



ROADS AUTHORITIES & UTILITIES COMMITTEE
(SCOTLAND)

ADVICE NOTE 14

SCOTTISH ROAD WORKS REGISTER
GOOD PRACTICE GUIDE TO SETTING UP AREAS OF
INTEREST

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Scottish Road Works Register
Good Practice Guide to Setting Up Areas of Interest

Version History

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Scottish Road Works Register Good Practice Guide to Setting Up Areas of Interest

Guidance Notes

1. Introduction

This document is intended to provide guidance on how to configure the SRWR system to meet your business requirements. The system is very flexible and should be able to meet your needs if set up correctly.

Section 2 provides a glossary of terms used in dealing with the SRWR, and the data within it.

Section 3 provides a list of references to other documents which can be used in conjunction with this guide to get more information.

Section 4 describes how Operational Districts and Index Groups can be used to control which notices an organisation and user within an organisation can utilise.

Section 5 provides guidance for Roads Authorities on how to configure the SRWR. Included are some business scenarios which show how certain organisational models could be handled.

Section 6 provides guidance for Undertakers and also includes sample scenarios.

Section 7 provides guidance on data submission.

Section 8 contains a list of Frequently Asked Questions.

Not all possible requirements will be covered in this document so if you wish to discuss how best to configure the SRWR to meet your needs, please contact the System Provider Support Desk on 01324682170 or email srwr@symology.co.uk and ask for advice – the current system provider is Symology Ltd.

2. Glossary

2.1. Area of Interest (AOI)

A list of roads from the gazetteer, of interest to a particular user or relevant to a particular function. An AOI is defined using Index Groups.

2.2. Associated Street Data (ASD)

The items of technical information which are required by the SRWR in respect of each street in order that the Register may function as intended. This includes the maintenance responsibility for, the reinstatement category of and the special designations pertaining to a street.

2.3. Authority Codes

The Department for Transport allocated codes for Roads Authorities, other road managers and bodies responsible for entering ASD.

2.4. Code of Practice (CoP)

The rules and regulations under which authorities and undertakers have to operate in relation to street works. These rules are incorporated into the SRWR.

2.5. Data Maintaining Authority

The organisation responsible for submitting an item of data to the SRWR. Only that organisation can change the item of data.

2.6. Index Group (IG)

A list of roads from the gazetteer used to define an Area of Interest or other grouping of roads. The function of the Index Group is determined by the Index Group Type. A road can appear in more than one Index Group.

2.7. Index Group Type (IG Type)

The IG Type identifies the function of the Index Groups within it. The IG Type can have any number of Index Groups. The 6 IG Types within the SRWR are:

- RWN – Road Works Notice Posting Area
- RWU – Road Works Update Area
- RWV – Road Works View Area
- INS – Inspection Patches
- COR – Co-ordination Group
- GEN – General Group

2.8. Local Street Gazetteer (LSG)

The LSG contains details of all streets in a Roads Authority geographic area regardless of maintenance responsibility. It is a self-contained entity created and maintained by the RA. Details include USRN, street name, description or number, co-ordinates

defining location, etc. The LSG has a number of uses and is supplied to the SRWR by all councils to create the base gazetteer.

2.9. Maintaining Authority Code

Code for roads or other authority maintaining a road.

2.10. Maintenance Responsibility

Data relating to the authority or authorities responsible for maintaining a road.

2.11. Notices Awaiting Assessment (NAA)

Notices received for works on a street in a user's notice posting area.

2.12. Operational District (OD)

An OD could represent a functional department e.g. Bridges Section, or a regional/area office covering a geographical area e.g. Edinburgh. Each OD is referenced by a promoter prefix code made up of the organisations two-character prefix code and a sequential number e.g.

AB001 – Aberdeenshire Road Works

AB002 – Aberdeenshire Bridges Section

SW001 – Scottish Water (Glasgow)

SW002 – Scottish Water (Edinburgh)

OD codes are used by the SRWR to provide a prefix on all works reference numbers.

2.13. Organisation

All road works organisations have been allocated a four-digit organisation code. The SRWR system holds a two-character alphabetic code for each organisation cross-referenced to the organisation code e.g. SW for Scottish Water, AB for Aberdeenshire. Works are not recorded by organisation, they are recorded by Operational District.

2.14. Own Operational District (Own OD)

Own OD identifies a user's current Operational District. Some users will be restricted to one OD in which case Own OD will never change. Others may be able to change their Own OD, allowing them to view, create and amend works for other ODs in their organisation. However, a user will only be able to create works for roads in their Update Area Index Group.

