be always realistically possible when a gesture could take less than a second to communicate.

Regarding gestures at football games, in 2015, a Middlesbrough fan, Goult, was convicted of making 'monkey gestures' at black players during a match between Middlesbrough and Blackburn Rovers. At Teesside Magistrates Court he was found guilty of two public order offences, one of which was 'racially aggravated'. Likewise, in 2020 a Wolverhampton Wanderers fan, Josef Smith, was found guilty of using racially aggravated, threatening or abusive behaviour, following the curling of his fists 'under his armpits in a chimp-like gesture'. He was banned from matches for four years, fined £800, ordered to pay £600 in costs and a £50 victim surcharge. In 2022, a Burnley fan was arrested for 'appearing to perform a Nazi salute' during a football game. It is unclear what the outcome of this investigation was, however, Toby Porter, a reporter for the journal Jewish News, described this incident and how away fans attending games at Tottenham Hotspur's ground in north London gave Nazi salutes due to a number of Tottenham's fans associated with the Jewish community. He confirmed the arrests were made at football grounds on suspicion of 'a racially aggravated public order offence' under the Public Order Act 1986.

Although demonstrating how current legislation can be used, it is unclear whether the gesture itself is enough to secure a conviction. By legislating against the communication of offensive gestures towards others opens a minefield of difficulties, making the process of implementing that legislation very difficult. In 2013, BBC News explained how potential terrorists are aware of leaving a digital footprint, where they could be identified and traced before achieving their aims. The article expresses how Sim cards, 'dead drops' (dropping off packages for collection), emails

and SMS text messages, social media chat rooms and gaming and USB sticks are used for hostile communications where steganography is applied to hide messages within messages, be they Gifs or Jpegs.

Final Thoughts

There is a need for further research into gestures used for terrorist purposes especially when used to identify each other or to encourage support for terrorist groups, like the far-right and the extreme far-right as covered in this article. The issue legislators must overcome when defining how gestures are used, is to determine whether they promote support for terrorist groups or, in relation to hate crime offences, are being used to communicate in an offensive manner. Because a gesture can have two meanings or more, this makes it difficult to prove. Drawing on international experience, such as that in Germany, it is acknowledged how difficult legislating gestures is because there are and can be, slight variations in actions making it easy for persons to enter what could be described as a tangled web of complicated legislation and meanings. There are some gestures like the raised right arm forming the Nazi salute that in essence only has one meaning, support for neo-Nazi white supremacists. As such, this gesture should not be protected under the freedom of expression under article 10 of the European Convention on Human Rights. It is a political gesture that incites hate or glorifies violence and as such meets the decisions on the freedom of expression delivered by the European Court of Human Rights in *Erbaken v Turkey* (2006) (Application no. 59405/00) and the UK's High Court in *Redmond-Bate v DPP* [1999] EWHC Admin 733. While it is easy to consider a gesture as harmless, if that gesture is adopted for alternative reasons, like that given by Brenton Tarrant, it turns its meaning into something else and can be very upsetting. Therefore, consideration is required not just into how this issue might be tackled, but why in a more effective and cohesive manner it should be, particularly with respect to the law.

Julia Jones is a lecturer at Leeds Beckett University's Carnegie School of Education and School of Social Sciences. Prior to working at the University, Julia was Assistant Principal and senior leader at Sawtry Village Academy. She is researching for her PhD examining the influences of far right and neo-Nazi groups on schoolchildren. This article emanates from her PhD thesis.

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Dr Alexandra Pentaraki, Q & A

In the following Question and Answer piece, we interview Dr Alexandra Pentaraki BA, MSc, Ph.D., CPsychol, AFBPsS - Clinical Psychologist & Neuropsychologist for children and adults - Lecturer - Registered Expert Witness in Greek, European Courts & in The International Criminal Court, The Hague, and The United Nations International Residual Mechanism for Criminal Tribunals about her work as a clinical psychologist and neuropsychologist and as an expert witness in many varied cases and the founding of Brain Matters Institute an Institute dedicated to the practice, learning and promotion of psychological science for the benefit of society and The Global Institute for Children's Drawings which is dedicated to the study of children's drawings and the assessment of children's drawings internationally such as the assessment of children's personality, family relationships, school and social relationships, neurodevelopment, potential abuse and neglect, counseling and therapeutic interventions, identifying fake drawings.

