



## **SIS 46 Accelerating ITS Deployment by Creating a More Diverse Workforce**

Thursday 8 October 13.30 – 15.00 Room 6

### **Report of Session**

**Moderator:** Natalia de Estevan Ubeda, Transport for London  
**Panellists:** Susan Harris, ITS Australia  
Martin Russ, AustriaTech  
John Collura, University of Massachusetts at Amherst  
Jane Lappin, US Department of Transport

Jennie Martin of ITS United Kingdom, the Session Organiser, started by recapping on the work done by an informal but dedicated international group of volunteers on diversity in the ITS workforce, starting with a Women in ITS breakfast session at the Stockholm Congress in 2009.

Following an initiative by Natalia de Estevan Ubeda of Transport for London, the 2015 Bordeaux Congress had been made the occasion of two initiatives by the informal working group: the first Award for Best Action to Promote Diversity in the ITS Workforce, and the Special Interest Session which is the subject of this report.

Jennie noted that gender diversity at the Congresses had visibly improved during recent years. This also generally seemed true for the ITS workforce generally but there were big national variations and while the Nordic countries appeared to have eradicated gender imbalance in the workforce, the situation is very different in many other countries.

The intention in 2015 was to move on to consider diversity generally, starting with the well established principle that a workforce delivering a public service such as transport will be more effective the better it reflects the service users. There is also an increasing body of research evidence proving that diverse workforces deliver better results generally, in whatever field.

Natalia de Estevan Ubeda introduced the panel speakers and welcomed the audience of around twenty five people. She invited the speakers to make their opening statements.

John Collura of the University of Massachusetts began by noting that diversity means different things in different settings such as public sector departments, private companies, or universities. But it is an important factor in all places of work and study, and needs to be considered and understood by those in charge. Taking academia as his example, he explained that for faculty members to attract a diverse body of students, the faculty staff itself must be diverse. The high

school seniors who make up the pool of potential new entrants are very diverse, but in the past this diversity did not survive the transition to university, with imbalances in gender, race and social origin appearing. He and his colleagues had put a lot of work and thought into this with good results, and felt that the single most important intervention was to make sure that the faculty staff reflect the diversity which is aimed for in the student intake. To put it simply, potential students need to see “people like themselves” working at the university, in order to believe that studying there is an option for them. He also indicated how important it has been for faculty to establish close ties working with the Women’s Transportation Seminar (WTS) based in Boston and with the University’s WTS and Society of Women Engineers Student Chapters.

Martin Russ of Austriatech described how this Austrian professional network tackles diversity issues. He believes that to make the transport sector seem like a possible and attractive place to work, positive messages need to start at kindergarten level. Talking about mobility rather than transport makes it sound more accessible and interesting, and it is important to make it clear that the mobility sector has lots of different specialisms and fields of work; as Martin put it, it is “salt and pepper, not black and white”. It is also important to keep the workplace and the work practices evolving. If the work culture is controlled by a certain type of person, the work place will be unwelcoming to other types, be they younger, different in cultural background, etc. The culture needs to change to accommodate the diverse workforce. Potential recruits will not change to suit an established workplace culture, they will find somewhere more welcoming and comfortable to work. He agreed that this can cause irritation to those whose preconceptions are challenged and even overturned. Having a clear vision and communicating this well to the workforce will help address some of this “push-back” but to be honest, not all.

Susan Harris of ITS Australia thanked ITS (UK) for organising this session and for leading the work on diversity associated with the Congresses. She was enthusiastic about the first Award associated with the work and looked forward to championing the strand of activity further for the Melbourne 2016 Congress. She noted that diversity is not always visible – the difference may be in gender, race, or a visible disability, but it can equally be in social background, education history, ethics and morality – all of which will produce a particular way of thinking and acting. This may be challenging to those who do not share it, but we know that a team made up of people who think and act in different ways will achieve more than one where everybody unthinkingly agrees with one another. The latter set up will be more peaceful and comfortable, but the former makes sure that all angles are covered, approached considered, and then delivers a better result.

The success of many small tech start-ups illustrate the point – they do not have an established workplace culture or norm of what a suitable employee may be, and sometimes the actors may have no previous experience of workplaces at all. This frees them from adapting old patterns and may well contribute to their success through agility and creativity.

