

The National Street Gazetteer

Reducing congestion and delivering service improvement



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The NSG was
created to improve
co-ordination of
street works using
local datasets
maintained by
local authorities



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The NSG has a significant impact on helping reduce travel disruption

What is the NSG's relationship to NLPG?

A local authority's LSG and LLPG will have synchronicity of all street types, level 3 geometry and working relationships between the street naming and numbering function and LLPG processes, and the highways function.

Whilst a unitary authority will be responsible for both gazetteers, making it easier to achieve continuity of streets data, the same is not the case for counties and districts. These organisations need to have processes in place to work through the anomalies in order to ensure continuity.

Street data continuity becomes important as more organisations begin to use the gazetteers for mission critical applications. Collaboration between counties and districts is facilitated if all parties communicate about the same properties on the same street using the same unique reference. Flood alleviation is a good example because flood extents can be described by both street and property.

The NSG is a centralised unique referencing system, designed to improve the relationship between local authorities and utilities. Its fundamental aim is to make the street works process more convenient to the citizen

What information does the NSG contain?

The NSG contains a range of street network and related information including:

- street name and location details
- road length
- junctions
- road centre lines
- street geometry
- Additional Street Data (ASD).

The following types of streets are included in the NSG:

- motorways
- classified principal streets including trunk roads and other classified numbered streets
- other publicly maintained unclassified numbered streets
- prospective publicly maintained streets
- private streets known to the highway or roads authority
- cycle ways
- remote footpaths
- subways that are publicly maintained
- footpaths where maintained or metalled.

Additional Street Data includes:

- details of ownership
- reinstatement categories
- details of protected streets
- special designations such as
 - traffic sensitive streets
 - streets with special engineering difficulties
- level crossing safety zones
- environmentally sensitive areas
- streets with special surfaces
- streets with priority lanes
- streets with special construction needs
- height, weight and width restrictions
- direction restrictions.

What is the NSG being used for?

Under the present legislation, the NSG enables highways authorities and statutory undertakers to coordinate street works in order to ease traffic congestion and disruption to road users.

The detailed street information helps the utilities to accurately pinpoint the location of their proposed works and the ASD gives them advance notice of any restrictions that may be in force on that street at any particular time. At present, over 660 organisations are able to use the NSG to manage street related activities on over 1,178,000 streets in England and Wales.

Local authorities and utility companies are helping the citizen by modernising, streamlining and showing a continual commitment to the improvement of service

NSG for local authorities

The NSG isn't just for street works. Although the NSG is the dataset that underpins the ability of each Local Highway Authority to meet their obligations under the Traffic Management Act (TMA), the NSG also enables authorities to perform the following duties:

- network management duties
- introduce fixed penalty noticing and permit schemes
- coordinate activities on the highway network.

These duties enable local authorities to maintain safety, minimise inconvenience to people using the street, protect the structure of the street and the integrity of apparatus in it. In addition, many highway authorities have implemented the NSG corporately to underpin other areas of their business such as:

- highways asset management
- gritting and salting routes
- route optimization
- waste collection
- emergency planning and response

- safe routes for schools
- CRMs leading to improved council services
- flood prevention and alleviation
- management of footpaths
- management of public rights of way
- traffic calming schemes
- online fault reporting
- identification and management of roadside nature reserves
- management of street name plates
- street lighting repair and maintenance
- risk management services to deal with highway related claims
- management of highway drainage components such as drainage gullies
- management of contracts for sponsored street signs
- management of vehicular crossings on the public highway
- management of highway structures such as bridges
- management of traffic signal installations, illuminated signs and bollards.

NSG for the emergency services

The street name and centre line geometry information contained in the NSG can be used for applications involving mobilisation, routing and scenario-based risk assessments. In addition, the ASD contained in the NSG provides essential information to the emergency services, such as traffic sensitivity, bridges and other structures.

The NSG is also valuable for data management and recording of incidents. It is also possible to use the NSG for flagging environmental information so that the impact can be assessed on an incident by incident case.

The NSG may also facilitate partnership working and collaboration with partner agencies such as Local Highway Authorities, National Rail and the Highways Agency. For example the local authority will use the NSG for streetworks activities, which may relate for example to fire hydrant inspections.

