

040115MN – USF TWG Data Objects Meeting 4 (London – TfL Offices, Eccleston Place)

(Purple text added 15.01.2004)

Update to Discussion Notes from Meeting 3

Update on discussions with UDG

We need to be careful that the “principles” that we have developed and are now working to are adhered to by future data objects additions if the UDG manage the Registry

Revised Data Objects

Reference System

It is agreed that the Location Reference is now defined in the Network Structures and therefore ALL data objects will have the “ReferenceSystem” field removed

Type Ids (see several references below)

All to consider if these fields should be mandatory – feedback to Janet **A: JA / All**

If reply is “Yes” then all Data Object Champions need to ensure that this is implemented in all Data Objects **A: Data Object Champions**

The Type ID table (below) structure to be moved to common data objects

The Type Data Source should be used to differentiate between Type ID instantiations, for example a Peek Pelican or a Siemens Pelican

Type ID Table

Attribute Name	Attribute Type	Description	Data Type	Min size	Max size	Ma n	Co m m e n t s	Table/View reference
TypeID	STATIC	Identifier for type	Number	1	10	Y		Traffic_Signal_TypeID
TypeID Description	STATIC	Description of type	Character	6	32	Y		

Type Ids need to be controlled -> therefore we need to a formal ID range 1-999 which is controlled by the Registry Administrator but individual suppliers will be allocated “blocks” from 1000 upwards in 100 chunks – Brendan to allocate and formalise **A:BM**

Brendan to formalise this data object **A:BM**

Traffic Signal Data Objects

TypeID added with the following pre-defined TypeIDs added to the Traffic Signal Support Object–

1 = Intersection
2 = Pelican
3 = Puffin
4 = Toucan
5 = Pegasus
6 = Tram Crossing
7 = Wig Wag
999 = Other (see below)

It is essential that if a supplier wishes to add to this list it must be with the approval of the Data Objects Registry Manager

TypeID 999 is used for those occasions when a formal TypeID has been requested but has not yet been incorporated into the Data Objects Registry

Janet to send Gary the final version for submission to the controlled Data Objects Registry Version 2 file. **A: JA**

Janet to align with the Type ID changes proposed above **A: JA**

Janet to forward final Data Object to GU for GU Approval Circulation **A: BM**

Air Quality Data Object

Question raised why has the measurement units moved from the Configuration Table to the Definition Table when this makes the Definition Table for Air Quality non-standard **A: BM**
To maintain consistency with other Data Objects the decision = Measurements Units will now be placed in the Air Quality BASIC DATA component

Changing the pollutant Data Type to "Real" will mean that a number of "live" databases will need to be reformatted from "Integer" to "Real" – however, the data is received from the MIB in "Real" format.

Brendan requested to confirm before a switch to "Real" is agreed (why is a decimal fraction needed when we are measuring in parts per million anyway ?). **A: BM**
It is unavoidable (driven by the equipment supplier) – we will use "Real"

In both the DYNAMIC and CONFIGURATION tables the "SystemCodeNumber" is missing – Brendan needs to put in (see JA E-Mail dated 25.11.2003) **A: BM**

In the Table / View Reference (now Component Reference) the references AIRQUALITY_DEF and AIRQUALITY_CONFIG need to be renamed AIRQUALITY_DEFINITION and AIRQUALITY_CONFIGURATION to be consistent **A: BM**

Air Quality Fault Types Object should be moved to become part of the Common Support Fault Types Support Object **A: BM**

Brendan to complete above actions + align with the new Generic Data Object Structure **A: BM**

Brendan to forward final Data Object to GU for GU Approval Circulation **A: BM**

Meteorological Objects

Meteorological Fault Type (Support) Object needs to be moved to the Common Fault Type Support Object – **DONE (BM)**

In the Table / View Reference the references METEOROLOGICAL_DEF needs to be renamed METEOROLOGICAL_DEFINITION to be consistent – **DONE (BM)**