Linked to diversity in the workforce is the acceptance of mistakes whether real or apparent. Again, in a diverse workforce, what looks like an error to one member of staff may well appear as a sensible action or decision to another. It is therefore important to avoid “blame culture” and “back covering”. These attitudes will work against diversity. Instead, it needs to be accepted that if people are tackling tasks from different perspectives and bringing different skills to bear on them, sometimes things will go wrong. It is only when everybody coasts along the established routes that no apparent mistakes appear. However, mistakes are still there, in the form of missed opportunities to create new, better solutions.

Jane Lappin of the US DOT shared some experiences from her career which had started with her as one of very few women in her workplace, a workplace which was also lacking in just about every

other form of diversity. This led to a pattern of applying the same style of thinking and the same approach to every task and in the case of the early days of ITS, it led to resistance to the notion of introducing dynamic ICT to transport which almost everybody considered to be a static subject.

Whether you are “selling” goods or as in the case of government, services and policies, you cannot “sell” to people you neither know or understand, whose values and lifestyles are significantly different to your own. This is why you need to recruit to create a diversity of understanding and experience in your workforce to mirror your “customers” so that if one staff member does not understand one particular client, a colleague will. For such a workforce to function, respect and openness are essential, since by definition not all members of the workforce will understand each other at first contact, either. Jane has a lot of experience of achieving this with training and other deliberate actions to change existing workplace culture. It is difficult to remove “in or out” modes of thinking about values, behaviour, and approaches to problem solving, but is essential. The US DOT had set about making these changes in a strategic and thoroughly considered way, backing new hiring strategies with training for existing staff, so that while change was fairly slow, it was solidly grounded and therefore permanent. The two most important tasks were putting across the importance of tolerance within the workforce and between it and its clients, and creating a climate where ambiguity was not seen as a fault to be rectified by clarity but as an ever present factor in a diverse workplace. If ambiguity and differences in approach and opinion are accepted, then everybody is enabled to contribute to a consolidated solution and take ownership and responsibility for delivering it.

The audience contributed several interesting examples of diversity at work. One concerned a public transport operation of 1200 drivers. They were organised into depots and segregated by depot so that female, straight male, and gay drivers did not mix but worked in homogenous teams. There was one female management team member, responsible for the corporate flower pots and other plantings. The senior management decided to create and implement a strategy for a heterogenous workforce working in diverse teams, and a more representative management team. This action was underpinned by the knowledge that having more female managers usually delivers improved results for any organisation, as does having a diverse workforce. This indeed is what is now playing out for this particular organisation.

Recruitment practices are key to success and to avoiding positive discrimination which is enormously divisive for the workforce. If recruitment is structured to deliver a diverse selection of new entrants, there will be no need later on for positive discrimination as this variety of individuals work their way up the career ladder. By involving more people than just senior management and HR professionals in the recruitment processes, it should be possible to help mitigate the risk of narrowing new entrants down to “people like us”. However, some other audience members thought that positive discrimination, however controversial, was necessary if changes were to happen within an acceptable time scale.

In Sweden, government Ministers are roughly equal numbers male /female, and Sweden has a regulation that all government actions must have a “feministic mainstreamed perspective”, as well as taking into account all possible discriminatory effects on ethnic and/or religious minorities. The Swedes in the audience thought that this may make their government the first feministic government in the world.

It was pointed out that a diverse workforce is also diverse in age. In smaller workplaces this can be hard to achieve, but it is always beneficial. Again, the idea that staff members must be able to “fit in” and “suit the team” needs to be banished from the recruitment procedures. Older applicants should be assumed to be as likely as younger ones to be able to work on tech startups, and younger

recruits will be of great benefit to a middle-aged and above team of consultants. It is unlikely that their clients only want a middle-aged perspective on their project. The Congress Hackaton was quoted as a dubious example – it is heavily promoted as being for young participants. This is good in so far as the Congress offer as a whole is designed to attract middle-aged and above professionals, but not so good in that it implies that only the under-25s are capable of working with disruptive and fast changing IT.

An Austrian example of support for young people is associated with the annual Technology Summit. This includes a Mobility Breakfast where students “speed date” established experts, enabling them to learn by discussing real issues and also add some VIP contacts to their professional networks.

Networking is an essential part of all careers including ITS, and it is universally true that effective networking is easier for those who are part of the majority, whatever this may be in different fields of work and different countries. Effective networking is just as important if not more so to those in minority groups, and events such as the ITS Congresses should recognise this and take positive action to help. This can be in the form of targeted networking events, targeted invitations, buddy-finding services, mentoring, and so on. The Transportation Research Board’s annual event in Washington was quoted as a good example. Women are underrepresented at this event and the Women in Transportation Seminar (WTS) supports them by organising a reception which is always well attended and appreciated by participants.