Q1 How did you become a clinical psychologist/ neuropsychologist?
It was my love of knowledge that first sparked my interest in psychology,' I also wanted to research the psychological factors relating to mental health conditions to find possible treatments. As I was studying more in-depth clinical psychology I was impressed about the enormous contribution of psychology as a scientific discipline to justice.

Q2 When did you move into expert witness work and what sort of cases have you been involved in?
I moved into expert witness work in 2017 working as a Registered Expert Witness in Greek and European courts and the International Criminal Court in The Hague. I am also working as a Technical Adviser and Expert Witness in Private cases. Here, my expertise helps with psychological and neuropsychological profiling, detecting child abuse and neglect ,custody, neurodevelopment and crime, syndrome of parental alienation, false allegations of child and adult abuse, malingering, false memory syndrome, international child abduction to child soldiers and rape to those who have been subjected to violence and trauma. I testify in criminal and civil cases, assess the suspect/accused and victims, provide my opinion, write reports, and prepare witnesses for testifying in the court. I am particularly proud that my work has helped protect dozens of children from further abuse and maltreatment.

Q3 Amongst your many cases what has been the most memorable?
Two cases that involve child sexual abuse and torture by a parent. The first case was about a 4 year old child that was severely abused sexually by her father (without penetration) and her mother knew it and she did not do anything about it. After my assessment and reporting to the court there was an International emergency warrant for the father's arrest who left Greece. It was also significant to me that the child draw a person (herself actually) that gave me many indications that she was abused. The second case involved, after my assessment and investigation, the detection and revelation of a father who was sexually abusing (without penetration) and torturing physically his 4 year old daughter. The father also threatened me. I had also cases that after analyzing the children's drawings I provided evidence to the court that the drawings were fake as they were not drawn by the child but by an adult.

Q4 How do you manage the emotional side of your work?
I try to relax mentally and physically after work and I feel satisfied and proud that my work helps and protects children and adults. This satisfaction helps me to continue my important work.

Q5 How did you come to found the Brain Matters Institute and what are its aims
I wanted to develop a body dedicated to the practice, learning and promotion of psychological science for the benefit of society as I found out both in Greece and abroad that psychology as a science could contribute significantly to children's and adult's well-being. It's aim is to develop and promote the ethical and evidence-based practice of psychological science. The Institute also offers many online and onsite courses for professionals that want to expand their existing clinical skills as well as courses and talks for the general public. Another aim of the Institute is the publication of books, translation, adaptation and development of psychometric tests and research.

Q7 What is The Global Institute for Children's Drawings?
The Global Institute for Children's Drawing is one of my recent developments. Drawing is essential to children's development and promotes healing. Additionally, drawing helps in the assessment of children and

adults enormously. The aim of the Institute is a) to provide, internationally, evidence-based assessments of children's (including adults' drawings) drawings that assist in the understanding of children's personality, emotional development, family dynamics and relationships, school and social relationships, gender development as well as case of abuse and neglect; assessments that can help the family, institutions, and courts, b) research in children's drawings and publication of scientific papers, c) to propose a therapeutic planning if it is necessary, d) provide counselling to parents about issues that their child is dealing with, e) identify fake drawings.

Q 9 How has this been used in expert testimony /reports?

Except from an in-depth psychological assessment and investigation that is based on a evidence-based scientific methodology that I have developed and use accordingly in each case, I also use drawings as part of my assessment of children and adults. I also use specific standardized reliable and valid psychometric tests that use drawing as an assessment method of various issues. There is evidence that is derived from studies that show the significance of using drawings in psychological assessments that will be used in the court. Also, the identification of fake drawings assist courts enormously especially in cases of false allegations of sexual abuse and neglect.

Q10 What developments (if any) would you like to see in the field of clinical psychologist/neuropsychologist witness work?

I want to see more research in psychometric testing that is used for the courts and more in-depth and better training for psychologists in psychological assessments and reporting. It is not enough to support that the x,y,z test is good for the court, you need to justify that it is valid and reliable in the respective topic that you investigate. In my field I am constantly seeing psychological assessments that are not based on scientific evidence that is reliable and valid. I also see psychological reports that are not reporting the results appropriately. I also want to see the police and courts to take into consideration the fact that witnesses and especially children must not be subject to many and repeated psychological assessments as this practice affects their memory and reduces their creditability, among other things.