Air Temperature is being proposed to be a “Real” value – is this really necessary due to need to reformatting data in several “live” databases – Brendan to confirm before change agreed **A: BM** - this will be Real **A: BM**

Agreed to move the Road Condition Type Support Object Into a single Support Object as separate tables – these should be a Global Type Object so that everyone can refer to it and not just meteorological applications **A: BM**

Brendan to complete above actions + align with the new Generic Data Object Structure **A: BM**

Brendan to forward final Data Object to GU for GU Approval Circulation **A: BM**

Global Data Objects are to be advised

Road **A:BM**

Visibility **A:BM**

Precipitation **A: BM**

Data Source **A: JD**

Day Type **A: SC (but not for V2 –**

The Day Type Data Object needs to be extended in due course to accommodate the Calendar Data Object (to be defined in due course). For now we will stick with the Basic Day Type Data Object as in the Profile Support Data Object – Janet to supply a copy **A: JA**

VMS Objects

Move the individual Support Objects into a single Support Object – **DONE (BM)**

Missing “_” in VMS_CONFIGURATION – **DONE (BM)**

Confirm “Y” in ET columns match up to the appropriate Support Object Tables – **DONE (BM)**

Move TypeID into GENERIC DATA

Brendan to forward final GU Data Objects for GU Approval Circulation **A: BM**

Detector Objects

Add TypeID with an appropriate Support Object to define “Detector Types” **A: BM / JA**

This is covered by the TypeID actions above (based on the Revised Initial List below) **A: BM**

Initial **L**ist proposed =

0 = SCOOT Loops

1 = Count 1 count bit

2 = Count 2 count bit

3 = Occupancy 1 count bit

4 = Occupancy 2 count bit

5 = RMS – this type needs to be discussed (supplier specific) **Superceded (JA)**

6 = Artemis – this type needs to be discussed (supplier specific) **Superceded (JA)**

7 = Congestion

8 = Count 1 assignable bit

It was agreed that the above list could be reduced to the Revised Initial List proposed =

- 1 = SCOOT Loops
 - 2 = Count
 - 3 = Occupancy
 - 4 = Speed
 - 5 = Queue
 - 6 = Bus
- Combinations also need to be defined

Janet to co-ordinate the final Detector Type list – all to provide Janet with their additions
Completed during meeting (All/JA)

Occupancy is being proposed to be a “Real” value – is this really necessary due to need to reformatting data in several “live” databases – Brendan to confirm before change agreed **A: BM**
Decision = for consistency it would be better to change this to “Real” to avoid future potential problems

If we intend to switch to using “Real” values should “Speed” also be “Real” ? **A: BM**
Decision = for consistency it would be better to make Speed “Real” to avoid future potential problems

The Enhanced Detector Data Object is no longer needed – the Detector Data Object will provide this data

It has been suggested that the Detector Object should have an additional DYNAMIC for Congestion (as a measure rather than a “yes / no” – Decision = for now such an attribute should be included as private table until a generic definition can be defined

Brendan to forward final Data Object to GU for GU Approval Circulation **A: BM**

Prediction and Profile Objects

Discussed but agreed to defer until Brendan available to discuss
Agreed to leave in today’s discussion to enable higher priority Data Objects to be discussed

Transport Objects

“TransportLinkType” within the data object should be renamed TypeID with its appropriate Support Object = Transport Link Support Object **A: JA**

In the Transport Link Object the Generic Definition Component references a Transport Link which is not used in this particular object – this attribute should be removed in this Data Object **A: JA**

Agreement needed as to which fields are required within the CONFIGURATION and DYNAMIC tables for SCOOT and ANPR links. Janet to circulate E-Mail requesting input **DONE (JA / ALL (replies to Janet))**

It is suggested that there is a need to split the CONFIGURATION DATA into a BASIC DATA part and a CONFIGURATION DATA part – Siemens to consider (including Profile) and propose a solution **A: JA**

Need to introduce a Transport Route Type ID and associated Support Object **DONE (JA)**

All to comment on Janet’s proposals issued in E-Mail dated 25.11.2003 – particularly the “ordered list” **A: JA / ALL**

LinkSystemCodeNumber is now TransportLinkReference
The following will now become “private” fields...

