TRANSPORT DIRECT

User Guide to Archiving NaPTAN Stops

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1. Introduction

This document is an advice note setting out the provision of a new facility to archive NaPTAN stops. It sets out the reasons for introducing the facility, describes the initial transition to use of archiving and explains the on-going management of stop data using the facility.

The use of archiving is not mandatory and authorities with few DELeted NaPTAN stop records may find no pressing need for it. Authorities with large numbers of DELeted records, however, will gain significantly from this new arrangement.

Any queries regarding the implementation of archiving should be directed to Transport Direct initially (TDPortal.Feedback@dft.gsi.gov.uk). Any queries regarding the use of archiving on a day-to-day basis once it is implemented should be directed to Thales, as you would for other NaPTAN data queries.

2. Current Position

The NaPTAN database holds close to 400,000 stop records. A small but significant number of these records have a Modification value of DELeted. At any point in time a local authority may also have a number of records shown as PENding, as a result of differences between the set of data held in the national database and that uploaded in a submission (i.e. stops missing in the upload). These PENding stops are unaffected by the introduction of archiving.

A NaPTAN stop is deleted when the local authority owning that stop decides it is no longer required for services. They do this by setting the Modification value of the stop in their stop database to DELeted, which is then carried with the stop record when it is uploaded to the national NaPTAN database, and this then becomes the new Modification value when the records are overwritten.

The rules for managing NaPTAN stops state that these stops cannot be physically removed from the database because:

- they may be used by other services, causing potential data integrity problems if they are no longer available;
- they may be needed for data audit and traceability purposes;
- they could have uses outside of journey planning; and
- they may be referenced within an Electronic Bus Service Registration (EBSR) and therefore form part of an important legal record which must be retained permanently.

It has become clear, however, that a high proportion of these DELeted stops are never referred to again. Although they are held in local databases, they are effectively redundant

records, which can cause some confusion and cluttering of the database. The DELeted stops are also held nationally and cause problems for systems that display stop records. This is particularly a problem where stops have been re-numbered but have the same OSGR, thus overlaying deleted and active stops (e.g. on the NaPTAN Viewer).

It has been decided to improve this situation by introducing the facility to ARChive records, allowing them to be removed from the main stops databases in a controlled and auditable way.

3.   Summary of Archiving

The NaPTAN schema has been amended to include a new Modification value of ARChived (ARC). Stops can be set to ARChived, provided certain conditions are met. This will allow records of ARChived stops to be held nationally, but separated logically from the all other "active" stops. ARChiving will be a one-way process and it will not be possible to reinstate records in the national database once they have been ARChived, but the ARChived stops records will continue to be available for download e.g. for auditing or tracing purposes. Once a record's Modification value has been set to ARChived in the national database, the local authority owner will be able to remove the records for the ARChived stops from their local database.

A separate procedure is available to handle bulk ARChiving, whereby a large group of stops can be ARChived in one pass.

Systems used to hold NaPTAN stop data will need to be capable of setting the Modification value of stops to the new ARChived value and should be capable of exporting data in accordance with the NaPTAN v2.2 schema (v2.1 does not support archiving). The date/time stamping of changes to stop records is an integral and important part of the validation checks carried out.   However it will also be possible to submit a list of stops for ARChiving if the locally-used NaPTAN editing system does not yet support ARChiving.

4.   Detailed Description of Archiving

NaPTAN Schema Changes

ARChive will be a valid setting for the Modification field in the Stops data element and the following associated elements:

- -   AlternativeDescriptor
- -   AlternativeNPTGLocality
- -   HailAndRide
- -   StopsInStopArea
- -   FlexibleZone
- -   StopAvailability

(To avoid any ambiguity, StopArea and AreaHierarchy are NOT included in these changes, even though v2.2 of the NaPTAN schema would not prevent these records being archived. The exclusion of archiving of StopArea and AreaHierarchy is a business rule, and attempts to archive such records will result in those records not validating on upload).