About DrPentaraki

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Joint BAAPS/BAPRAS Position Statement on Plastic Surgeons Performing Aesthetic

The public in the UK rightly expect and deserve the highest possible standards and safety when considering aesthetic plastic surgery.

Their surgeons should be well trained, competent and demonstrate involvement in continuing professional development in aesthetic surgery. Plastic surgeons are unique amongst UK surgical specialists with respect to aesthetic surgery: as plastic surgery includes training in aesthetic surgery across all anatomical areas of the body.

The plastic surgery curriculum incorporates the psychological aspects of dealing with patients impacted by disfigurement, body image concerns and loss of form and function. Aesthetic surgery thus forms part of the plastic surgery syllabus and all trainees are formally examined in aesthetic practice as part of the FRCS(Plast) exit (consultant level) exams. No other surgical specialty in the UK incorporates aesthetic surgery in the same manner in its curriculum or training. The depth of history behind plastic surgery including the speciality being at the forefront of developing aesthetic surgery means that for the majority of people that when aesthetic surgery is being considered, one thinks of a plastic surgeon and plastic surgery.

At a consultant level, plastic surgeons undertaking aesthetic plastic surgery include this aspect of their practice in their annual appraisals and five yearly revalidation with the GMC, ensuring the maintenance of a high level of care and of continuing professional development (CPD) in this area of their practice.

Due to restrictions in service provision over the last 20 years, many aesthetic procedures are not provided routinely in the NHS. However, plastic surgeons are still trained in all aspects of aesthetic plastic surgery. Unlike many other surgical specialties, the range of surgical procedures a plastic surgeon performs privately will therefore not exactly mirror their NHS practice.

The concept of a surgeon's scope of practice in the private sector reflecting their NHS practice has therefore not existed for many years.

BAAPS and BAPRAS, the two UK official professional plastic surgery associations, fully support their members undertaking aesthetic plastic surgery, which they have been trained and examined in and can demonstrate their ongoing CPD in their annual appraisals. Should any advice or guidance be required regarding the governance of aesthetic plastic surgery, senior leadership team members from BAAPS and BAPRAS will be available on request.

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HANDLING A DENTAL NEGLIGENCE CASE?

Dental consultant Toby Talbot, an independent expert witness with British and American training, has spent 25 years providing a fast track service for the legal community in cases of clinical negligence.

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Whether acting for the claimant or defendant, please call.

Toby Talbot
BDS MSD (Univ of Washington)
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Top Ten Tips for Getting the Most From SEN Expert Witnesses

by Matt Wyard, 3PB Barristers

The outcome of an SEN appeal turns on the quality of the expert evidence. Yet, despite its importance, solicitors practising before the First Tier Tribunal rarely get the most out of their expert witnesses. I provide ten top tips below on getting the most from experts.

1. Expert selection – get it right
A simply but important point - make sure you are recommending experts that you know and trust. If you come across a new expert ask to see a redacted, example report to make sure that they know what they are doing before your instruction – no one wants to be the guinea pig.

2. Initial instructions – get experts involved early
They're busy professionals with, likely, a busier or less flexible diary than you. If you are not sending letter of instructions to the experts yourself, then guide your client on instructing the expert and what the expert needs to know in order to get on top of the brief quickly.

3. Provisions of papers – instructing experts in a silo is pointless
It sounds obvious but make sure you provide your expert with all the papers they need to do a proper job. Previous reports, annual review documentation, evidence of academic progress, evidence that is unhelpful to your client's case: all of this is crucial for an expert to see to avoid any pitfalls that can be exploited in cross examination (think: would your opinion change had you seen x document?). Ultimately, if the expert has not been properly briefed or been given complete information, this will impact on the quality of the end report. If amendments are required it will also increase your client's costs.

4. Diaries – think forward
When you instruct an expert in a SEN appeal you know what you want: an assessment, a report, commentary on the other side's evidence, input into the working document, attendance at the final hearing. You also have a reasonable idea of when the expert's input will be required. Therefore, instruct them to book time out their diary to provide these services from the outset.

