New Chair for the Criminal Justice Special Interest Group!

*By Sue Merchant (CJ SIG Secretary)*

At its AGM on June 5th, a new Chair of the CJ SIG was elected – Martin Rahman from West Yorkshire Police. Martin is a Business Change Manager and has extensive experience of the practical application of a range of OR methods in major change projects, typically employing Lean process improvement supported by a range of tools such as discrete event simulation. He has been an active member of the ORS for some time and has made numerous presentations to the CJ sig and at ORS conferences and seminars, so we very much look forward to his influence on the group!

Martin’s election is tinged with sadness that Ian Newsome has had to stand down from the Chair’s role due to illness but we wish him a speedy recovery and hope he will be back in harness soon. Ian has been a great Chairman ever since the group started around 10 years ago, not only working full time for West Yorkshire Police but also doing a PhD In OR in his spare time. We will miss him a lot.

CJ SIG event June 5th

Following the elections and approval of the revised CJ SIG constitution 14 CJ SIG members, visitors and speakers were treated to three very different talks and also invited to comment on the type of talks they would like to see in future.

Our first speaker, Paul Hewson, who is Associate Professor (Senior Lecturer) in Statistics, in the School of Computing and Mathematics, Plymouth University , kindly travelled all the way up from the West Country to talk to us about his work examining police and fire & rescue funding formulae to check the validity of these. Paul and his colleagues (Joyce Halliday, Alex Gibson and Sheena Asthana, who are experienced in examining health funding formulae) had carried out the analysis for the Rural Services Partnership some years ago. He explained that central funding for police and fire services is allocated centrally, though responsibility for delivery is devolved, and formulae are needed, for example, to allocate funding as fairly as possible between different areas, to give a degree of objectivity and to make technical assumptions apparent. A number of approaches were used to check the formulae which could be a massive task if done thoroughly: the NAO reckoned that £152billion is allocated using three formulae based on 152 different indicators.

Paul gave an example of what would happen to funding if Wokingham for example were ‘taken out’ (not literally!) – Birmingham would gain £380m which might seem counter-intuitive.So, what diagnostic information does this provide about the validity of the underlying formula? He went on to describe several of the visual and analytical ways he and his colleagues had used to look at the data (see his slides on the CJ sig website for more detail), described some problems they had found in model construction and summarised his conclusion: just putting spreadsheets on the web (as the authorities have done) does not make for transparency: more information is needed on the construction of formulae and more policy information on assumptions made. This would then lead to better informed judgment on how such formulae match policy goals. Paul ended with some thoughts for OR: it seems sensible to assume humans make errors / mis-judgments in everything they do, so why should funding formulae be immune? Various software quality processes could be followed when developing spreadsheets and some OR habits may be relevant (e.g. ranging and simulation). This may be quicker and within a wider range of users’ ability than detailed math/stat analysis of formulae.

Brunella Longo, an independent information management consultant, then spoke to the group about her holistic approach to information security where she gives lectures and exercises to very small groups of company personnel. She mentioned the case of Starbucks where very clever hackers using sophisticated ‘dashboards’ had planned the timing of an attack to coincide with the company helpline not being open at that time. She emphasized that it was necessary with open data to understand the dynamics of open policy-making processes. She ended her talk with a mention of the link between cybercrime risks and defective premises. She also advised those present to take care as it wasn’t possible to avoid all attacks.

Our last two speakers, Janine Gill from ROC Technologies and Claire Gilmour,a systems change manager from the National Probation Service, spoke to us about ROC and its product Nimbus, which is a sophisticated business process methodology. Janine emphasised that ROC is keen that Nimbus works from the business end rather than being seen merely as a software product – it deals holistically with Process, Projects and People. She mentioned that they had recently done some research with Oxford University into why projects fail and how to avoid ‘black swans’. Claire explained the power of Nimbus and indicated that the recent major business changes in the Probation Service could not have been handled successfully without the power of Nimbus. The NPS needed a tool like Nimbus to ensure consistency across the country, reduce duplication, save staff and management time in looking for information – she said that in the past, 7 hours per week could be lost by individuals searching for information, so saving this would give more time for them to work with offenders. All NPS staff will have process maps and all documentation and related guidance on their desktops in future. Staff have been engaged to build the system and review it, using capture workshops. They can drill down into information and cost processes so in future the system can be used to identify savings/impact.

The meeting ended with the secretary asking members to vote with the ubiquitous green dots to show which types of talk they would like to hear in future. There were mixed opinions but top of the list was facilitated discussion of CJ issues which we haven’t done for some time, so watch this space! OR techniques and methods came second and new relevant research and mix of types of event tied third.