

MOVA AND PCMOVA USERS GROUP: MEETING NO. 20

Minutes of the Twentieth Meeting

Held on Tuesday March 31st 2009 at the Austin Court Conference Centre, Birmingham
Arranged by JSTSM Ltd

Aims, Objectives, and Format: For users, by users: to discuss any Mova related issues. The format for the Users Group meetings is now long established, of Users discussion of issues and applications (in the morning), and TRL and manufacturers (in the afternoon). Sessions are open to all throughout the day, unless as requested by Users to discuss matters in private.

1. **Welcome and Introduction:** Chairman, John Spence, JSTSM Ltd.
2. **Minutes:** Minutes had been issued by email as usual
3. **Apologies for absence:** for the Highways Agency, Richard Privett once again not attending the meeting; from DfT, Suku Phull present as a delegate;
4. **Agenda:** Amended to include Clearview Traffic demonstrating their magnetometer alternative to loop detector

Matters arising:

5. A Constitutional issue raised by the Chairman after discussion with many delegates, and with delegates support, the previously informal role of the group in supporting PCMova users raised with and supported by delegates hence the name of the group now becomes the "MOVA AND PCMOVA USER'S GROUP".
6. Once again in the absence of the Highways Agency: the Group expressed a desire for the Highways Agency to join in the debate; its views were sought on several aspects of Policy on Mova.
7. **Sponsors attending:** On this occasion Siemens (Keith Manston), telent Paul Southworth and David Cousin) (in the absence of Kevin Gilday), and Peek Helen Blood (in the absence of Andrew Hodge and others); all three major manufacturers, thank you, also attending Peter Sykes of SIAS, and new to this meeting Sergio Grosso of PTV (VISSIM), and with TRL sponsoring the meeting in equal shares of the cost necessary to fund the venue, and delegates refreshments and lunch. On this occasion the anzac signal company Aldridge Systems Ltd represented by Andy Dixon, taking the opportunity to make known that his company also now offering equipment including signal heads to the UK market.
8. Publications due: DfT are shortly to release two new Guidance "leaflets", Traffic Advisory Notes (to be available on the DfT stand at TRAFFEX), relating to Compact Mova and pedestrian facilities within Scoot systems.
9. The meeting is for the benefit of users: **Users are requested to bring examples of applications, issues or problems for discussion.** There has recently been a lack of discussion on examples from the floor.

Morning Programme: User's Issues and Applications

Session dedicated to Users to raise Issues and come forward with applications.

10. Issues raised by Users:

- Issue raised by Suku Phull, using SD/SA with Mova on high speed roads, following reports of a site using both, with results which were ineffective and raised eyebrows at DfT and TRL and also amongst users, being directly contrary to guidance from DfT and user's accepted practice of NOT using SD/SA on Mova sites (at least whilst Mova was under control) and adding intergreen on speed approaches between 35mph and 45mph of an additional 1 second and approaches between above 45mph of an additional 2 seconds, in accordance with Mark Crabtree's advice to previous meetings, re-iterated at this meeting. The practice of extending the green using SD/SA once Mova has sought a stage change is poor practice and condemned by delegates being outside guidance and best practice. The issue of outstanding liability for designers remains however, delegates seeking another attempt to persuade the Highways Agency to resolve this.
- Compact Mova – found (and proven by TRL!) to be highly effective at slow speed urban sites, achieving reduced delay for pedestrians and vehicles, with suggestions from users that at higher speed urban sites a 'short' IN loop (located as close as 50m / 60m FSL) together with a short X loop achieve highly effective and controlled operation, mitigating the concerns of some that TRL's advice that the X loops should be as far out as 45m (which creates more opportunity for Mova to optimise stragglers, but also increases the variation of travel time to the stopline between faster and slower vehicles, and is seen by some as too aggressive at free standing crossings). Compact Mova can be applied to any approach; there has been a misleading misconception in the past it applies to the entire junction.
- Mova 6 in use for well over a year now, the only problem being Pedestrian Priority: to overcome an issue in the software, to enable PEDMAX to work, requires a fix to the ".MDS" file; Mark Crabtree to produce guidance on how to do this (for release on the web site?). Email Mark if you are implementing PEDMAX1 pedestrian priority within Mova.
- Subsequent to TRL's indication last year that they would no longer be supporting the Bundle software MOVASPEED and SATFLOW, Dave Key (Pell Frischmann, and responsible for the 'Lightnup' web site offering a useful resource for Signal Engineers, <http://lightnup.co.uk/> has developed a user friendly approach speed measuring program available free of charge from the downloads page of the LIGHTNUP web site, http://lightnup.co.uk/lightnup_003.htm Mark Crabtree agreed to assist with the provision of the statistical input to confirm users are taking sufficient readings to be statistically significant.

Chair

Second Session: for PCMova User's

A new Session dedicated to user's of PCMova chaired by Dan Preece, the only user with experience of both PCMova and Controller functionality models. At this first meeting, a general discussion on the issues arising; User's please bring queries / worked examples to the meeting for discussion. Dan explained that in practice, we had found better results on street than were suggested by the model (even a fully validated model)

(SIAS produce a useful "Good Practice in modelling" guide which explains the necessity of good modelling practice).