5. Assessments – make sure the child/ young person is seen in school
SEN appeals are about the educational provision the relevant child requires. Recently I have seen more and more examples of experts who have not been instructed to visit the schools in contention, nor to observe the child in school or speak to school staff. These are crucial visits for the expert to make and can provide very helpful direct evidence of the school's view on matters.

6. Draft reports – check them
It goes without saying that draft reports should be thoroughly reviewed. A proper review is not just a proofreading exercise, although proof reading is an important aspect of a review. Check that the experts have stated the documents that they have reviewed - if something appears missing, check if they have reviewed it and, if not, give it to them to review. Check recommendations for specificity and quantification - without this writing the working document won't be possible. Check internal consistency – for instance, if a speech and language therapist has opined a child has receptive language difficulties, check that the receptive language index score is below 100 i.e. below average and check that the subtests relied upon to reach that score (typically, in the case of receptive language: word classes, following directions, understanding spoken paragraphs, semantic relationships) are also below average. Test any discrepancy with your expert.

7. The local authority evidence – give it to the expert and ask for feedback
When the local authority evidence arrives or, perhaps more helpfully, the final hearing bundle, send it to your relevant expert and ask them to conduct an analysis of it. More and more often in conference I am being told that there is nothing wrong with a local authority report and that it's simply the recommendations are wrong. This is not detailed enough. The reason for the differences between the reports needs to be unpicked so that it can be tested in cross examination. The person responsible for doing the unpicking is your expert. This information should be provided in conference (see below) or, as in other areas of practice, a brief note prepared by the expert identifying the issues and, importantly, providing page/paragraph references to the final hearing bundle where the inconsistencies arise so that they can be put to the local authority expert.

8. Conferences – hold at least two and make them worthwhile
Ideally there would be two conferences in the lifespan of an appeal, one upon receipt of draft reports, the other upon receipt of the hearing bundle. The purpose of these conferences is not for the expert witness to repeat the contents of their report to the lawyers and the client - it has been read in advance – something which should be made clear to the expert in advance of the conference.

Conference one is the expert's opportunity to listen: listen to what the issues in the appeal are; listen to what the client is trying to achieve; listen to what the gaps in the draft report are. Afterwards, the report should be amended to reflect the issues discussed.

Conference two is a different beast entirely – it is the experts time to shine. It should take place a week or so before the final hearing and, at the very least, before counsel has fully prepared. Lawyers and experts should have reviewed the hearing bundle or, at the very least, the expert evidence and any key evidence upon which it is based. The conference should serve two purposes – firstly, a roundtable meeting to discuss the final issues for hearing. Secondly (and most importantly) the experts should be assisting counsel prepare for the final hearing.

9. Working documents – ensure the experts review and comment on it

Working documents are crucially important – they form the list of issues before the FTT and also reflect what each party wants the EHC Plan arising from the appeal to look like. Your experts must be involved in preparing the working document – they know how it needs to be drafted and should be asked to check any amendments you make. Double check that your experts have actually checked it – regularly in hearings experts decide the working document is not drafted properly – this should happen in advance.

10. The hearing

Make sure you explain to your experts, if they have not been to a final hearing before, what the expectation upon them is, what they will be questioned on (carefully: do not coach) and the basic procedure.

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The Issue with Medical Consent

by Chris Dawson

UK law on consent has changed considerably since 1957 and the case of *Bolam v Friern Barnet Hospital*. Following this case, the "Bolam test" stated that if a doctor reached the standard of a responsible body of medical opinion then they would not be considered negligent. The law was qualified in 1997 in *Bolitho v City and Hackney Health Authority* where the House of Lords held that there would have to be a logical basis for an opinion, and that a Judge would be entitled to choose between two bodies of expert opinion and reject an opinion what was logically indefensible.

In 2015 the law relating to informed consent changed with case of *Montgomery v Lanarkshire Health Board*. Following this case doctors are under a duty to take reasonable care to ensure that the patient is aware of any material risks involved in any recommended treatment. Furthermore, the test of materiality is whether a reasonable person on the patient's position would be likely to attach significance to the risk or the doctor is or should be reasonably aware that the particular patient would be likely to attach significance to it.

Many commentators (and doctors) consider that this has set a very high bar for doctors seeking informed consent from patients. A significant part of the issue in my opinion is reaching an understanding of what the patient on the other side of the desk would reasonably want to know about the procedure, or what complications any particular patient would be "likely to attach significance to".