The use of this information removes duplication of effort across local government and frees up staff and resources for front-line operations.

NSG for utilities

The NSG enables utilities to plan and execute their street works in a coordinated, streamlined and efficient way. Having the correct information about who has responsibility for the road is essential for speed of notification and speed of works to be undertaken.

Things change, so having up to date information on any Special Engineering Difficulties allows the appropriate amount of time and resources to be budgeted for at the very beginning, enabling continuous work from start to finish without unexpected breaks.

Utilities use the NSG as an important decision making dataset in respect of all maintenance and repair issues. Knowing the most current state of the road and all its associated data allows informed and efficient decisions to be made, ultimately remembering that the main purpose is to give the public a fast and efficient service with the minimal possible disruption.

The NSG was designed to improve the synchronisation of street works that have in the past been undertaken with little or no coordination. It aims to prevent streets being repeatedly dug up over a period of months, by numerous different utility companies as well as local authorities



The IDeA works to encourage all authorities and utilities to continually improve data quality and working practices to ease the pressure on our roads

Why use the NSG?

Besides the statutory requirements outlined earlier, there are a number of reasons for using this local government dataset.

- the NSG is the definitive source of street information for England and Wales collected at source from the originators of street change intelligence
- it's current. The NSG is continually updated by highways authorities and changes are incorporated into it every month at the national hub
- the NSG is the only dataset built to BS7666:2006 standards that incorporates all public, prospectively adopted and private streets in England and Wales including dual language where appropriate
- the Unique Street Reference Numbers (USRNs) and the Elementary Street Unit (ESU) reference numbers provide a national unique identifier. This allows users of the NSG to tie their data together across applications making sharing of information corporately and across industry seamless and efficient
- the usage of USRNs enable the development of better business processes
- the NSG is a community wide commitment to continued data improvement.

The future of the NSG

The NSG has the potential to revolutionise access to street data and street works information to the benefit of a host of applications that rely on up to date, detailed street level data such as pay-as-you-drive or congestion charging. The currency of the dataset makes it attractive to anyone who needs up to date information reflecting changes in street usage and designation.

The NSG has the potential to underpin public access to street works information, particularly through applications such as satnav systems which could access planned and in progress street works information. This would allow for better route planning and avoidance of traffic congestion blackspots as well as more efficient mobilisation for emergency services.

Uses could include command and control, routing, incident handling and risk assessment. In the absence of a suitable alternative, the NSG should become the preferred source of definitive road information, providing recommended freight routes, motorway incident diversion routes and much more.

The additional street data file (ASD) provides essential information, such as traffic sensitivity, bridges and structures, whilst closer alignment with the National Land and Property Gazetteer, already chosen for future fire incident mobilisation, makes its wider adoption more likely still.

An aerial photograph of a complex highway interchange with multiple lanes and overpasses. In the background, a large lake is visible, surrounded by greenery and some buildings. The sky is bright, suggesting a sunny day.

NSG - supporting the Traffic Management Act (TMA)

The aim of the TMA is to reduce road congestion, improve journey times and coordinate street works for the benefit of road users. Information contained in the NSG helps provide the basis for highway authorities to manage all TMA related processes and allows statutory undertakers to be aware of protected or traffic sensitive streets, and streets with special engineering difficulties. In effect, the NSG reduces the impact of street works to the citizen as the new legislation empowers the highway authority to have more control over their own street network.

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The NSG helps highway authorities to co-ordinate activities and enables utilities to know where and when it is best to carry out works

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As the NSG is dual language, the data will also help users in the Emergency Services within Wales comply with their obligations under the Welsh Language Act.

Local Government Information House

Layden House
76-86 Turnmill Street
London, EC1M 5LG
T: 020 7296 6600
F: 020 7296 6896
E: msa@idea.gov.uk
W: www.idea.gov.uk/lgih

Intelligent Addressing

Ivybridge House
1 Adam Street
London, WC2N 6DD

T: 020 7747 3500
F: 020 7747 3501
E: info@intelligent-addressing.co.uk
W: www.intelligent-addressing.co.uk