Afternoon Programme

The afternoon programme as usual devoted to the manufacturers and TRL updating users on current and forthcoming developments:

11. **TRL** were represented by Mark Crabtree (tel 01344 770959, mcrabtree@trl.co.uk) Guile Martinez (01344 770035 gmartinez@trl.co.uk), Andy Kirkham and Adam Giszczak.
 - Mark had indicated in the morning session that MOVASETUP FOR WINDOWS was in beta testing, and had hoped to achieve release either at TRAFFEX. Distribution will be via the TRL website; there will be no charge for the program. In our experience this program is more user friendly than previous versions, and a long awaited step forward.
 - Mark gave a short presentation on his preliminary proposals for improved logging of information prepared by Mova about flows and congestion for Network Management purposes. The information will be stored in individual logs and will include new additions such as pedestrian service, oversaturation and exit blocking logs etc (details are to be finalised). Data is likely to be in CSV format to make it easy to load into spreadsheets. In addition to the logs a number of triggers are being proposed so the user can be warned of problems as they happen. The manufacturers will be consulted as to how they would like the information presented and then they can decide what functionality to incorporate into their equipment.
 - Mark indicated that Mova 6.1 would be released to the Signal Companies hopefully by mid summer, Mova 6.1 containing updates to the handling of the Saturation Flow measurement (including optional feedback into MOVA Kernel) improved and increased information logging and removing the remote download restrictions.
 - There is an issue setting PEDMAX in current issue MOVASETUP software (PEDMAX is a facility first introduced in Mova 6 to enhance the rather crude TOTALG parameter (which constrains cycle time all the time) to keep cycle time short for pedestrians; using the PEDMAX facility allows more control over cycle time, shortening the cycle time when there is pedestrian activity in a user controllable manner, not when there isn't, allowing longer cycle times if there is no pedestrian activity) – potential PEDMAX users should speak to TRL about the fix for this. MOVASETUP FOR WINDOWS should resolve this problem.
 - **It emerged at the Mova Development Group meeting immediately after the meeting that Mova Licence fees would with almost immediate effect shortly be increased to £700 (from £650 it has been for the past two years) for up to two streams for a first time Mova site (as before half the full fee for an upgrade from Mova 2 or 4 to 5 or 6), it having been previously indicated by TRL and agreed by the manufacturers steering group, that Licence fees would be reviewed every two years)**
12. **Highways Agency:** User's seek the attendance of the Highways Agency to resolve the liability issue, to offer guidance in the interim on additional intergreen to be used to avoid liability on the Engineer and his Authority / Firm, and other Mova related issues. Any clarification of the Highway Agency's Policy to be directed please to **Richard Privett**, the Highways Agency's man responsible for Mova (tel. 0117 372 8215, email Richard.Privett@highways.gsi.gov.uk).

13. The Highways Agency web site where signal related documents can be downloaded free of charge is <http://www.tssplansregistry.co.uk/homepage.asp>; users may in particular wish to review TR2500A, the recent replacement for TR2210A, and other signal related documents which can be downloaded free of charge - in particular for Mova Users MCH1542C.
14. **Telent** (formerly TSEU), in the absence of Kevin Gilday, represented by Paul Southworth (01926 693231 paul.southworth@telent.com) and David Cousins, Paul described the origins and history of the telent takeover of TSEU / Microsense and set out telent's services portfolio, explaining a new Controller was in hand (and would be on show at TRAFFEX) using the Sentinel software on a SWARCO hardware platform, to update Sentinel and enable the long awaited use by the Company of Mova 6 again with multistream capability, together with a free standing outstation for use on their own or other companies' Controllers.
15. **Peek**, represented by Helen Blood, newly appointed Business Development Manager (01256 891821 helen.blood@peek-traffic.co.uk) reminded Mova Users that Peek Chameleon units were Mova 6 now in use generally, with up to four streams per Chameleon; Peek were reviewing the Chameleons outstations to enable their use for both Mova and UTC on a single Chameleon.
16. **Siemens**, represented by Keith Manston (Keith.Manston@poole.siemens.co.uk 01202 782248). Keith described Siemens forthcoming UTMC OTU with integrated Mova on up to 4 streams either semi-integral or available as a free standing unit which can be fully managed from the installation including firmware downloads, with web-type access. Keith also described Siemens range of Heimdall FMCW radar detectors now fully tested and available from May 2009 useable for any control system including Scoot and Mova (performance report available at TRAFFEX).
17. **SIAS** were represented by Peter Sykes tel 0131 225 7900, Pete.Sykes@SIAS.com Peter discussed the importance of good modelling practice when using PCMOVA particularly with regards to modelling the variability in demand and also the tendency drivers have to re-route to their most advantageous route which may change if junction throughput is improved. SIAS also advertised a PCMOVA course at TRL on May 6-7th. There then followed a brief presentation on the use of Paramics as a tool for event and incident management using ITS and UTC systems to help fulfil the pro-active planning duties imposed by the Traffic Management Act, details available from SIAS.
18. PTV (the VISSIM developers) were represented at this meeting for the first time, by Sergio Grosso (0191 281 4356 info@PTV-Newcastle.co.uk) from their Newcastle office (headquarters are in Karlsruhe, South-West Germany). PTV provide software, equipment and consultancy in the fields of 'traffic', 'mobility' and 'logistics'; in the UK, work mainly in 'traffic', supporting software such as VISUM for traffic assessment at a strategic level and the microscopic simulator VISSIM which is capable of being linked to MOVA via PCMOVA. Sergio explained that over the years PTV has received interest in modelling MOVA -controlled junctions, dealt with by PCMOVA and VAP/VISVAP (a VISSIM add-on) to model vehicle actuated controllers including Mova. VAP is a small programming language used to build logic that can 'talk' to VISSIM at run time, which can be used to receive detector data at each simulation time step and pass back to VISSIM new signal timings. VISVAP is the interface to VAP and guarantees a smoother way to build and share VAP programs than coding VAP directly with a text editor. PTV were asked about training in the software, in particular new users, and offered the opportunity to show their modelling work at a future meeting.