LinkStart
LinkVia
LinkEnd
SegmentLength
SCNExists
ConfigurationDate

The following attributes will be removed ...

SystemCodeNumber
PeriodNumber
StartPeriod
EndPeriod
DefaultJourneyTime
ConfigurationDate

Journey Time Object is no longer needed as this data will be provided by the Transport Route Data Object

Janet to forward final Data Object to GU for GU Approval Circulation **A: JA**

CCTV and other Interface Issues

Need to change the "interface specification" to accommodate the transmission of binary CCTV data.

Proposal is to "lose" the SQL interface – or should we add a new interface (should not remove existing interfaces ?). SQL has problems as you have to understand the structure of the data that you are accessing.

Could CCTV be resolved by passing the "image" out of the data object and leave the transfer of the "binary" to "local arrangements" ? ... pass a reference (which could be a file name). This is agreed to be a pragmatic approach at this stage to avoid delay in getting the Data Objects Registry Version 2 released. Stephen will progress this approach and document. **A: SC**

Session management needs addressing. Key players are the CDB suppliers – Siemens, Tenet and Motts + Peek. Consider views for initial proposal at the next meeting.

A: MB/JA/JM/BM/GU/JD/IC/BR

To be discussed in a future meeting

Way Forward to achieve completion

Target completion date = mid-February 2004

Continue by E-Mail with review meeting to be held on – 15.01.2004 in London – Gary to book room **A: GU**

ADDITIONAL NOTES FROM DISCUSSIONS 15.01.2004

Definition of Data Types

(This discussion originated from the Air Quality Data Object review discussion)

It is agreed that all Data Types should be defined in the Data Objects Registry (for example, Real Integer = xxxx) – implementers must adhere to these definitions to ensure cross-compatibility and ability to implement on different database engines

Should we use the XML definitions ?

Type definition discussions

Date, Time, DateTime = agreed that all three types are needed

The Modified Julian Date to be used is to be defined in the Registry – Janet has a reference to an industry statement

Integer = all integer fields should be 64-bit

Real = Decimal value (no precision defined in the specification – implementers define)

Char String = for system control values it is necessary to retain max and min string lengths but for description fields the length should be unrestricted

Single Char =

or

Boolean = (1 and 0) or (YES and NO) or (TRUE and FALSE) – do we want Boolean ?

Decision is to use Logical which = “Y” and “N”

Based on this starting point Brendan to co-ordinate E-Mail discussion to construct a Data Type Definition Table for inclusion in the Registry (ensuring the due consideration is given to avoiding impact and change on the interface) **A: BM**

Generic Data Object Structure

Using the Generic Data Object Structure defined during the meeting, Brendan to provide general description document to explain the structure and the meaning of each element **A: BM**

Janet to re-vamp the Traffic Signal Data Object as an example of a specific implementation **A: JA**

Fault Objects

Jim to propose a Generic Fault Object + Support Tables and circulate for E-Mail discussion **A: JD**

Access Control Data Object

Jim to re-format to new Generic Template

The Access Control Support Object should be incorporated into the Access Control Data Object

Jim to forward final Data Object to GU for GU Approval Circulation **A: JD**

Car Park Data Objects

Transferred to Siemens to review – need to consider the availability of “raw” count data and the use of “Real” v “Integer” attributes **A: JA**

Car Park System Type Object – becomes part of the generic TypeID

Day of Week Type Object becomes “DayType” which is part of the Global Objects

DATE OF NEXT MEETING

12.02.2004 – TfL (tbc)

Review those Dos not yet reviewed

Review those Dos under final approval

If time permits to review Registry Management

Review Faults, Planned and Unplanned prior to next meeting for final discussion at the meeting

A: JD

Stephen to propose interim CCTV solution for final discussion at the next meeting **A: SC**