



Office of the  
Deputy Prime Minister  

---

Creating sustainable communities

*Towards the  
National Spatial  
Address Infrastructure*

---



Office of the  
Deputy Prime Minister  

---

Creating sustainable communities

Towards the  
National Spatial Address  
Infrastructure  
  
Outline Prospectus

May 2005

Office of the Deputy Prime Minister: London

The Office of the Deputy Prime Minister  
Eland House  
Bressenden Place  
London SW1E 5DU  
Telephone 020 7944 4400  
Website [www.odpm.gov.uk](http://www.odpm.gov.uk)

© Crown Copyright, 2005

*Copyright in the typographical arrangement rests with the Crown.*

*This publication, excluding logos, may be reproduced free of charge in any format or medium for research, private study or for internal circulation within an organisation. This is subject to it being reproduced accurately and not used in a misleading context. The material must be acknowledged as Crown copyright and the title of the publication specified.*

*For any other use of this material, please write to HMSO Licensing, St Clements House, 2-16 Colegate, Norwich NR3 1BQ Fax: 01603 723000 or e-mail: [licensing@bmsso.gov.uk](mailto:licensing@bmsso.gov.uk).*

Further copies of this publication are available from:

ODPM Publications  
PO Box 236  
Wetherby  
West Yorkshire  
LS23 7NB  
Tel: 0870 1226 236  
Fax: 0870 1226 237

Textphone: 0870 120 7405  
E-mail: [odpm@twoten.press.net](mailto:odpm@twoten.press.net)  
or online via the Office of the Deputy Prime Minister's website.

May 2005

Product Code 05LGFG03118

# Contents

	page
Executive summary	4
1. Introduction	6
2. The National Spatial Address Infrastructure	8
3. Stakeholder requirements	10
4. Inputs	11
5. Outline of supply arrangements	12
6. Stakeholder interest and governance structure	13
7. Timescale	15
8. Comments and views	16
Annex 1 NSAI specification	17
Appendix A Fundamental requirements	20
Appendix B Responses from consultation on needs	22
Annex 2 Phasing	24

IMPORTANT: The information set out in this Outline Prospectus is subject to and conditional upon the finalisation of certain agreements. As a result the information in this prospectus is subject to alteration. The timescales set out are also dependent upon the finalisation of the agreements and the timetable presented should be used only for indicative purposes.

# Executive Summary

The prospectus sets out the background to the new National Spatial Address Infrastructure (NSAI) and in the annexes, details are given of the proposed specification and the plans to deliver the Infrastructure. It is hoped that individuals and representative groups will respond to the prospectus to inform the final decisions on stakeholders' requirements.

The aim is to create a national, high-quality spatial address infrastructure that will be maintained through a partnership approach and a collaborative framework of address and property identifiers. The database, currently to be known as the National Spatial Address Infrastructure (NSAI), will support a wide range of services delivered by central and local government and the private sector. It will be regularly maintained to a high quality with full national coverage and will be made available through Ordnance Survey.

This partnership between Ordnance Survey, IDeA and ODPM was announced by Phil Woolas, the local government Minister in the Office of the Deputy Prime Minister. Support comes from Vanessa Lawrence, Director General and Chief Executive Officer, Ordnance Survey; Lucy de Groot, Executive Director, Improvement and Development Agency and Len Cook, National Statistician and Registrar General for England and Wales, Office for National Statistics.

The infrastructure will incorporate Local Land and Property Gazetteers (LLPG's), the National Land and Property Gazetteer (NLPG), the National Street Gazetteer (NSG), the Postcode Address File (PAF) and Ordnance Survey AddressPoint. NSAI will draw on the expertise of stakeholders including Local Authorities, the Royal Mail Group plc, the Office for National Statistics and the Valuation Office Agency.

The main partners, Ordnance Survey and IDeA, have agreed heads of terms for the development process. A first cut of the NSAI will become available eight months after the full agreement is signed, paving the way towards a final structure after 18 months. The NSAI will initially relate to England and Wales. Longer term, the plan is to include information from Scotland and Northern Ireland to create a UK-wide infrastructure.