The acceptable values for Modification will include ARChive, in addition to NEW, REVise and DELete. The acceptable values for Status settings will remain unchanged, i.e. ACTive, Inactive and PENding.

Rules for Archiving (individual stops)

The data submission procedure is unchanged.

For stops to be considered for archiving their status must be set to Inactive and their the Modification value must be set to DELete, with the Modification DateTime changed to record the date and time when the change to Modification = DELete was made.

A stop with Modification set to DELete for a minimum of three years can be edited so that the Modification value becomes ARChived. A data submission for uploading to the NaPTAN database will then include the ARChived stops, which will be held in the national stops database.

Once a stop is uploaded with a valid ARChive Modification set, this cannot be changed and it remains ARChived permanently. ARChiving is a one-way process, without exception.

Once an ARChived record has been uploaded successfully the Local Authority is free to delete that record from its local stops database. It is not then necessary for these stops to be included in any subsequent uploads. If a stop previously modified to ARChive is re-submitted, still with a modification of ARChive, this does not cause a data submission error or rejection.

If a stop that was previously set to ARChive, and uploaded successfully, is re-submitted subsequently, with its Modification set to NEW, REVise or DELete, an error will be reported and that stop's Modification will remain as ARChive in the National database.

Where data is submitted for the associated elements, as listed above, the same checking and validation rules will apply. Where the parent stop is set to ARChived, then the associated elements will be changed to ARChived in the national database, whether or not this has been done in the upload. However where an associated element is marked as ARChived but the principal stop record is not ARChived, then the record will become PENding and an error report will be returned.

5. Rules for Archiving (Bulk Updates)

A separate procedure will be available to ARChive whole groups of stops, e.g. a number created in error or replaced. This procedure can also be used where there is a need to ARChive stops that were DELeted less than 3 years ago. This will follow a number of agreed steps:

The Local Authority will compile a list of the stops to be ARChived and send the request to Transport Direct (emailed to TDPortal.Feedback@dft.gsi.gov.uk) together with a short explanation of the reason why the stops need to be ARChived.

TD will check the content of the list and approve the ARChiving (this could require consultation with operators who may be coding their services to these stops).

TD will forward the approved request to Thales for bulk ARChiving at the earliest opportunity.

Thales will process the request and inform the Local Authority and TD when it has been completed and when the updated data is available for downloading and for viewing (e.g. using the NaPTAN Viewer).

An alternative method for ARChiving stops which have not been DELeted for more than three years will be available on some NaPTAN editing systems. Where this is available there will be a procedure for unlocking the 3yr rule on the local editing system with the specific consent of

DfT. It will then be possible for authorities using such systems to set records to ARChived within their normal editing routines. The upload file created from this process will need to be e-mailed (and NOT uploaded) to Thales for processing so that the tests for the 3yr rule will not be applied to that data. Such arrangements will only exist where DfT is persuaded that they are appropriate, and each authorisation will only apply to the creation of a single upload file.

6. Downloading ARChived Stops data

ARChived stops will be available for downloading – alongside the normal download of data from Thales it will also be possible to download a file of ARChived records for any AdminArea. In CSV a separate zipped ARChived records file will be available to be downloaded. In XML, the ARChived records will form a separate file (using v2.2 of the schema), whilst all normal stops data will continue to be in v2.1 of the schema.

The download and export of data to the TD Portal will exclude those stops marked as ARChived. They will not be visible on the portal, therefore, nor through the associated NaPTAN Viewer.

ARChived stops for each AdminArea will be created for downloading as part of the daily submission process. The files generated will be:

- XML – exported to a separate file: NaPTAN<area>_arc .xml and included in the zip file NaPTAN<area>xml_arc. Zip. This file will be in v2.2 format (whereas the main data file will remain in v2.1 format)

- CSV - exported to separate files: eg. stops_arc. csv and included in the zip file NaPTAN<area>csv_arc. zip

7. Display of Stops Data Status

Information on the number of ARChived stops will be displayed for management information purposes on the Thales web-site, alongside the counts for ACTive, PENding and DELeted stops.