British APCO MAIT Round Table – write-up and outcomes

British APCO held a round table event in London on September 26th, 2023, to specifically discuss the Multi Agency Incident Transfer (MAIT) schema. Users, suppliers, and consultants were all welcome to attend and encouraged to contribute to the round table.

Here at British APCO we have had oversight of the schema from the outset – it was back in 2016 that we recognised the need to share accurate information, at speed, often with many partners, during an emergency incident. We worked with the Cabinet Office, emergency services and commercial organisations to develop a common standard for the sharing of incident information between control rooms. The outcome was development of the MAIT schema which was approved in 2016 and is now an adopted open standard for UK government.

The purpose of the British APCO round table was to share learnings and stimulate debate about exactly what's next for MAIT – as well as understanding other methods currently used in the UK for incident transfer between agencies. Given recent news from the Home Office and National Fire Chiefs Council (NFCC) then the evidence suggests that we are on the path to widespread adoption of MAIT by Fire & Rescue Services across England & Wales.

The programme for the day ran as follows with the key objectives of sharing ongoing work; challenging as and where appropriate; and setting a clear forward path for MAIT. Copies of the slides are available by contacting support@bapco.org.uk:

Welcome and Introduction to the day	**John Anthony** British APCO
An update on MAIT	**Tony Bracey** Welsh Government
The aims and objectives for MAIT across English Fire & Rescue Services	**Keith Donnelly** Home Office Fire
Is there a case for agencies using DEIT (Direct Electronic Incident Transfer) to consider migrating to MAIT?	**Brian Chappelle and Jim Dutton**, National Highways
An alternative view from Ambulance Trusts – how are they currently transferring incidents and bringing call handling together	**Ola Zahran**, Yorkshire Ambulance Service
Insights into how industry is delivering & supporting MAIT	**Gordon Ellen, Seraphina Earl and Graham Snee** ATOS/Eviden **Paul Miller**, AVR Group
Discussion led by British APCO: Maintaining the MAIT schema to ensure it remains fit for purpose; is a core requirement for control room CAD solutions; and has no barriers between suppliers offering MAIT enabled solution.	

An update on MAIT

MAIT has been around for some seven years – and there is a need for the community to take MAIT to the next level – what ever that may be. In Wales, MAIT has been up and running, supported by ATOS/Eviden, and in that time has been 100% available, 24 hours a day, 7 days a week.

British Transport Police and Welsh Ambulance are both soon coming on board – we have passed the stage of education; we now need to be in the "doing" stage.

There is a challenge – for instance, where are UK Police Forces in all of this ?   They do share and transfer incident information with various agencies – but rarely is MAIT the basis for structuring the data transfer.

The MAIT schema does need to evolve – is there full agreement that this is indeed the case and, if so, how is this managed and governed.

The view from the Home Office and English Fire & Rescue Services

On June 14th, 2017, a high-rise fire broke out in the 24-storey Grenfell Tower block of flats in North Kensington, West London, at 00:54 BST and burned for 60 hours. Seventy-two people died, two later in hospital, with more than 70 injured and 223 escaping.

In 2020, a Home Office grant was made available to address recommendations from the Grenfell Tower Inquiry, specifically in relation to the numbers of 999 calls being received and the way in which other fire control rooms were able to provide assistance – especially given the limited situation awareness that they had. It was noted that delays in critical information being passed between fire control rooms in fast time can have a negative outcome to the overall successful resolution of an incident.

Three initiatives were identified to share information:

1. Creation of a radio broadcast talk group
   Work completed in 2021, fire control operators can now broadcast situational awareness to all fire control rooms via Airwave Radio

2. A national fire and rescue service 999 call redistribution scheme
   National Call Distribution Scheme known as "Operation Willow Beck" was introduced in 2022 and is successfully up and running

3. Multi Agency Incident Transfer
   The final piece of the Jigsaw…

An NFCC (National Fire Chiefs Council) led procurement recently awarded a contract for the 44 English FRS – which work through 33 fire control rooms. Due to the complexities of fully integrating MAIT, together with several FRS reprocuring C&C/CAD systems, a phased implementation approach with a web based, standalone, MAIT deployment has been agreed as the preferred initial approach – although FRS can go straight to the fully integrated solution should they wish.