Stakeholders will have a continuing input to the process via a governance process that will encourage participation at a number of different levels. This group will be chaired by a senior official at ODPM. ODPM is also making up to £2.3 million available from the local e-government programme to Surrey County Council to enable the transfer of the NLPG database to the NSAI and to help facilitate local government's transition from one system to the other.

The introduction of the NSAI will benefit both the public and private sector by providing a definitive maintained spatially referenced address database to which other information can be linked or referenced. The NSAI will link to Ordnance Survey mapping data. It will include a comprehensive look up table to enable records to be

linked more easily and will provide major gains for information management in Great Britain.

The NSAI will bring improvements to many aspects of everyday life. From the deployment of the emergency services to the collection and management of the next Census and other surveys: in addition to increasing the efficiency of local services provided by both the private and public sector.

The NSAI will be supplied by Ordnance Survey under Crown Copyright arrangements.

# 1. Introduction

- 1.1 The National Spatial Address Infrastructure (NSAI) will provide a single, definitive address database and supporting spatial infrastructure for a wide range of central and local government programmes and also for commercial business activities. This prospectus sets out the arrangements that will be put in place over the next 30 months to create the NSAI and seeks your views on a number of issues related to the scope and timing of the process.
- 1.2 The agreement to develop the NSAI brings together the various agencies that use addresses in a collaborative venture to create a high quality address database that will support national requirements.
- 1.3 In announcing this development Phil Woolas, the local government Minister in the Office of the Deputy Prime Minister, said “I welcome the development of the infrastructure as it will support closer information exchange across national and local government, and between government and business. This will help to drive the knowledge economy as well as improve the quality and efficiency of vital public services. I’m pleased that ODPM has been able to facilitate an agreement between key stakeholders”.
- 1.4 The NSAI will underpin many business activities and will also be an important part of the wider Modernising Government programme. It will benefit:
  - data management and handling in the public and private sector
  - service delivery, access and communication
  - undertaking of the census resource allocation and development strategies
  - customer service quality and costs in the public and private sector
- 1.5 The NSAI brings together a range of partners to create a single definitive infrastructure that will be continuously updated and maintained. It will incorporate the separate address information produced by the Royal Mail, Ordnance Survey, Valuation Office Agency and Local Government and therefore will be the definitive maintained spatially referenced address database for the United Kingdom. It will benefit from the investment that has been made by the four major providers above, and will be kept up to date using the best local information available. Initially it will be created for England and Wales but it is planned to be extended to include Scotland and Northern Ireland.
- 1.6 It will be developed in three main phases and the full working system will be in place within 30 months of the start date. The current timetable is set out in Annex 2. A key part of the process will be to maintain support and minimise disruption to current users of the Unique Property Reference Numbers from Local Land and Property

Gazetteers (LLPGs), the National Land and Property Gazetteer (NLPG), OS AddressPoint, PAF and other address databases.

- 1.7 This prospectus sets out the background to the NSAI and in its annexes gives details of the specification that will be met and the plans to deliver it.
- 1.8 The new infrastructure will be provided by Ordnance Survey on behalf of the user community under direction of the Office of the Deputy Prime Minister and there will be a new governance structure that will ensure that interests of stakeholders are protected.

