

NON ROYAL MAIL IP OPEN ADDRESS REGISTER: PILOT EXECUTIVE SUMMARY

RESPONSIBILITY FOR THIS DOCUMENT

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I. EXECUTIVE SUMMARY

Ordnance Survey (OS) was commissioned by the Open Address Register (OAR) Project Steering Board to explore options for the creation and maintenance of an address register which contains no intellectual property rights of Royal Mail Group Limited. OS prototyped the methodology outlined in the Non RM-IP Address Register Solution paper, previously submitted to Steering Board, on a significant sample of properties covering a range of address types in a variety of geographies.

OS identified **32.5 million candidate records** for an address, and used three methodologies to populate the address for these records: Fully automated based on existing OS content; Desk based manual analysis; and Field based data capture.

The results of the prototype, when extrapolated up to a national scale, are:

Completeness in comparison to candidate list: 96% (1.3 million incomplete records)

Accuracy¹ of completed OAR product content: 90.8% (2.9 million incorrect addresses)

Thus, 4.2 million (13%) addresses that are present within AddressBase would either not be in the OAR, or would be in erroneously.

Several trends have been identified with regards to the OAR completeness and accuracy:

High levels were achieved where:

- There was one address within a single property (a one-to-one address), and the name / number had already been captured by OS in a non-address product
- A one-to-one address, and the number could be interpolated from nearby addresses where the number had already been captured by OS
- An address was an Object Without Postal Address² (OWPA), e.g. a bill-board / electricity sub-station
- An address was unique to Local Authority and not captured by Royal Mail

Lower levels were achieved where:

- There was more than one address within a single property (multiple-to-one addresses), e.g. a block of flats / shopping centre
- The address was accessed from a private shared drive (e.g. a block of flats / industrial estate)
- The address only had a name
- The address was uniquely identified only by an organisation name

These trends are primarily down to the existing specifications of the key OS datasets used in the Pilot: AddressBase, OS MasterMap Topography Layer and OS MasterMap Integrated Transport Network (ITN) Layer. The Pilot has used these products for purposes that they were not designed for, particularly within multiple-to-one addresses properties. Increased investment in the capture of the aforementioned OS datasets could improve the accuracy and completeness of the Pilot OAR dataset, for example improving the internal capture and representation of the properties that contain multiple-to-one addresses, e.g. shopping centres / train stations. This would overcome many of the data issues encountered in this project. Further work would be needed to determine the required investment and quality impact on the OAR data as this was out of scope for this Pilot.

This Pilot has also demonstrated that there is a critical issue is the linking of multiple-to-one addresses with the existing Unique Property Reference Number (UPRN). The UPRN has been accepted and adopted across Local and Central Government as the key for linking address datasets.

¹ A description of how the accuracy was calculated can be found within section 2.5 Quality Analysis Method Overview

² Objects Without a Postal Address (OWPAs) – These are records which are captured by Local Authorities due to their extended business requirements when compared to Royal Mail. Therefore, include records which attract rates such as Advertising Hoardings. These records also include items such as Ponds and Electricity Sub Stations.

The only methodology available for appending a UPRN to an OAR address, results in a potential UPRN error in up to 18% (5.9m) of OAR records, thus making the continued use of the current UPRN unviable.

It should also be noted that whilst the results of the prototype when extrapolated up to a national scale were encouraging, at 96% completeness and 90.8% accuracy, the following should be considered:

1. 96% completeness does not provide complete coverage of GB – for example 1.3 million addresses would be incomplete and therefore not included within the register
2. 90.8% accuracy of the address register would result in approximately 2.9 million complete addresses being incorrect.
3. These 4.2m could not be identified prior to the product release, without significant quality assurance investment, such as checking large volumes of records manually. Without this, confidence in the product would be seriously undermined by over 1 in 10 addresses being missing / erroneous, affecting usability, especially by organisations such as emergency services and other customers where accuracy is key.

From the Pilot it has been demonstrated that the above results could be achieved in 5 ½ years, at a cost of [REDACTED] with ongoing maintenance fees of [REDACTED].

Based upon the evidence contained within this paper, it is the recommendation of OS that [REDACTED]

[REDACTED] this OAR Pilot is not taken forward as a potential solution / negotiating tool with Royal Mail. This recommendation is based upon:

- 1) The lack of a postcode, required for uptake by citizens and users (both public & private organisations)
- 2) The completeness levels (96%) resulting in an incomplete address dataset
- 3) The accuracy levels of the completed records (90.8%) resulting in too many errors (2.9 million) to be accepted as definitive / usable by customers for their business applications
- 4) The existing UPRN would no longer be viable
- 5) Significant confusion in the marketplace due to the creation of a second spatial address dataset – something that was overcome, after many years of consternation, by the creation of AddressBase.