Recognising that there are multiple MAIT suppliers, the English FRS contract does require their chosen suppler to work together with any other supplier.

As part of the outcomes from the Home Office input to the roundtable, British APCO took away an action to see how the UK could be mapped with which emergency agencies are using MAIT; which are in the process of implementation; and those yet to confirm MAIT usage.

National Highways – and their need to transfer incidents

National Highways has a significant network of roads in England to manage and monitor – this is carried out from one National Traffic Operations Centre and seven Regional Operations Centres. In the past 12 months they have dealt with:

- 608,287 incidents
- 134,093 incidents were then transferred to the Police
  - Transfer is digital using DEIT to 31 police forces; by email to the other forces
  - Average of 360 transfers per day
- 1,670 incidents transferred to Fire
  - Transfer is by telephone call
- 1,247 to the Ambulance Service
  - Transfer is by telephone call

DEIT – Direct Emergency Incident Transfer is a schema that pre-dates MAIT. National Highways have investigated how they would benefit from MAIT – and recognise that their Control Works platform is already able to send & receive incidents using MAIT. Benefits are likely to include:

- No change to configuration management process with C&C platform
- Efficient process for adding new connections/emergency agencies
- Potential cost savings on use of Airwave hailing talkgroups
- Reduction is telephone calls saving time to respond – and freeing up operator time
- Enhance speed and quality of incident transfer
- Improve on the road Traffic Officer response time to incidents – and improve safety
- Ability to work smarter with more agencies to achieve common goal of public safety – which could include Contractors, Utilities and Local Authorities.

An alternative view from Ambulance Trusts

To get an idea of scale, the 14 UK Ambulance Trusts handle over 13 million emergency calls a year – around 36,000 per day – Yorkshire Ambulance Service alone responds to 65% of their 3,350 daily 999/112 calls. On top of that, in the Yorkshire Ambulance Service area the 111 NHS Direct number received nearly 5,000 calls per day on average.

Performance improvements have been made through their Intelligent Routing Platform (IRP). This helps reduce call answering times with unanswered calls distributed to other Ambulance Trusts. Content Guru is the solution provider for the IRP. Once answered, the call can then be passed electronically to the "home trust" who can then determine response for dispatching an ambulance crew. The Interoperability Tool Kit (ITK) is key to structuring the data for transfer between Ambulance Trusts.

Already looking to the future – and BaRS (Booking & Referral Standard) which is an interoperability standard based on FHIR R4 (Fast Healthcare Interoperability Resources).

Insights into how Industry is Supporting MAIT

There are currently two suppliers supporting MAIT connectivity – Eviden (a part of ATOS) and AVR Group. Both offer their services through the UK Government G-Cloud portal.

Eviden have been delivering MAIT to multiple agencies for around 3 years; in that time they have provided 24/7 support; ~500,000 messages have been transferred; with no downtime or failures. Their solution is based upon a National Emergency Hub – which they see as key to their MAIT solution concept – and connect individual agencies to the Hub using VPN tunnels for security.

Eviden will work with any agency or supplier – seeing their role in MAIT message transfers as that of a postmaster.

AVR has recently been awarded the NFCC led Fire Service contract mentioned earlier – and have been using the principles of MAIT as part of the Emergency Call Handling (ECHO) platform.

Both suppliers evidenced that what can be a 3-to-4-minute average phone call between agencies can be achieved in around 15 seconds using MAIT – a key saving for a specific incident, as well as for the call handlers who can be ready to take their next call earlier than would otherwise be the case.