## 2. The National Spatial Address Infrastructure

- 2.1 The NSAI will be a single, comprehensive nationally consistent source of address information. The aim is for it to be adopted throughout central and local government in place of the multitude of individual address datasets currently in use. It will also have many applications for private organisations such as utilities, retailers and financial service providers. It will include a core set of consistent Objects Without Postal Addresses (OWPAs).
- 2.2 The NSAI will be:
- a complete set of addresses – the NSAI will cover England and Wales in the first phase. It is planned to extend to Great Britain by including Scotland and ultimately the United Kingdom with the inclusion of Northern Ireland.
  - accurate and up to date – there will be systematic efforts, under well-resourced central management to pool the knowledge of all stakeholders about each property at each stage of its life cycle.
  - using the existing Unique Property Reference Numbers (UPRNs) and links to other key spatial identifiers allowing a much easier and more efficient interchange of data between computer systems. This will minimise errors and misunderstandings and make it much easier to cross reference between different sets of property based data.
  - spatially referenced – the dataset will be geo-coded to the National Grid.
- 2.3 The NSAI will build on the work undertaken for the creation of the Postcode Address File, AddressPoint and the National Land and Property Gazetteer. The detailed requirements for the NSAI are set in Appendix B. These were devised from the responses to questionnaires issued to central government agencies, the IDeA Local Government Address Advisory Panel, the Emergency Services, the ESRC on behalf of Academia and commercial users via the Business Demographic User Group (DUG).
- 2.4 The NSAI will be provided by Ordnance Survey, as the lead supply agency, in partnership with the major suppliers of intelligence about addresses and changes to addresses:
- the Royal Mail will supply current information from the Postcode Address File and new information about multi-occupied splits at addresses
  - the UPRNs from the National Land and Property Gazetteer will be incorporated

- the key information collected by local government in Local Land and Property Gazetteers (LLPGs) on new addresses will be used as a source of change intelligence and new UPRNs.
- information about change will also be supplied from the Valuation Office Agency (VOA)
- the Ordnance Survey change intelligence gathering system and Ordnance Survey local surveyors will be working with local government to quantify and verify change

All of this will be brought together to provide a definitive maintained spatially referenced address infrastructure.

2.5 By applying a set of national standards to the data in line with the planned new standard BS7666 for addresses, together with Unique Property Reference Numbers (UPRNs) from LLPGs and the NLPG, it will enable data to be linked and shared more easily. A key part of the concept is a publicly available cross referencing table that will link together a range of identifiers: UPRN, OSAPR (Ordnance Survey AddressPoint Reference), UDPRN (Royal Mail Unique Delivery Point Reference Number), TOID (Ordnance Survey reference number within OS MasterMap), UARN (Valuation Office Agency Unique Address Reference Number) and USRN (Unique Street Reference Number).

## 3. Stakeholder requirements

- 3.1 To help ensure that the NSAI will meet the full range of user requirements the Office of the Deputy Prime Minister (ODPM) has worked with representatives from central and local government to:
- define the national infrastructure in terms of output and process
  - agree funding and governance arrangements
  - set the timescale for developing the NSAI
- 3.2 To develop a specification for a National Spatial Address Infrastructure, a set of fundamental requirements was developed after consulting with the major government agencies with an interest in addresses, local government, the emergency services, academia and businesses. The resultant requirement is set out in the appendices to Annex 1.

## 4. Inputs

- 4.1 The NSAI will incorporate and combine inputs from a wide range of contributing data providers using agreed national standards. This process will create a high quality spatial address infrastructure with maximum coverage of addresses and OWPAs.
- 4.2 The NSAI will
- build upon the current processes for managing LLPGs employed by Local Authorities.
  - ensure the maintenance and sustainability of UPRNs.
  - match Ordnance Survey data with Valuation Office Agency data in its early stages.
- 4.3 A major part of this process is the licence of the NLPG database to Ordnance Survey at the beginning of the programme and the ultimate transfer of the NLPG database to Ordnance Survey and the use of NLPG as a key component of the initial matching process to create a first cut version of the NSAI. As a first step, NLPG will be matched against records from Ordnance Survey, Royal Mail and Valuation Office Agency databases, with Ordnance Survey reviewing and resolving any differences or anomalies. This will meet the important needs of delivering a first cut national infrastructure quickly.
- 4.4 The user requirements for Objects Without Postal Addresses (OWPAs) and key multi-occupancy data will be met by sourcing OWPA and multi-occupancy data from Ordnance Survey's national geospatial database, Royal Mail data, VOA data and matching the Local government data against these sources. The utilisation of the NLPG database will allow for early base-lining of OWPA and multi-occupancy data to provide continuity and consistency with local government datasets, with Ordnance Survey identifying and resolving the anomalies and mismatches that will inevitably arise.
- 4.5 BS7666 will be the primary interface standard between databases, the process will facilitate simple update and revision between local government LLPGs and the NSAI, thereby maintaining UPRN record continuity and integrity.
- 4.6 Constraints within the BS7666 format will introduce a number of classifications which will need to be reviewed as part of the governance process.
- 4.7 Local councils are major creators and users of address information, and the majority of Local Authorities are well advanced with the creation and operation of their LLPGs. Use of the records from the NLPG/LLPG database with the Ordnance Survey national geospatial database will enable the production of a high quality NSAI in areas when LLPGs are well developed. For other areas the NSAI will be based on Ordnance Survey, Valuation Office Agency and Royal Mail data, but will use LLPG data where it can. This process will ensure that the current local government requirements for addresses will be met and it will also improve the quality and consistency of LLPGs in areas where they are currently less developed.