In the medicolegal setting the range of consent practice is highly variable. In my experience a number of factors would facilitate the Defendant in rebutting an allegation of breach of duty with regard to informed consent

• Document the discussion of the intended treatment in the medical notes in detail. Comments such as "I spoke to him about his forthcoming procedure" cover a multitude of possibilities and also leaves the Claimant able to state that he wasn't properly informed about the procedure. Make sure that the clinic letter reflects all of the discussion with the patient and sets out the likely complications of the procedure

• Provide an information sheet about the procedure. If this is a procedure specific leaflet then so much the better. Document in the medical notes that you have given the leaflet and if it lists the known complications

of the procedure then document these as well in the clinic letter, and document that these have been explained to the patient

• Make sure the consent form is filled out in detail. In my experience in medicolegal cases the "indication for the procedure" box is frequently left blank, and often the complications section as well. If time permits (and it often doesn't) then best practice suggests that the consent form should be completed in clinic, in advance of the procedure

• If written informed consent is taken on the day of surgery (and it often is) then ideally this should be by the surgeon performing the procedure. At the very least the doctor taking consent should be fully cognisant with the procedure being performed, and the likely complications

Having such documentation available in the notes will not prevent an allegation of breach of duty with regard to informed consent, but it will make it much clearer to the legal teams for both parties when it comes to preparing a report on the issue

Chris Dawson
January 2023

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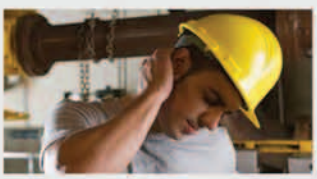
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Working With Water; Hydrotherapy Within Expert Physiotherapy Reports - A Justifiable Cost?

'Hydrotherapy' can be a contentious issue within specialist neurological physiotherapy expert reports, because of the significant costs associated with installation and maintenance of a pool.

There are key differences between aqua therapy, hydrotherapy, and water-based exercise:

o Aqua therapy - used by suitably qualified physiotherapists employing the therapeutic properties of water in treatment programmes to help maximise a person's function. The term has now been adopted by the Aquatic Therapy Association of Chartered Physiotherapists, to highlight the distinction with hydrotherapy.

o Hydrotherapy - water-based therapy carried out by non-specialist therapists, such as support workers, carers, and family members, who may not have extensive knowledge about the therapeutic properties of water.

o Water-based exercise – such as swimming, aqua aerobics, or following an exercise programme in the pool, with or without care support, for cardiovascular, mental health, and a myriad of other exercise-related benefits.

It is rare that any of the above will replace land-based exercise, but for some claimants they can be an important part of therapy, rehabilitation, and long-term health and wellbeing, including promoting confidence in water following injury.

While aqua therapy requires warmer pools, and some claimants need warmer water in the longer term, this does not automatically follow that a claimant will need a swimming pool at home. Alternative options for the expert witness to consider include local hydrotherapy centres, warmer pools at private health clubs, and spa/plunge pools. Not every pool has fully accessible changing rooms, hoist facilities, chair or step entry to the pool. However, this is changing, with many local pools expanding their facilities.

In addition to considerations of access, the physiotherapy expert witness will also consider how the claimant presents, their symptoms, their requirement for support, suitable alternatives, their

subjective account of the benefits, frequency of use, and any track record of engagement with hydrotherapy provision, as evidenced in the records available. The admissibility is ultimately a matter for the court and there remains a mix of case law regarding recoverability.

Sometimes what a claimant needs/wants in the longer term, is access to water sports and leisure activities. Formal therapy goes on the back burner in favour of disabled surfing, scuba diving, and sailing, and rightly so; life is to be lived. Unfortunately, these are rarely represented within expert physiotherapy reports, but they really should be as integral to the principle of reasonable restitution.

Tanya Owen
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Private Neurological Physiotherapist, Neuro Physio Works Ltd; and Somek and Associates expert witness

Tanya qualified as a physiotherapist in 1999 and specialises in neurology, spinal cord injury, cauda equina syndrome, brain injury, cerebral palsy, and stroke.

Mr Matthew Smith

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Mr Matthew Smith is a Consultant Orthopaedic Surgeon at Liverpool University Hospitals NHS Foundation Trust and has been since September 2009.