Round Table discussion take-aways

GOVERNANCE:

- Strong push for *governance that mirrors that used for Airwave* currently
- There must be a *"neutral" custodian* – British APCO or JESIP suggested. Custodian to oversee schema as well as *information sharing agreements*
- Need a clear *roadmap for MAIT*; allows innovation and moves with technology
- *Mandate MAIT* as a core requirement in all new ES contracts; technical, support and supplier collaboration

UNDERSTANDING THE SCHEMA:

- *"How to guide"* for users and suppliers
- *Best practice materials* – training guides, videos, etc.
- Efficiencies explained to *support user business case*

MULTI AGENCY CONSIDERATIONS:

- *Simple common language* & principles – JESIP well placed to support
- *Chief Officer awareness* key
- Mandate all emergency agencies have MAIT as a core requirement in tenders – using same language and principles [obvious – but needs to be said !]
- *Secure data paths* and *agreed security protocols* that must be followed
- *Local* resilience forum *awareness*

MARKETING & COMMUNICATIONS:

- *Agree target audiences* – there will be more than one [suppliers; users; buyers; etc]
- *Share existing videos & collateral*; create new where there may be gaps
- Create a *push from the staff side* up to NPCC, NFCC, AACE, etc
- *Use other interested parties*, such as Ordnance Survey, to support innovation & adoption.

<u>Next Steps</u>

The British APCO MAIT Round Table provided the opportunity for constructive discussion around MAIT – the work from the day is supportive of a more active MAIT leadership group being formed across all interested parties. British APCO would welcome our continued participation in an oversight role – and will either contribute to an initiative led by one or more of the emergency agencies or take the lead to form an initial scoping and working group should nothing else be forthcoming.

British APCO would like to thank everyone who participated in the Round Table for their constructive and candid inputs into an important topic area.

APPENDIX: Post-it Note inputs:

Governance

Contact chair between multiple agencies	Home Office for overall governance chaired by either or all of the services	NFCC, Home Office, NARU, CPOA – a combined group	Set up governance groups like Airwave	Airwave type governance
Protocol Roadmap	Underlying data should be the same	What is the minimum required data to send a call ?	MAIT – core requirement in all new ES contracts	BAPCO or JESIP as custodian of MAIT
Protocols need to be simple to endure – but must move with technology (see GD92)	Govt level ownership & oversight to ensure the standard is maintained & suppliers work collaborate	Establish User Group – drive improvement; provide case studies	Obligation in all new contracts to ensure they talk to all hubs	GDPR – multi-agency information sharing agreement

Technical governance group own tech standard – i.e. C&C and HUB suppliers

GDPR – who owns DPIA ? Are MAIT suppliers processors ?

Minister lead; NPCC or similar lead; HMIC on inspections (points deduction); PCC national lead. Representatives for governance – each agency; C&C/CAD rep; User Group (existing); BAPCO for rule book

Understanding the Schema: training, user guides, etc

Schema – User Group to drive development	"How to" guide for suppliers to follow with updates	"How to" guide for end users to know what to do when an incident is passed	What does good practice look like ?	Ops centres understanding the shift from phone calls to increase in CAD incidents
Future schema min need to i/f to social media apps, streaming. Move away from voice in 5-10 years?	Share data to show how handling is reduced	Keep it simple – why use? How to use? End user needs to be understood – feedback to assist with training material	GDPR awareness for users	Build on BAPCO MAIT documents; agency guidance
Accepting what is. Timely relevant information. Send or not to send	Wales – MAIT videos; ECHO video; show in use helps build confidence	Keep MAIT simple end to end connectivity and routing (IP address and routing table) Email is a prime example	Set of principles set out in MAIT. Organisations map their data to the MAIT protocol, e.g. incident type	Schema: agreed by User Assurance Group; Working Group – regional, local, suppliers

Putting the 'M' in MAIT

JESIP – Keep in simple common language

Embed into JESIP principles

Coastguard as a Fire Partner

Building into procurement process/tenders

Chief officer forums at multi-agency level

Engage at multi-user forums e.g. Radio User Groups, Comms User Groups

Local Resilience Forums

Look at Case Studies – Fire example

Good governance; Secure data paths; security protocols; web portal for other agencies (e.g. Local Authorities; Internal ICT are too busy ! Legal recommendations for MAIT – e.g. Grenfell 3.16

MAIT MarComms (videos, case studies, etc)

Who is target for MarComms ?

OS keen to support with UPRN adoption

Show case benefit of MAIT & DEIT

Put video(s) on internal comms pages in each agency – create a push from staff side
British APCO push to NPCC, NFCC, AACE, etc