## 5. Outline of supply arrangements

- 5.1 The NSAI will be protected by Crown Copyright and Database Right which will be administered by Ordnance Survey:
- Royal Mail will retain Intellectual Property Rights for PAF
  - Local Authorities will retain IPR in their LLPGs and the source data supplied to NSAI, as will the Valuation Office Agency
- 5.2 Based on the current understanding and agreements between the parties on the extent and maintenance of the NSAI, the additional datasets will be supplied as enhancements to the current Ordnance Survey Addressing Products. For central and local government users these enhancements will be supplied at an increase of approximately 50% of the current prices for addressing products, together with any additional Royal Mail royalties. The precise supply arrangements and cost of the NSAI will be announced once final agreement between Ordnance Survey and IDeA has been reached. Prices for the inclusion of data from DNA for Scotland and Pointer for Northern Ireland will be available once a formal agreement has been signed with them.
- 5.3 Local and Central Government will supply Ordnance Survey with address change intelligence information. Update cycles and specifications are to be agreed. Ordnance Survey can then use this information in-perpetuity to augment the address management processes developed during the initial matching with the NLPG database. In return for this on-going supply of information, Ordnance Survey will provide a continuing matching, maintenance and data improvement activity complementary to the needs of the stakeholders as defined by the management group.
- 5.4 The NSAI has been based on a specification for the users of the data, as covered in para 2.3 above. The on-going improvement activities will be undertaken so as to increase the completeness and accuracy between the various datasets. The relationship between data content, data quality, cost of maintenance and price of products and services will be an important part of the on-going governance process.
- 5.5 The stakeholder Partnership between central and local government will have a key role to play in the development and operation of viable long-term partnership agreements.

## 6. Stakeholder interest and governance structure

- 6.1 A governance structure will be put in place to ensure that the development of the NSAI is championed effectively, has clear strategic direction and is developed in partnership between stakeholders and the lead supply agency.
- 6.2 The Office of the Deputy Prime Minister (ODPM) has an overarching role in relation to geography and land use statistics. ODPM leads on local government policy and their links with central government, has Ministerial responsibility for Ordnance Survey, and is the lead agency for the pan-government agreement on the provision of Geographical Information. Phil Woolas, the local government Minister in ODPM, is the Ministerial champion for the NSAI.
- 6.3 A governance structure with four layers will be set up to lead and manage the development and maintenance of the NSAI:
- Ministerial Champion – ODPM Minister for Local Government
  - Steering Group – chaired by ODPM as owners of the addressing issues across government with high level and proportionate representation from major stakeholders
  - Two parallel groups both reporting to the Steering Group
  - Stakeholder Partnership Group chaired by nominated Senior User
  - Management Group chaired by Ordnance Survey as Lead Agency
  - Ordnance Survey Project Control Team – managed internally within Ordnance Survey
- 6.4 There will be some common membership between the Steering Group, the Stakeholder Partnership Group and the Management Group provided by senior representatives of Central Government, Local Government and other stakeholders. It is anticipated that the Steering Group will not need to meet as often as the Management Group. Communications between all governance groups, stakeholders and key customer communities will be vital to ensure that the project delivers the right outcomes at the right time, within agreed budgets.
- 6.5 Steering Group – this group will act on behalf of the Minister to ensure that the NSAI is created in line with Government policies and direction for the development of the e-Government infrastructure. It will be led by the main sponsoring department, ODPM, and would:

