

## **USAG**

### **Heathrow Academy**

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We (Sodak) are an organisation that specialises in applying behavioural science to various situations to help achieve a different and better outcome for people. We work with businesses and individuals. We help people improve health and safety, well-being, quality, and efficient delivery. We also work with leaders to create scientifically sound strategies that design environments for success.

Sodak also advise CECA Scotland on behavioural science and service avoidance. In 2012 we produced the first report for CECA Scotland into Service Strikes and Utility Damages (under our sister company, Alternative Safety Ltd). A year later we published another report on a case study of Utility works in the centre of Glasgow.

There are a small number of printed reports available here today, or you can download it from our website.

Both of these reports conclude that successful service avoidance is the result of a number of factors that are not 'the norm' of most construction and utility companies.

By 'norm' I mean the operating standard, model or pattern from a group of individuals. Sociologists describe norms as informal understandings that govern individuals' behaviour in society.

The majority of Utility and Construction company's procedures for service avoidance are to a very good standard, and, if followed, most service strikes would not happen. But, most company's 'social norm' behaviours are those which result in the number of service strikes that we, as an industry are currently seeing. There is a disconnect between what the procedures, guidance and best practice say, and what currently happens on site. Why is this?

Well, firstly, a basic understanding of behavioural science can help us here. Behaviours are not attitudes, beliefs or hearts and minds, contrary to what the layman believes. Behaviours are actions, they are the things we actually do and say. The things that we say and do, our behaviours, are actually a product of the space around us and the people in that space at the time we say or do something.

Behavioural Science tells us that our actions are a result of our interpretation of a situation at that moment in time rather than what we have read or been instructed to do. If we have been trained over and over again, to a point of fluency, to perform in a certain way in a certain situation we most probably will, but if we have only been briefed or read a procedure that hypothetically informs us of a desired behaviour, we are not likely to react in the instructed way unless we have been conditioned to do so. In other words, our actions are a result of the stimulus around us, not the instruction we receive.

This is where social norms play a big part. Social norms are unwritten rules about how to behave (how to act) in certain situations. Social norms develop as we observe and conform to the expectations of others around us, in that situation. Social norm behaviour will develop whether it is purposefully designed or allowed to mature naturally. Without a basic

understanding and application of behavioural science social norms will not always deliver the results you had hoped.

What are the social norm behaviours that lead to service strikes and what are the more effective behaviours would lead to successful service location?

<b>Current Social Norm behaviour</b>	<b>More Effective behaviour</b>
Use of the term 'Service Avoidance'	Use of the term 'Service Location'
Avoiding or locating services at same time as completing excavation activity.	Locate and protect services as a separate activity.
People attending a ½ day awareness course	People being trained to fluency over 18 months.
Cat used in power and radio mode to mark-up possible service routes.	Genny and CAT used to locate service locations as accurately as possible.
One person uses CAT.	Two people execute service location.
A select number of attachments are supplied with Genny.	All available attachments are supplied with Genny.
Number of service strikes are measured.	Number of services avoided are measured.
Supervisor supports all the above behaviours.	Supervisor supports all the above behaviours.
Manager supports supervisor behaviours.	Manager supports supervisor behaviours.

Most companies have created an environment that supports the behaviours or norms in the left hand column, very few have managed to create an environment that supports the right hand side. This is because the social norm behaviours we currently have are what happens if nature is left to decide how things are done. Whereas the behaviours on the right are far more onerous and time consuming, yet, they yield the answer to improved performance that is not only safer but can save our industry millions in lost profit.

Take this specific as an example –

<b>Current Social Norm behaviour</b>	<b>More Effective behaviour</b>
Cat used in power and radio mode to mark-up possible service routes.	Genny and CAT used to locate service locations as accurately as possible.
<b>Subsidiary behaviours</b>	<b>Subsidiary behaviours</b>
<ul style="list-style-type: none"> <li>• Walking in a zig zag across the excavation area in power mode.</li> <li>• Walking in a zig zag across the excavation area in radio mode.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect genny to electric/gas/water service in house to induce signal.</li> <li>• Scan to find induced signal.</li> <li>• Connect genny to lighting columns in area to induce signal.</li> <li>• Scan again to find signal.</li> <li>• Connect genny to BT service.</li> <li>• Scan to find induced signal.</li> <li>• Induce general signal from genny into ground.</li> <li>• Scan again to find signal</li> <li>• Repeat for other houses, buildings or services in the location.</li> </ul>

The left hand behaviour, the current social norm, is far easier to perform than the more effective behaviour in the right hand column. In fact, the more effective behaviour requires a

far greater number of subsidiary behaviours to be carried out than that of the current social norm.