An academic example was provided, of an institution where 30 years ago there were hardly any female students but now the split is even from undergraduate up to and including PhD students. The faculty staff is 40% female. The institution is now working on improving its record on ethnic and social diversity so that this too will come to reflect the pool of potential students. It regards workforce diversity as essential to create student diversity. Informal role models and examples are essential. Again, the WTS is active at the university and is very helpful in supporting female students.

Another example, this time from Transport for London, underlines the importance of this. TfL runs a substantial graduate scheme and the methods used to select graduates are rigorously designed to avoid all forms of discrimination. However, the outcome is always a very male team of recruits, simply because of how the genders have progressed through the UK education system prior to looking for their first job. By the time TfL is recruiting from the pool of graduates with suitable knowledge, this pool is overwhelmingly male.

It was noted that academia and industry must work together to improve not just this particular situation, but generally to enable universities to better prepare students for their working lives, and also to help employers make sure that they do not miss out on good recruits by routinely selecting “more of the usual” undergraduates. Employers should make sure that a good variety of people get to look over things like advertisements and job descriptions, to make sure that no unintended discrimination is taking place.

Thinking about ITS needs to move on to thinking about outcomes, no longer about technical specifications, pieces of kit and software. The starting point should always be what we want to achieve for the travelling public, not what technology we have available and how we would like to use it. A diverse workforce comes into its own when work becomes results-focused. With perspectives contributed by men and women, older and younger staff, people of different ethnicities, those with disabilities, people from different social and cultural background and so on, there is every chance that the methodology agreed to achieve the desired outcome will be more appropriate, since many more options will have been considered. The drawback will be a less

socially comfortable workplace, with more differences of opinion and styles of working, but it is time that we accepted that we will be required to work with a wide variety of people if our organisation is going to deliver the best possible results. Continuity and consensus have been positive concepts at work for a long time – it is time for us to re-evaluate them and consider that they could actually stop us from achieving our best.

Transport for London has been running an initiative to recruit ex-soldiers and other ex-armed services personnel for some time. This includes recruiting staff with both physical disabilities and mental health issues arising from their service experience. This has been overwhelmingly positive for the organisation. Far from creating problems which could have been avoided by only recruiting people without any health issues, the inclusion of these people in the workforce has added knowledge, strengths and viewpoints which the organisation lacked before, and which help it serve all the citizens of London better. A travel service which works well for disabled people, for instance, is very likely to also work better for many able-bodied travellers: those with heavy or bulky luggage, those with pushchairs, with several small children, and so on.

Transport for London also actively recruits school drop-outs as apprentices. Normally, these young people without any school certificates would find it very hard to get jobs. TfL's view is that if the apprenticeship scheme is designed correctly, it will work fine for these youngsters and the lack of prior formal qualifications will not matter. So far, the organisation has been proved right in this.

To promote ITS as a career to a wide selection of young people, efforts need to start long before the university stage. UK Department for Transport described one of their initiatives, holding a day for 13-14 year olds to promote transport generally as a career. Before the event, interest among the students was limited, but at the end of the day, a big majority thought that working in transport was something they would seriously consider. This included both boys and girls, from a wide number of ethnic and social backgrounds. DfT had taken the approach of letting the students hear from a number of people who actually work in transport themselves, and being able to question these "real life examples" worked well for the students.

### **Congress recommendations for Glasgow, Melbourne and beyond**

- Make specific efforts to attract female delegates
- Make having a more diverse set of Congress attendees a goal
- Hold special events for young people
- Hold special events for graduates
- Provide special assistance with networking for the Congress minorities – events, contact finding, mentoring, buddying ... One of the Congress deliverables should be to create valuable new contacts for all attendees
- Reduce or even waive fees for certain categories of young professionals and encourage industry sponsors to help support and sponsor this effort
- Sponsor students to attend
- Work to increase diversity also in the disciplines that attend
- A true panel discussion Special Interest Session like this one is more valuable than the type of SIS which is mainly PowerPoint presentations
- Include children in the Congress, for instance by organising half day tours of the event with schools
- Hold similar sessions to this one in Glasgow and in Melbourne