- provide strategic direction to the development of the National Spatial Address Infrastructure
- direct the adoption of a coherent and coordinated approach across both central and local government
- be a decision forum to resolve divergences
- report to the Ministerial owner from time to time
- act as a link with the delivery of Geographic Information Strategy within the UK
- ensure the NSAI is consistent with the agreed specification and is fit for purpose
- meet as required, but not more than quarterly

6.6 Stakeholder Partnership Group – this will be the senior Stakeholder Group with responsibility for determining that the partnership with the supply agency will deliver the agreed specification to the planned timetable. It will provide a forum for stakeholder discussion and assessment for any emerging policy issues, changes to the initial plan, and transition arrangements over the period of development of the NSAI. It will be chaired by a nominated senior user with representation at senior level from Central Government, Local Government, LGA, IDeA, Ordnance Survey, Royal Mail and ONS. It will co-opt other members as necessary.

6.7 Management Group - this Group will be chaired by a Director from the Ordnance Survey, as lead agency. This Group will provide the operational external project governance and will have executive responsibility for delivering the strategy agreed by the Steering Group. In addition to the Chair from Ordnance Survey, membership should comprise:

- Senior official from ODPM (authorised to speak for the Chair of the Steering Committee);
- Senior member/representative of Local Government;
- Senior representative of Royal Mail; and
- Senior representative of ONS
- Senior representative of Valuation Office Agency

6.8 Specific input from additional key stakeholders will be sought from Land Registry/ Registers of Scotland, the Scottish Executive, the Welsh Assembly and Ordnance Survey (Northern Ireland). Further interested parties would potentially include any other Government Departments with policy initiatives driven by accurate addressing needs and the commercial sector. To remain focussed on the delivery of the project it is proposed that these groups are not part of the executive governance but are provided critical engagement through a clear and accountable process.

# 7. Timescale

- 7.1 The NSAI will be created over a period of 30 months in three main phases. Full details of each phase are given in Annex 2.
- 7.2 The first phase will commence as soon as agreement is reached on the creation of the NSAI and it will produce a first cut GB version within 8 months. This will include:
- NSAI standards
  - enhanced data from Royal Mail
  - current data from Ordnance Survey
  - Valuation Office Agency matched data
  - these three inputs matched against LLPG and NLPG data as described earlier in this prospectus
  - initial Scottish data
- 7.3 The second phase plans to expand the content for Scotland by bringing in information from the Definitive National Addressing database, Scotland, introducing bi-monthly updates starting in month 14 and then move to monthly updates starting in month 18.
- 7.4 The third phase plans to introduce data from Northern Ireland and create daily updates by month 30.
- 7.5 During the development phases of the NSAI, the NLPG will continue to be provided until the new infrastructure can provide the same service to stakeholders via the NSAI.

## 8. Comments and views

- 8.1 Stakeholder input to the specification for the NSAI has been gathered by consulting both central agencies and local authorities, via a local government advisory panel set up by IDeA, and also by obtaining views from the emergency services, academia and commercial businesses via the business members of the Demographic User Group run by Demographic Decisions.
- 8.2 Both the specification and the development plans have benefited from the work undertaken by the NLPG, PAF and Ordnance Survey AddressPoint. The NSAI will thereby provide an infrastructure that meets the previously stated needs of the user community. It is also important for all stakeholders to have an opportunity to comment on the arrangements that are being put in place and on how their future interests will be protected. Therefore there are a number of areas where the NSAI Steering Group would like input to help it set its future agenda and also to identify the issues that the Stakeholder Partnership Group will need to address. These are listed below and responses should be sent to [addressing@odpm.gsi.gov.uk](mailto:addressing@odpm.gsi.gov.uk) by 30th June 2005. It will not be possible to reply to individual points, but any issues that are raised will feed into the appropriate governance group and feedback will be made as part of the NSAI management process.
- 8.3 Although comments from individuals will be welcome it will help the process if comments could be grouped, via any existing umbrella or interest groups that cover a range of users, in the same way that IDeA have used a selected local government advisory panel to consolidate initial input.
- **General approach** – are stakeholders generally happy with the plan to bring together all of the existing sources about addresses into a single national spatial address infrastructure. Are there any other sources or general requirements that are missing?
  - **Stakeholder interface** – the current specification and solution have been developed from a specification that was created by bringing together central and local government and other requirements. Is the proposed Stakeholder Partnership Group a suitable forum for representing user needs?
  - **Specification** – this prospectus suggests that the Stakeholder Partnership Group should determine the specification for the National Spatial Address Infrastructure. Do you agree that this is the best approach and, if so, what are the priority issues for the Group?
  - **Phasing** – any comments on the proposed phasing and in particular whether the interpretation of the stakeholder priorities which has been built in to current plans are right?
  - **Governance** – views on the membership of the various governance groups set out in the paper.