So how do we make the more effective behaviour the new social norm? Where do we start?

Awareness is definitely the first step, we have to be aware of what the better solution is, but that, unfortunately, is never enough to produce new and more effective behaviours. Think about health for example, I'd imagine that we are all aware that if we want to lose weight, we should exercise more and eat less. Making me aware of this does not mean that I'll perform the desired behaviours to lose weight. My current eating behaviours are supported by my current situation, house, repertoire and those around me. My current eating behaviours are my social norm. To change them I have to change a number of things around me, I have to change the things that support the current behaviours and I have to engineer new things that will support the new desired behaviours.

So the information and instruction is an important part of explaining what must happen, but how you create the conditions where the desired, more effective behaviours will occur is even more integral to the safe execution of the task. We often stop short of purposefully creating the environment, probably because we'd like to believe that we have done our part by delivering the order. However, there are many more things we can do and should do as the curator of the environment.

Here are some simple things that can be done that will dramatically increase the chances that your staff, workers or children will do the things that you want them to do.

1. **Train the person carrying out the task to a point of fluency.** This step cannot be underestimated. If someone is trained to fluency, they are conditioned to react in a certain way when they are exposed to a certain set of conditions. This is the combination of knowledge and multiple practice. There really is no substitute for this.
2. **Get the person involved in the planning and methodology of the task.** Research shows that when an individual is involved in the planning of a task, they are more likely to remember what is required of them. They should also be the experts if they have been trained to a point of fluency and can give advice in the best methods to employ.
3. **Provide enough time for the person to carry out the task.** Time or the perception of time can influence how we do things. If we believe that we have little time to complete a task, we will be more likely to rush and cut corners.
4. **Provide the right materials and tools for the person, at the time they need them.** Having the right materials and tools for the job at the time and place when and where you need them increases the chance that you will use them. Not having the right tool or materials at the time or even if they are back in the stores will increase the chances that you may use a slightly less suitable alternative.
5. **Observe the person carrying out the task and give them corrective or confirmation feedback.** You may think that you have done the best job in explaining what is required. The person you have been explaining it to has acknowledged everything you have said. You have a picture in your mind as to what it looks like and you think they have the same. However, there is no way of knowing this unless you observe what they do, once they are actually attempting to complete the task. If

it's what you expected, and what was planned, great, tell them so, if it needs a slight correction, great, tell them so too!

6. **Ask other members of the team to observe each other and give each other feedback.** Insist this happens, observe it happening and don't just request it. You are trying to create an interdependent culture, one that will have peer support for the right behaviours and challenge behaviours that may cause risk. However, this isn't natural, and it is slightly confrontational. If we are all left to our own devices we naturally avoid this. With a little encouragement however, we can practice this and build it in to our normal repertoire.
7. **If a certain part of the task is safety critical, make it separate from the other tasks.** Some tasks are safety critical, i.e. checking to see if circuits are dead prior to working on them, or positively finding services by hand before machine dig. Make this a planned activity in itself rather than part of a bigger task. This will give it focus and attention and will help to support the desired behaviours if the above steps are carried out too.
8. **Regularly check to see if what you expected to happen, is happening.** Now that you know that behaviours are situational you can't trust the desired outcome to a chance briefing. The only way you will know if what you expected to happen is happening is if you regularly check to see if it is. This is also a chance to affirm to your team that they are doing everything you want them to do (or not).

In summary....

- Our current behaviours and social norms give us our current performance
- You can't change behaviour with just briefings, training or instruction.
- There are more effective behaviours = Improved performance.
- You can create the conditions.
- But it takes effort, time and perseverance.

For the CECA reports, please click here.... [www.sodak.co.uk/resources/](http://www.sodak.co.uk/resources/)