2.15. Reinstatement Category

Data relating to the reinstatement category of a road or of particular sections or elements of a road e.g. carriageway, footway.

2.16. Road Works Authority

The authority responsible for maintaining a road. This will be the roads authority for a public road and the road managers (normally the frontagers) for a private road.

2.17. Scottish Road Works Register (SRWR)

The SRWR is kept by the Scottish Road Works Commissioner in pursuance of his duties under section 112A of the new Roads and Street Works Act 1991. The operation of this register is contracted to a service provider, currently Symology Ltd.

2.18. Special Designation

Data relating to special designations applying to a road in general, to sections of a road or to specific points on a road e.g. Traffic Sensitivity, Special Engineering Difficulty.

2.19. Statutory Undertaker

A company or public body which has a legal right to dig up roads in order to install new pipes, cable etc, or to maintain their existing ones.

2.20. Trunk Road Operator and Concessionaire (TRO)

An organisation contracted to Transport Scotland with delegated powers to 'run' and maintain the trunk roads and motorways. Current examples are Amey, Autolink, Scotland TranServ and Bear Scotland.

2.21. Uncoupled ASD

ASD supplied to the SRWR independently of Base Gazetteer data e.g. by Network Rail or a TRO. Only ASD for roads which are included in the SRWR gazetteer will be loaded.

2.22. Unique Street Reference Number (USRN)

The USRN is an identifier for a street, unique within the UK. All street records in a street gazetteer have a USRN assigned to them.

3. References

The following documents provide more detailed information on the SRWR – how to use it, data preparation and data submission.

Reference	Title	Organisation
1	BS7666:2000 Part 1: Specification for a street gazetteer	British Standards Institute
2	Data Transfer Format V6.3	Intelligent Addressing
3	RAUC(S) Advice Note 5 – Scottish Road Works Register Associated Data Guidance Notes V2	RAUC(S)
4	SRWR Gazetteer AOI Submission Formats V1.3	Symology Ltd
5	Gazetteer and ASD Validation and Submission Process V?	Susiephone
6	SRWR Workshop User Guide V2.4	Symology Ltd
7	Advanced SRWR Workshop User Guide V2.4	Symology Ltd
8	Scottish Conventions for Street Gazetteers (under production)	Improvement Service

4. Management of Notices within the SRWR

When deciding how best to configure the SRWR to meet your needs, it is important that you understand how notices are managed within the system. One of the benefits of the SRWR is the ability to restrict notices that a user has to deal with to those which are relevant. This can be achieved by use of Operational Districts and Index Groups/Areas of Interest which in combination, act as filters on notices.

The Notice Posting Group contains a list of roads which generate notices in the Notices Awaiting Assessment for an Operational District, hence there is one Posting Group for each OD. These notices have to be dealt with accordingly.

The View Group contains a list of roads which an individual user can look at notices for, without having to respond. It can include all roads within the Posting Group or it can restrict a user to a subset within a geographic boundary. It can also contain roads which are not contained within the Posting Group.

The Update Group contains a list of roads for which a user can create or modify notices. Again, it could contain all roads which are of interest to the OD or can be restricted to a subset of interest to a user.

To summarise, an OD and its Notice Posting Group can be associated with an organisation or business unit/ department within an organisation whereas a View and Update Group are associated with a user within that organisation. A notice will only appear in a user's Task Summary List if the road is in the Notice Posting Group for the user's OD and in the user's View Group.

The contents of an Index Group can be defined by either using a polygon to identify all roads within a geographic area or by specifying the list of roads to be included as a file. It should be noted that the use of geographic areas is recommended, where possible. This means that any revisions of the gazetteer data will automatically be captured within the geographic area. However, as will be seen in the next section, Roads Authorities also have the choice of letting the SRWR generate Index Groups automatically in some circumstances.

Business Units or departments may work independently of each other. They may cover different geographical areas in which case the ODs would have different roads in their Notice Posting Groups, or they may have separate functions but be interested in the same roads e.g. a Bridges Section and a Street Works Section within a Roads Authority. Notices will be sent to all ODs which have a road in their Notice Posting Group.

5. Good Practice for Roads Authorities

5.1. General Guidelines

This section lists some key information about Operational Districts and Areas of Interest.

