

Traffic Control Products with Charge Code Challenges

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Scope of Note

This note has been prepared for comment at the UMSUG Meeting 131 Wed 17th March 2021 by M Pleydell of ARTSM.

As new attendees at the meeting there is a learning activity occurring in ARTSM and its members about the processes for obtaining charge codes and switching regimes. For any given manufacturer this is a relatively infrequent task so expertise does not accumulate within those organisations.

Against that context this note identifies those type of traffic control products where the manufacturing community perceives or has encountered challenges when working to obtain a charge code or switching regime.

For each case it also suggests an indicative route to understanding realistic energy consumption, with the aspiration of turning that into a methodology for testing and charge code / switching regime definition.

Purpose/Objective of Note

As reported at meeting 130, there are manufacturers and suppliers of traffic control products who experience difficulties in achieving Charge Coding or Switching Regimes for certain products in this sector.

This note lists those product types with an initial objective of getting feedback from the meeting on both the breadth of the list and the proposed methods for obtaining realistic energy consumption data.

Next Steps

Subject to the committees guidance we would propose at or before subsequent meetings that we would identify those products that are most in need of support and propose a methodology for arriving at a their realistic energy use. These methodologies will be based in so far as it practicable on existing Elexon methodologies.

The Products

The product descriptors below are indicative of families or types of products and are not specific products from specific manufacturers. It is a clear aim of this work to be manufacturer agnostic, drawing on data from as many manufacturers of equipment as can be accessed when developing models and methodologies for achieving charge codes or switching regimes.

Table 1 Product Families of Concern to ARTSM Members

Item	Description	Issue	Proposed Solution
1	VMS	Variable messages, dimming levels and duty cycles	National averaging
2	VAS (different sign types will need different processes)	Variable messages, dimming levels and duty cycles	National averaging
3	Wig-wag signals (ambulance/fire station)	Variable duty cycles	National averaging
4	Pedestrian Push button boxes	Variable duty cycles	National averaging
5	Items not connected directly to the 230V supply	Accommodating transformer losses etc.	Re-visit previously agreed approach
6	Part Time Traffic Signal Sites	Variable burn hours	Seek a code or switching regime for part time sites based on national averaging
7	Bus stop displays	May be switched off at night	Seek a code or switching regime for part time use based on national averaging
8	Communications equipment	Often added to controllers – levels of comms activity may vary by site, time of day, etc.	As item 5 and some level of national average for UTC, RM, other application types.
9	School Crossing warnings	Term time hours of use need to be accommodated	Seek a switch regime that accommodates average yearly use
10	Overheight vehicle detection systems	Variable duty cycles	National averaging

As noted above, while we have tried to get a full view of where issues may be occurring this list may grow during subsequent revisions.

M Pleydell

Note Ends