He was previously the Associate Clinical Director for the department with responsibility for Upper Limb Surgery. His primary role is as a subspecialist shoulder and elbow surgeon.

He has a wealth of experience including experience of procedures that are practiced by a limited number of appropriately skilled surgeons across the country such as The Arthroscopic Latarjet or "Arthrolatarjet" and the fixation of complex shoulder fractures.

He has a large arthroplasty (shoulder replacement) practice and is leading the way with innovative techniques such as CT scan navigated shoulder replacements. In addition to this ultra complex work he undertakes all aspects of routine shoulder surgery and most aspects of routine elbow surgery.

Mr Smith undertakes medico-legal work and has been preparing medico-legal reports for fifteen years He undertakes reports for claimant and defendant solicitors alike for both personal injury and medical negligence matters. He aims to provide fair unbiased reports for the assistance of the court, and parties involved, in all cases.

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Brief Advisory Reports

by Nicholas Deal

As well as giving evidence at court and compiling expert reports, expert witnesses can also be asked to provide what is termed, a brief advisory report or a screening report.

What are brief advisory reports?

What do experts need to bear in mind when providing one?

Nick Deal, Barrister and subject matter expert at Bond Solon discusses the components of this type of report and the practical issues that experts need to consider.

What is a "brief advisory report"?
Essentially this is a short report provided by an expert in a particular field after consideration of some, but not usually all, the material in the possible dispute. It is sought by instructing solicitors before proceedings are issued, when they are weighing up the merits of their client's case. If an expert is instructed by a claimant, they will be asked to work out whether there is enough merit in the claim to warrant launching proceedings .If an expert is instructed by a defendant, they will be asked to consider whether the client has a strong enough defence to the claim to warrant defending it.

Instructing solicitors might need, for example, an opinion as to whether there is evidence to suggest that the defendant's actions fell below the standard expected under a contract of engagement for services (e.g., a breach of contract claim) or below the standard of a reasonably competent practitioner (e.g. clinical negligence claim or professional negligence claim).

They may also need expertise to assist them to identify specific areas, actions or inactions which failed to meet the required standard. A lawyer may not know what the applicable standards are, but someone who works in that field will do, and so their opinion is sought.

In that sense, what is being sought by the solicitor is no different from the usual report from an expert witness. What is different, however, is the timing of the request and the concept of a "brief advisory report" or "screening report".

(i) Timing
As mentioned above, the instruction will take place at the earliest stage of the litigation process before proceedings have been launched. The solicitor will want to know if it is worth pursuing a claim or defence.

In a civil action, a claimant must send a letter before action to the defendant, setting out what their claim is. A brief advisory report or screening report will help a solicitor determine whether or not their claim has any merit and, if it does, what specifics they can allege on the currently available evidence.

A solicitor instructed by a defendant will be able to show their expert witness the letter before action and the expert will be able to help them to understand whether their client has avenues for defending the claim or not and, if they do, how strong they are.

Because it is at such an early stage, there may be limited information available. Pursuing a claim and unearthing evidence is a costly process, hence the need to review the merit before embarking on that path.

(ii) The concept of the brief advisory report
Essentially, the solicitor is trying to limit the costs at this stage.

They will therefore ask the expert to provide the report based on limited information and at a reduced cost.

It is important to recognise straightaway that what they are doing is legitimate and, indeed, encouraged and endorsed by the overriding objective of the civil procedural rules to deal with cases justly and 'at proportionate cost.'

In other words, if there is nothing in the claim, a claimant will need to know that at the outset and avoid the costs of issuing proceedings which are not going to succeed. Equally, a defendant will need to appreciate at the outset if they have any prospect of defending against all, or part of, the claim; this may lead to them settling at an early stage before the costs of the action start to mount up.

Should the expert witness provide a brief advisory report?
As it is a legitimate request from the solicitor, it is legitimate for an expert witness to provide such a report. In principle, no criticism can be made of an expert for doing so.

What should the expert witness look out for?
There are several issues to think about here, which come under two broad headings:

(i) Capacity
An advisory report is produced to help the solicitors assess the merits of the case.It will come under the heading of documents which are privileged against disclosure to the other side as this category includes material which is produced by a third party (the expert witness) for a solicitor, once litigation is contemplated or pending. Litigation privilege allows parties to seek advice on the merits of the claim without having to disclose that to the opposing party in the dispute.