1. If a Roads Authority is responsible for maintaining a road, OD1 for the organisation will automatically have the road added to its Notice Posting Group, provided the maintaining authority code in the ASD Type 51 (Maintenance Responsibility) record is set correctly. Users belonging to this OD will then see notices for this road in their Notices Awaiting Assessment, provided the road is in their View Group. Other ODs within the authority will not automatically receive notices. For example, in Aberdeenshire, the Operational District AB001 will have all roads maintained by Aberdeenshire Council added to its Notice Posting Group automatically. This will not apply to AB002, which is used by the Bridge Maintenance Section. For AB002, roads must be added to the Notice Posting Group by another method e.g. using a list.
2. If you only want to receive notices for roads for which you are the maintaining authority, no area of interest need be submitted for OD1 as the system will generate the appropriate list of roads.
3. If you want to receive notices for a road for which you are not the maintaining authority, or you belong to another OD (other than OD1) within that authority, it must be added to your Notice Posting Group.
4. If you want to receive notices for all roads within your geographic boundary, use an area of interest polygon to define the Notice Posting Group. It will include public, trunk and private roads. Monitoring all notices will aid co-ordination.
5. If you only want to see notices for a limited list of roads that are not likely to change, then it may be best to use a list of roads to define your Notice Posting Group. However, this will not be automatically updated if the gazetteer changes.
6. If you want to raise a notice on a road, the road must be in your Update Group. The guidelines which apply to the Notice Posting Group, defined in 1-4 above, also apply to the Update Group.
7. If you want to look at notices on a road, the road must be in your View Group. Remember that if a road is also in your Posting Group, notices will appear in your NAA. If not, you will only be able to view them.
8. Different View Groups can be created depending on the needs of users. If you are interested in all roads within your Authority you will have a View Group which covers the geographic extent of your Authority. For co-ordination purposes, it may be useful to look at

notices on roads outside but close to the geographic boundary of your authority. This can be achieved by making the area of interest polygon for the View Group slightly larger than the geographic boundary. If you work in an area office you may only be interested in roads within your geographic area and your View Group would only cover this area.

9. If you are setting up an Index Group to be used as an Inspector Patch (collection of roads monitored by an individual roads inspector) or Co-ordination Group, it may be easier to define the Index Group by providing a list of roads.
10. Statistics are collected for each Operational District separately. You may want to consider this before deciding whether to have more than one OD.
11. An OD defined as a 'Roads Authority' can also be flagged as an 'Inspection OD'. All roads within that OD which have the correct maintaining authority code, will then be available for sampling and can have inspections recorded against them. The OD1 for each Roads Authority is set up like this by default.
12. Fixed Penalty Notices are prompted against a works. Anyone who has access to the street works record can view a FPN. Only a user who belongs to the OD which owns the road can process the FPN.

5.2. Some Possible Scenarios

Scenario 1 – One centralised department handles all noticing within Roads Authority.

Solution

One Operational District is required. A decision must be taken on how to define the Notice Posting and Update Index Groups. They can either be (A) system generated or (B) an area of interest polygon. Under (B), an area of interest polygon defining the geographic boundary of the Roads Authority must be supplied to the System Provider.

For both options, a polygon (slightly larger than the geographic boundary, if required) should additionally be supplied to create the View Index Group.

Outcome A

- The noticing department will receive notices for all roads for which the RA is the maintaining authority;
- The noticing department will be able to raise notices on all roads for which the RA is the maintaining authority;
- Notices on all roads within or close to the geographic boundary of the RA can be viewed; and

- Statistics are collected for the Operational District (in this case the RA).

Outcome B

- The noticing department will receive notices for all roads within the geographic boundary of the RA including public, trunk and private;
- The noticing department will be able to raise notices on all roads within the geographic boundary of the RA;
- Notices on all roads within or close to the geographic boundary of the RA can be viewed; and
- Statistics are collected for the Operational District (in this case the RA).

Scenario 2 – One department handles all noticing within Roads Authority but has a number of district offices (or inspector patches) with different geographic areas of responsibility.

Solution

One Operational District is required. A decision must be taken on how to define the Notice Posting Group. It can either be (A) system generated or (B) an area of interest polygon. Under (B), an area of interest polygon defining the geographic boundary of the Roads Authority must be supplied to the System Provider.

For both options, area of interest polygons for each district office geographic boundary are also required. These will be used for the Update and View Index Groups. The view polygons should be slightly larger than the boundaries. Users in each office will be assigned the View and Update Group appropriate to that office.

Outcome A

- A district office will only receive notices for roads within their geographic boundary for which the RA is the maintaining authority;
- A district office will only be able to raise notices for roads within their geographic boundary for which the RA is the maintaining authority;
- Notices on all roads within or close to the geographic boundary of the district office can be viewed; and
- Statistics are collected for the Operational District (in this case the RA).

Outcome B

- The district office will receive notices for all roads within the geographic boundary of the district office including public, trunk and private;
- The district office will be able to raise notices on all roads within the geographic boundary of the district office;
- Notices on all roads within or close to the geographic boundary of the district office can be viewed; and
- Statistics are collected for the Operational District (in this case the RA).