# Annex 1: NSAI specification

## 1. General

- 1.1 The NSAI will be an essential part of the e-government national infrastructure and a key element of both the Digital National Framework and the standards being developed for information handling by the Office for National Statistics (ONS) as part of the Geographic Referencing Framework for National Statistics.
- 1.2 The requirements set out in the appendices to this annex represent what stakeholders require from the NSAI. Ordnance Survey, as the lead supply agency, will need to consider how they can be incorporated into the infrastructure. A key part of this process will be for stakeholders to work with Ordnance Survey through the NSAI Steering Group and the NSAI Stakeholder Partnership Group to develop the content of the NSAI, define and agree standards for the constituent elements of the infrastructure and provide guidance on the best way to ensure that the NSAI is developed in line with stakeholder needs.
- 1.3 The foundation for this process will be the requirements set out in the two appendices referred to in section 4 below
- 1.4 It is essential that the NSAI is developed in accord with existing national standards such as BS7666 and future developments in information handling such as the Digital National Framework (DNF) are used to underpin it.
- 1.5 Clarification of requirements, development of definitions and standards will be important elements of the work programme of the governance groups in order to ensure that the NSAI is stakeholder driven.
- 1.6 NSAI will be consistent with the soon to be revised national address standard, BS7666. It will include an appropriate interpretation and implementation of the standard with extensions where justified. It will also conform with e-government standards, including e-GIF and e-GMS.
- 1.7 In the longer term the NSAI will be a United Kingdom resource. Initially, it will cover England and Wales and then Great Britain. The Scottish Executive has sponsored a Definitive National Address Database initiative in Scotland and it is planned to incorporate this in the NSAI. The position for Northern Ireland is different as there are differences between the NSAI and the Northern Ireland Pointer development, which is already in place. The initial version of the NSAI will capitalise on the work undertaken in England, Wales and Scotland but with an aim to reflect or harmonise with Northern Ireland to the extent possible, particularly for a core set of addresses.

## 2. Sources of addresses

- 2.1 Address files and information on changes originate in several places. The NSAI model requires that these are understood and that intelligence is gathered at appropriate times and logical points in the address life cycle, and not in a many-to-many relationship. Originators mainly include Local Authorities, the Valuation Office Agency, Royal Mail, Ordnance Survey, Scotland/NI parallels, but possibly others, such as Land Registry or the Inter-Departmental Business Register.
- 2.2 The maintenance structure will capture change in a timely and quality controlled manner to ensure minimal duplication of effort and the proper authentication of input. It will incorporate address churn (eg property splits and merges) that is detected first in the local authority property taxation function and in other operational activities.
- 2.3 The development and maintenance plan will be built on the processes and status of address management in individual local authorities and other data providers. It will not cause unnecessary additional work or a repeat of work undertaken previously.

## 3. Content and characteristics

- 3.1 The NSAI will build on the good work that has been undertaken in creating PAF, OS AddressPoint, LLPGs, the NLPG, DNA and Pointer databases and reflect their key content. It will also address the known deficiencies in this existing set of address gazetteers by improving:
  - coverage
  - quality
  - identification of multi-occupied addresses
  - objects without postal addresses
  - maintenance arrangements

Treatment of these matters is part of the detailed design.