19. Clearview Traffic were represented by Graham Muspratt (01869 362809 Graham.Muspratt@clearviewtraffic.com), who presented his Company's M100 magnetometer detector, an alternative technology to detector loops, which have been extensively and successfully tested (assisted by Paul Rouse 01905 796711 / 07976 770495 / pr@prsignals.com). The magnetometers are cut into the road at the loop locations, one per lane, communicate with the Controller using radio technology via pole mounted receivers / transmitters, with repeaters as necessary, with bespoke contact closure cards in place of detector cards. For other applications, the Units can also count and assess speeds, and are proving to be accurate and effective. Mova trial sites are in hand, results of which are very promising. Questions arose regarding magnetometer battery life; Graham indicated that to date the units in use in America looks likely to confirm the Company's estimated life of 10 years.
20. **AGD Detection systems**, represented by Lee Shepherd, tel 01452 854212, email lee.shepherd@agd-systems.com Lee presented a brief product update of the AGD315 detector, describing a Mova site in North Lanarkshire with at the clients request detection entirely using forward facing digital radar AGD 315 detectors at the optimum position some 20m from the detection point, 3.5m to 4m above ground, which had proved to be highly effective.

Summing Up / The Way Forward

21. **Minutes:** Thanks again to several individuals for assistance in recording discussions to enable me to write the minutes, in particular Graham Wheatley (Derbyshire CC), Ian Stewart (Lancashire CC), Sue Woodward (Gloucestershire Highways), and Paul Rouse (PRSignals), thank you all.
22. **Arrangements and Catering:** Thanks to the Austin Court Conference Centre for catering, and our sponsors, consisting of the signal companies attending, TRL, SIAS, and PTV (VISSIM) for funding lunch and the costs of the room and equipment hire, on this occasion arranged by JSTSM Ltd.
23. **Next Meeting:** The twenty-first meeting of the Mova User's Group to be held on Tuesday **22nd September 2009**, as usual on the day prior to the JCT Symposium this year to be held at Hertfordshire University, Hatfield, details available from the JCT website <http://www.jctconsultancy.co.uk/Symposium/Symposium.htm>, **booking arrangements through JCT please**
24. **Circulation:** TCUG (Secretary) and all interested parties

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Please note that Chairman's home address has changed to 25 Friarn, Over Stowey, Bridgwater, Somerset TA5 1HW, and landline to 01278 733799. Mobile 07941 963802, email js@jstsm.com and web site www.jstsm.com are unchanged.

Mova Courses available are:

JCT courses:

- The long established and popular annual course held in Birmingham (this year Monday 1st June to Thursday 4th June according to which parts of the Course you wish to attend) covering all aspects of Mova design and application intended for Traffic Engineers wishing to learn or expand their knowledge of Mova, a four day course, of which Day 1 was available as a stand alone 'Introduction' to Mova to those who want only an overview of Mova, the three day course for those who seek a more detailed understanding, and day 4 (only for those who have previously attended the three day course) available as a stand alone advanced applications topics day. Details from JCT.
- The two day 'Dataset Workshop' Course will be offered again this year, venue JCT's new office, a two day course which will run in the Autumn, dates to be confirmed. This is suitable for Traffic Engineers with experience of Mova wishing to gain experience of Creating Datasets in a workshop environment with supervision and assistance from JSTSM personnel, so bring your own examples of layouts requiring datasets, or problem sites, although lots of examples are available. Delegates will work on JCT PC's, although it may be helpful to get software setup advice to bring their own Laptops if they wish. Details from JCT.
- Various other courses have been developed, including a one day introduction to Mova Course, a bus priority course, and a course for Maintenance Engineers. All can be arranged as bespoke courses for individual authorities or consultants. Details from JSTSM Ltd

TRL are again providing a Mova Course, in the form of a Mova "Workshop" and an "Engineer's Workshop" in the Autumn, dates to be announced, details from TRL: http://www.trlsoftware.co.uk/store/training_prices.asp?pid=19 , and TRL are holding a PCMOVA course on May 6-7th at TRL.