Scenario 3 – Roads Authority is split into autonomous departments with separate responsibilities e.g. Street Works Section, Street Lighting Section, Bridges Section.

Solution

One Operational District for each department is required. An Operational District can have one or more Areas of Interest depending on the structure of the department.

Example

- Street Works Section are interested in all roads within geographic boundary of RA.
- Street Lighting Section are only interested in roads with street lights.
- Bridges Section are only interested in roads with bridges.
- Each section needs to check each notice within their area of interest independently.

Operational District 1 – Street Works section

- The Notice Posting Group and Update Group are defined by an area of interest polygon representing the geographic boundary of RA.
- The View Group is also defined by an area of interest polygon but covering a slightly larger area.

Operational District 2 – Street Lighting Section

- The Notice Posting Group is defined by a list which contains only roads with street lighting. The Update Group would be defined by the same list.
- The View Group could be defined by the list or by an area of interest polygon, which would allow notices on other roads to be viewed.

Operational District 3 – Bridges Section

- The Notice Posting Group is defined by a list which contains only roads with bridges. The Update Group would be defined by the same list.
- The View Group could be defined by the list or by an area of interest polygon, which would allow notices on other roads to be viewed.

Outcome

Each department only receives the notices that they need to respond to. They are able to maintain their own set of statistics.

6. Good Practice for Undertakers

6.1. General Guidelines

This section lists some key information about Operational Districts and Areas of Interest.

1. If you want to receive notices for a road in your Notices Awaiting Assessment, it must be contained within your Notice Posting Group. Conversely, if there are roads that you have no interest in, you should exclude them from your Notice Posting Group.
2. The best method of selecting roads within a geographic area and excluding roads outside that area, is to use an area of interest polygon.
3. A Notice Posting Group defined by an area of interest will include public, trunk and private roads.
4. Statistics are collected for each Operational District separately. You may want to consider this before deciding whether to have more than one OD.
5. If you want to raise a notice on a road, the road must be included within your Update Group.
6. If you want to look at notices on a road, the road must be in your View Group. For co-ordination purposes, it may be useful to view notices on roads outside but in close proximity to the geographic boundary of your organisation. This can be achieved by making the area of interest polygon for the View Group slightly larger than the polygon for the Posting and Update Groups.

6.2. Some Possible Scenarios

Scenario 1 – Organisation covers the whole of Scotland. One department handles all noticing.

Solution

- One Operational District will be required. It will not be necessary to supply an area of interest polygon. Inform the System Provider Support Desk and they will configure the system. All users are allocated to the same Operational District.

Outcome

- The noticing department will receive notices for all roads in Scotland.
- The noticing department will be able to raise notices on all roads in Scotland.

- Statistics are collected for the Operational District (in this case the whole organisation).

Scenario 2 – Organisation covers the whole of Scotland but district offices cover different geographical areas.

Solution

One Operational District is required. The System Provider should be notified that the Notice Posting Group will cover the whole of Scotland and they will configure the system. Area of interest polygons defining the geographic boundary of each district office must be supplied to the System Provider. These will be used for defining the View and Update Index Groups. All users are allocated to the same Operational District but should be given the appropriate View and Update Index Groups for their district office as their default.

Outcome

- The organisation will receive notices for all roads in Scotland.
- Each district office will only be presented with notices for roads within their geographic area. They will only be able to raise notices for roads within their geographic area.
- Statistics are collected for the Operational District (in this case the whole organisation).

Scenario 3 – Organisation only covers part of Scotland. One department handles all noticing.

Solution

One Operational District is required. A decision must be taken on how to define the Notice Posting, View and Update Index Groups. They can either be (A) defined by an area of interest polygon or (B) a list can be used. If (A), an area of interest polygon defining the geographic boundary of the organisation's business area must be supplied to the System Provider. Under (B), a list of roads must be supplied.

Outcome A

- The organisation will receive notices, view notices or raise notices for all roads within their business area.
- Statistics are collected for the Operational District (in this case the whole organisation).

Outcome B

- The organisation will only receive notices, view notices or raise notices on roads in the list provided to the System Provider.
- Statistics are collected for the Operational District (in this case the whole organisation).

Scenario 4 – Organisation is split into autonomous departments each with their own area of responsibility.

Solution

An Operational District for each department is required. A decision must be taken on how to define the Notice Posting, View and Update Index Groups for each OD. They can either be (A) defined by an area of interest polygon or (B) a list can be used. If (A), an area of interest polygon defining the geographic boundary of each department's business area must be supplied to the System Provider. Under (B), a list of roads for each department must be supplied. Users must be allocated to the Operational District appropriate to their department.

