



Results of DNF Unique Identifier Consultation

Component: 2.1 Identifier Management

Report on outcomes regarding the Identifier Consultation Paper issued in November 2005



Document Content

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Change record of this document

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1.00c	March 2006	Second draft to stakeholders
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Content

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Location of this document

This paper will be found under:

<http://www.dnf.org/architecture>

Approval for issue

Expert Group Chair

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1 Introduction

1.1 Purpose of the document

This paper reports feedback and the results from the identifier consultation paper issued in November 2005 (Reference: DNF Expert Gp 2005)

2 Scope

This summary of the outcomes of the above consultation paper will be relevant to anyone who is managing or considering the adoption of some form of unique geographic identifier.

The report summarises the responses before outlining the actions that are now required to implement any changes and mechanisms to support identifier management in the future.

The actions will feed into the DNF RoadMap component “2.1 Identifier Management” and supporting documentation (described later). These documents will then underpin the initial release of the DNF Registry (registration of identifier prefixes).

3 Definition of terms

There are no new terms introduced in this document.

4 Background

The consultation paper (Ref DNF Expert Gp 2005) outlines the current issues and highlights the need to ensure a consistent approach to identifier management in DNF. Specifically this includes the way blocks of identifiers have been allocated and the impact of new pervasive technology and standards (such as GML¹). It also acknowledges some issues that have arisen with use such as inconsistent formatting of identifiers. The paper presented a preferred approach and discussed the implications of the changes before seeking views on the proposals. Responses were requested to the following questions:

¹ GML: Geography Markup Language, based on XML for use in communicating geographic information. Developed by the Open Geospatial Consortium and now being transferred to a formal ISO standard (as ISO 19136).



8.1 Do you agree that the registration of organisation prefix is preferable to the allocation of blocks of identifiers?

8.2 Do you agree that the use of a character string to handle the full identifier will support greater consistency of storage and exchange across organisations?

8.3 Do you have any other comments?

The paper was specifically targeted at those who already held blocks of identifiers (TOIDs). It was also sent to those who were developing data using identifiers (where these were known), systems suppliers and the wider stakeholder community. Opportunities were also taken to discuss these issues at DNF and similar events.

5 Outcomes from stakeholders

5.1 General Response

The majority of the feedback was short and positive, i.e. respondents understood the need for the change and supported the proposals. Most of the feedback was informal either as email responses or in several cases through discussion.

A small number of comments (two) proposed building intelligence into the identifier but the general trend has always been to keep it simple and open to support a wide variety of applications for the future without undue restriction.

In several cases the consultation also elicited several new prefixes (around 10). Some of these are already in use or about to be used. These will be added to the register prior to its inception to ensure continuity. This appears to confirm that the proposals are in line with industry direction and current working practices.

5.2 Specific Stakeholder Responses

Ordnance Survey Ireland and Ordnance Survey for Northern Ireland

The collaborative work of the three Ordnance Survey's in 1999-2001 agreed a common model which employed a consistent 16-digit identifier (TOID). Also agreed at that time was that this would be incorporated in future database redevelopments. The initial allocation of TOIDs was subdivided between the three organisational areas i.e. for Great Britain and for both Ireland and Northern Ireland separately.



Today both **Ordnance Survey for Northern Ireland** and **Ordnance Survey Ireland** are now developing new data models and databases but have not yet implemented any changes. They are therefore content to accommodate the proposed change.

The Countryside Council for Wales

The CCW have not yet used any of the identifiers allocated. In their response they agree to the proposals and have registered a prefix to provide that their block of identifiers remains active.

The Countryside Agency (now part of Natural England)

The Countryside Agency deployed a block of identifiers to assign to almost one million hectares of land mapped as Open Country and Registered Common Land under the Countryside and Rights of Way Act 2000. These identifiers have been used to support the management of each land parcel in the access land database throughout the five year mapping process. They will need to be preserved through a prefix even though the data must be updated within ten years under the Act's 'decadal review' regulations.

Ordnance Survey (Great Britain)

Ordnance Survey issued their own consultation on unique identifiers through the OS INSIGHT programme towards the end of the DNF consultation. As the TOID has been widely distributed and it was already evident that some inconsistencies in data management of the identifier had occurred it is unsurprising that this appears to be one of the main topics of discussion at the time of writing this summary. Ordnance Survey will finalise and review their consultation before formulating a plan with users and systems suppliers with a view to resolve those inconsistencies, including the omission of leading zeros that may have arisen.

5.3 Relationship with UPRNs

In 2000 a numerical division between Ordnance Survey TOIDs and IDeA UPRNs was created to avoid confusion at a time when both forms of identifier were new. The UPRN is a 12 digit number based on BS7666:2000 and the TOID a 16 digit identifier based on DNF and it was agreed that the TOID range would start at 0001 0000 0000 0000. This is one number higher than the maximum UPRN number and therefore this avoided any TOID and UPRN overlap. The UPRN was unaffected.

However the introduction of a prefix, and greater clarity of the role of these identifiers over the intervening period, now renders that division unnecessary. The intention is therefore not to maintain such a numerical division in future.



The easier integration of unique identifiers in future is also supported in the new BS7666:2006 standard that will now accommodate any form of defined identifier to be used to identify street, land and property and delivery point “gazetteers”.

5.4 Wider aspects

Europe & other forms of identifier.

The work now underway within the European INSPIRE² initiative seeks to promote interoperable information across member states within Europe. One of the components here are unique identifiers. Like all aspects of INSPIRE there are variations from country to country with many geographic identifiers existing today. It is therefore highly unlikely that organisations will be expected to change these to a common form (cost will be prohibitive if nothing else). We can expect the main objective will be to translate and cross reference datasets, much as we do today in other fields of the information industry.

Abuse of the system.

It was also generally felt that some form of mechanism is required to avoid abuse of the identifier prefix system, such as blatant misuse or other inappropriate actions. This can be managed partly through the registration system mechanism and by performing certain checks and also by reserving the right to withdraw the registration of certain combinations of characters if the Expert Group felt that they were damaging to DNF.

6 Conclusions from the feedback

- The proposals in the consultation document were generally well received and agreed by those responding.
- The next stage is to implement the proposed changes (see section 7 below).

² INSPIRE: INfrastructure for SPatial InfoRmation in Europe. <http://inspire.jrc.it/home.html>



7 Actions now required

- The DNF Expert Group will now publish a Technical Guide on Unique Identifiers under RoadMap component 2.1 [Identifier Management] and make this available on the DNF website by the 3rd April 2006.
- The DNF Registry will be implemented with an automated prefix registration service. This will be fully operational by the 3rd April 2006.
- The prefixes reported during the consultation period (mainly to preserve existing allocations, but some new prefixes as well) will be registered prior to the go-live date of the Registry.
- There is a need to continue to track wider initiatives (such as INSPIRE) and other forms of identifier, to ensure that these initiatives remain compatible.

8 References

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| 2005 | DNF Expert Group | Unique Object Identifiers within the Digital National Framework (DNF) – Consultation on proposed changes to identifier management. |
| 2006 | DNF Expert Group | www.dnf.org DNF website |