- 3.2 Rules will be required for defining the addressable entities to be included in the database and the detail or granularity at which these are to be included. Special attention is needed to sources of intelligence to support the identification of dwellings in multiple occupancy.
- 3.3 A core set of standard Objects Without Postal Addresses, OWPAs, will be agreed, defined and included in the NSAI. A wider set might be maintained independently in LLPGs and other databases to a consistent structure, but will not be added to the national resource.

- 3.4 The UPRN will be a key unique reference. A maintained link to other codes in common usage will be created as a publicly available linking matrix (eg UDPRN, UARN, OSAPR, representative TOID). This linking will both facilitate data interchange and aid data quality and change intelligence.
- 3.5 The design will allow for whole addresses or address components to have alias names.
- 3.6 The NSAI will include appropriate quality indicators related to status, precision and accuracy. Metadata will cover provenance, change, date stamping and indication of terminated addresses.

## 4. Detailed requirements

- 4.1 The fundamental requirements to be satisfied by the NSAI are set out in Appendix A.

The detailed requirements for the NSAI are set in Appendix B. These were devised from the responses to questionnaires issued to central government agencies, the IDeA Local Government Address Advisory Panel, the Emergency Services, the ESRC on behalf of Academia and commercial users via the Business Demographic User Group (DUG).

# APPENDIX A

## **Fundamental requirements to be satisfied by a National Spatial Address Infrastructure**

An agreed territorial extent – initially Great Britain with a target of a final version for the United Kingdom.

Comprehensive, covering all types of addresses/properties:

- all postal points/addresses;
- all households/dwellings at multi-occupied addresses\*;
- all communal establishments\*;
- all business addresses\*;
- all non-residential addresses\*;
- other objects (potentially useful for local events that are not address-based)\*.

Constantly updated to retain currency.

Maintained to meet a minimal quality specification e.g. a high level of coverage of 99% and no differential under-coverage (at least 98%) such as in complex inner cities or fast changing areas\*.

Maintained dynamically with a facility for virtual access and available on a regular basis (at least monthly) or on customer-driven spot dates.

Clearly identified address introduction and termination dates to provide a capability to produce historic files.

Data obtained from the widest available sources to maximise coverage, currency and quality.

The intellectual property rights comprising NSAI will be secured so that they do not prevent the licensing of NSAI

\* definitions and timings for these items will be subject to discussion with Stakeholders as part of the governance arrangements

Updating information from Local Authorities from LLPGs or other sources but to an agreed regular process

Addresses with spatial locators:

- the Unique Property Reference Number to facilitate data exchanges;
- a high resolution grid reference (GB and Irish if UK coverage is required);
- links to other address reference identifiers and Ordnance Survey TOIDs.

Compliant with address structure standards (i.e. the planned BS7666 standard).

Owned by government in the national interest

# APPENDIX B

## Responses from consultation on needs for a National Spatial Address Infrastructure

### B.1 Territorial scope

Final aim is UK coverage. Initial aim is GB coverage with core dataset for Northern Ireland being brought in from Pointer later.

### B.2 Scope/comprehensiveness

High priority:

- All postal addresses and delivery points.
- Records of introduction date, termination date and address history.
- All appropriate addresses to include Royal Mail delivery points.
- Business addresses to include those using PO Boxes\*, and to include organisation/business name.
- Non-permanent addresses such as houseboats and caravans.
- Unit postcodes of addresses.
- PAF Address Key.
- Coverage of multi-occupied households and communal establishments (all household spaces within an address identified where possible). [Definitions required]
- Distinction between residential and non-residential properties.
- Identification of second/holiday homes\*.
- High-resolution grid references (from OS AddressPoint).
- Objects without postal address (OWPAs): a wide range of entities. Priority needs to be given to identifying the core set of OWPAs; further OWPAs are a medium priority item.
- UPRNs (from LLPGs/NLPG).
- OSAPRs.
- Means of identifying roads - USRNs, TOIDs and road numbers. [Consider implementing road segmentation as used in Scottish DNA].