Outcome A

- Each department (Operational District) will receive notices, view notices or raise notices for all roads within their business area.
- Statistics are collected for each department (Operational District) separately and not for the whole organisation.

Outcome B

- Each department (Operational District) will only receive notices, view notices or raise notices on roads in the list for that department provided to the System Provider.
- Statistics are collected for the Operational District (in this case the whole organisation).

Scenario 5 – Organisation has central plant information team and a works management department split into district offices.

Solution

An Operational District for the plant information team is required. The Notice Posting Group for this OD will contain all the roads of interest to the organisation. All notices will be received and processed by this OD. The View Group for users in this OD will also contain all roads. A separate OD for the works management department is required. Area of interest polygons defining the geographic boundary of each district office must be

supplied to the System Provider. These will be used for defining the View and Update Index Groups. All users in the department are allocated to the same Operational District but should be given the appropriate View and Update Index Groups for their district office as their default.

Outcome

- The plant information team will receive all requests on behalf of the organisation.
- Each district office will only be able to raise notices or view notices for roads within their geographic area.
- Statistics are collected for each department (Operational District) separately and not for the whole organisation.

7. Submission of Data

7.1.1. Street gazetteer and associated street data

This section applies to Roads Authorities and Network Rail only. Street gazetteer and ASD must be submitted on a quarterly basis at the end of February, May, August and November.

If your **street gazetteer** has changed since the previous submission you will have to extract the gazetteer from your gazetteer management system (See doc ref 2 for a data format specification). You may choose to run the NSG validation program, originally developed by Ordnance Survey when they were the National Street Gazetteer custodian. This can be used to correct any errors reported prior to submission to the SRWR.

If your **associated street data** has changed since the previous submission you will have to extract your ASD from the system you use for maintaining your ASD (See doc ref 3 for a data format specification).

Assuming both sets of data have changed, the files submitted by Aberdeenshire would be:

Filename	Data Description
9052_01.csv	Street gazetteer
9052_02.csv	Associated street data

Zip files and email to iain.ross@susiephone.co.uk, or if the Zip file is too large to email, burn to CD and post to:

Susiephone Ltd
PO Box 12891
Loanhead
EH20 9WU

7.1.2. Index groups and areas of interest

Are new **Index Groups** required? If yes, create the Index Groups online, using the SRWR application.

Do you have **polygon based index groups**? Have new AOI polygons been created or existing polygons changed since the last submission? If yes, create a polygon coordinate file.

Do you have **street based index groups**? Have new lists of streets been created or existing lists changed since the last submission? If yes, create a street list file.

Create an Index Group definition file.

Complete an AOI Submission Template.

Assuming all files were required, the files submitted by Aberdeenshire would be:

Filename	Data Description
IODS_AB_001.txt	Index group definition file
ICOORDS_AB_001.txt	Polygon co-ordinates for each AOI
USRN_AB_001.txt	List of roads for each index group
SRWR Gazetteer AOI Submission Template.doc	Information on organisation and AOI submission

The first 3 filenames contain a sequential number which should be incremented each time the file is submitted. (See doc ref 4 for data format specifications and detail of procedure)

Zip files and email to Service Provider at srwr@symology.co.uk
AOI information can be submitted at any time.

8. Frequently Asked Questions

1. How many Operational Districts does my organisation need?

This depends on how many people in your organisation need to separately receive and assess each notice. If you operate a system where one person assesses each notice and either responds or prompts any necessary action by others then you only need one Operational District. This applies regardless of whether you need to operate with a centralised system or with geographically based units. So long as each notice only needs to be assessed once, it can be filtered to the correct geographical unit within a single OD. However, if each notice needs to be received and assessed separately by more than one person, you may benefit from setting up additional ODs. An example of this for a council might be if roads and lighting operated as autonomous units. Each could then be set up as an OD and process its notices independently.

2. How should I filter the notices for my Operational District?

You should set up a notice posting group for your OD that restricts the notices on your Task Summary List to those which your business unit really need to assess individually. If you are assessing notices for a Bridge Maintenance unit, you only need to examine those for work on roads where there is a bridge. You could set up your notice posting group either as a list of roads with bridges or a set of small polygons surrounding each bridge.

3. How can I filter notices to operators within an Operational District?

You can set up a view group for each operator, to restrict the notices on the to do list which the operator can see to those which are of interest. This can be done by creating a polygon to define a geographic area of responsibility or by defining a list of roads.