An advisory report is not subject to the court's oversight and will not (usually) be seen by the court. The expert, therefore, is not bound by the duty to assist the court on matters within their expertise in the

way that an expert witness instructed to provide a full court report would be.

That being said, it would be wise for experts to write it as if under this duty to the court because this will help them remain objective and evidence based and not overstate the merit of the claim or the defence.

The best insight you can provide your instructing solicitor is evidence based and genuine. Of course, they may press you to be more supportive of the client's case but, once they understand the basis of your advice, they will be able to advise the client and prevent a wasted investment.

The expert will still owe a contractual duty to the solicitor to take reasonable care and will owe a duty of care to the client to meet the standards of the reasonably competent expert in their field in providing the advice. Again, the expert's genuine expert view is sought here, and anything less would fail to meet the contractual standard and the duty of care standard.

(ii) Practical issues

There are two broad considerations to focus on: firstly, the contractual arrangements; secondly, protecting the expert.

(a) Contractual arrangements.

The expert must clarify with the instructing party what is being sought and on what basis. Essentially, this boils down to three matters:

- **Quantity of information.** Find out from the instructing party exactly how much information is going to be provided. It is best to pin them down to the number of pages; this will help the expert to give a reasonable estimate of time and cost.

- Timescale. Find out what their timescale is for receiving the report, the reason for the timescale and its flexibility, or rigidity. They may be up against a time limit within which to bring the action, in which case they will have no flexibility. The expert needs to know if they can commit the time to writing the report within the limits requested. If they cannot, the expert should not accept instructions. An expert who accepts instructions, knowing the time constraints, and then fails to provide the report within the agreed time, may well find themselves facing an order for third party costs.

- Cost. Agree a fee. Alternatively, agree to do the work at no charge. Either is acceptable but it is essential to be clear about what has been agreed before embarking on any work. The fee should reflect the amount of reading to be done (see the quantity of information point above), the time taken to think through the issues and the time to write the report.

It is essential to make sure that you have a written agreement. That can be done as simply as writing a confirmatory email with the agreed points, or more formally in a contract.

(b) Protecting the expert

There are three matters to consider here:

- **The heading.** Head the document as "Screening Report" or "Brief Advisory report" and "Not for Use as a CPR35 Report" to make it clear to the reader that this report is for limited use only. As we shall see later, there may be circumstances where the report comes into the hands of the other party. Using this heading will protect the expert from unjustified criticism.

- The introduction. In the opening paragraph, it is good practice to reiterate that this report is a brief advisory report or a screening report and not for use in court. In addition, that it has been prepared on the basis of limited information (specify exactly what information has been provided) and with a limited time in which to draw conclusions. Finally, that it represents a preliminary view which may change as other information becomes available.

- The language of the report. It is vital to keep the language evidence based and not judgemental; the expert should maintain the language of the independent expert, not the language of the advocate trying to advance a case. It is all too easy to adopt the language of the advocate. For example, an advocate might say "we can argue a breach of duty on this basis"; the expert should be saying "there is evidence of falling below accepted standards of practice in the following areas".

Anyone reading this article may ask why it is necessary to protect the expert if the report is not going to be disclosed. This is a fair question.

The problem is that it could be disclosed accidentally by being included in material shared with the other side. Or it could be referred to in a subsequent report, which then allows the other side to request a copy of it.

In short, the expert should always write the report on the basis that it might be seen by the other side and by the Judge. In that sense, it is far safer to maintain an independent tone and evidence-based language, to be wholly transparent about the limitations under which it has been produced and that it therefore represents a provisional view which may be subject to revision in the light of further material.

One last thought: an expert is never obligated to undertake instructions if they do not wish to do so. If the terms of producing the brief advisory report are not acceptable to the expert, they are perfectly entitled to refuse to accept those instructions.

Author

Nicholas Deal

Nick was called to the bar in 1989 and had a common law practice, that included dealing with personal injury, family and commercial disputes. Nick has represented clients before all levels of courts in the UK. He joined Bond Solon's training team in 2004 and is now the lead expert witness trainer for the business. He is also heavily involved in the Annual Bond Solon Expert Witness Conference, the largest gathering of expert witnesses in the UK.'

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