#### Medium priority

- Communal establishments categorised by type.
- Status of property (planned/existing/demolished). [Priority depends on complexity of identifying information]
- Residential addresses within business premises to be separately identified and categorised. [If not identified by criteria above]

### B.3 Standards

- All addresses must be provided to agreed standards with the aim of utilising the forthcoming revision of BS7666.
- Compliant with government interoperability standards (e-GIF).
- Alias/alternative address descriptions (including local naming) required, where in common usage.
- Improved and defined standards of coverage, quality and timeliness.
- Agreed maintenance and update cycle.

### B.4 Precision

#### High priority

- Positional accuracy indicators for grid references.
- OSAPRs to facilitate linkage to historical data.

#### Medium priority

- Business address grid references to be based on real location of PO Box, rather than Sorting Office\*.
- Also possible links to TOIDs, etc.

### B.5 Quality

- Minimum coverage specification needed (e.g. 99% generally, 98% for inner cities or other fast changing areas)\*.
- Names and codes follow National Statistics standards\*.
- Consistent business names (using standard abbreviations only, where necessary).
- Continuously quality assured using accredited sources.
- Constantly updated to retain currency, with a minimum of monthly input from key suppliers, and an agreed survey QA process to cover change.
- Clear ownership and accountability.

\* these items are dependant on the availability of data and will be important issues for discussion by Stakeholders as part of the governance process

# Annex 2: Phasing

## Phase 1

### Outputs

- A first cut version of the NSAI for Great Britain based on inputs from LLPGs, the NLPG, Ordnance Survey geo-spatial data, VOA data and enhanced data from the Royal Mail.
- The initial version of the public cross referencing table linking key identifiers.
- Full transitional support for LLPGs and the NLPG.
- A National Street Database.
- Updates available twice yearly until replaced by phase 2 outputs which offer more regular updates.

### Content

- Cross-matched infrastructure for GB though some Scottish content will be less extensive than for England and Wales as DNA-Scotland data will not form part of this phase
- Matching with NLPG database
- Key identifiers (UPRN, OSAPR, TOID, UARN, USRN)
- Further blocks of UPRNs released to LAs (if required); UPRN blocks already released will be maintained and supported
- Data from 30-50 exemplar LLPGs (including multi-occupancy data). UPRNs will be taken from these LLPGs and change information flagged
- Ordnance Survey data, including grid references to 0.1m resolution and first cut Objects Without Postal Addresses
- Enhanced PAF data from Royal Mail, including multi-occupancy data from any improved Royal Mail sources, initial input will be sourced from what is currently available
- VOA data

- 6 monthly updates
- National Street Database (amalgamation of the National Street Gazetteer and NLPG) and referencing to Ordnance Survey Integrated Transport Network
- Agreed quality targets and improvement plan
- Detailed programme agreed across all stakeholders, including Scotland and Northern Ireland
- Single NSAI operational model

## Phase 2

### Outputs

- An improved version of the NSAI for Great Britain which plans to incorporate the DNA for Scotland.
- Potentially a first cut version for the United Kingdom by incorporating data from Pointer.
- Full transitional support for LLPGs and the NLPG.
- Updates available every two months.

### Content

- Increase the Scottish content (DNA-Scotland)
- Incorporate NI Pointer (possibly)
- Increase LLPG content
- Move to outputs every two months
- Implement a full IT infrastructure

## Phase 3

### Outputs

- The full NSAI for the United Kingdom.
- Available on a monthly basis, or more regularly if required.

## **Content**

- Incorporate NI Pointer (if not in phase 2)
- Enhanced range of Objects Without Postal Addresses
- Improve coverage and quality of addresses through incorporation of additional address datasets
- Incorporate alias addresses
- Incorporate remaining LLPGs
- Land Registry address databases incorporated
- Move to monthly updates then daily updates (the latter not until at least month 30).  
Note: The currency of the data from daily updates will only reflect the currency of the data that has been input; it does not imply that all data will be current as at the date of extraction).