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Grants and support for creating
and improving woodlands

Approach to Digital Mapping

Introduction

In the past, grant applications have used different standards of base maps derived from a variety of Ordnance Survey mapping products and aerial photography. Data submitted has subsequently been captured at different scales resulting in inconsistent quality. This has resulted in poor quality applications. The introduction of Ordnance Survey Mastermap¹ (OSMM) product will provide a continuous and consistent quality, ensuring that all spatial data users are working to the same mapping standard.

It is essential that a common mapping standard is adopted for e-government in order to provide a means for government departments and the general public to work with the same quality spatial data. OSMM will provide the means to help to deliver a standard that can be used by all parties involved in the transfer of spatial data.

This document outlines the main criteria required for Management Planners to supply quality digital spatial data that can be used for Better Woodlands for Wales (BWW) grant applications.

Use of OSMM Digital Data

OSMM is the most up-to-date large-scale digital map of GB providing a seamless database for 1:1250, 1:2500 and 1:10000 survey data. This dataset is recognised as the mapping standard for GB. To ensure consistency in data quality OSMM will be used by the Forestry Commission (FC) to record spatial data for grant applications.

Integrated Administration and Control System (IACS) cross-checking is one of the main drivers for using OSMM. EU legislative requirements mean that grant claims have to be checked by the FC for the possibility of double funding against agri-environment payments. The Environment, Planning and Countryside department (EPC) of the Welsh Assembly Government are using OSMM and/or OS Landline products. Therefore, to ensure compatible mapping standards, it is essential that the FC Wales (FCW) use OSMM as the base map for all spatial data associated with grant applications. FCW will support this principle by offering Management Planners OSMM digital data, which can be used to submit BWW applications.

¹ <http://www.ordnancesurvey.co.uk/oswebsite/products/osmastermap/>

Standard of Digital Spatial Data for Grant Applications

Please note:

The word 'feature' has a particular meaning in the context of BWW Management Planning. This is explained on the document "How to Prepare and Submit a Management Plan".

In this 'Approach to Digital Mapping' document, 'feature' can refer to any map element, rather than a management 'feature' in BWW.

The standard of digital spatial data will be greatly improved, as all future applications will be captured against OSMM. Using OSMM will ensure that the quality of application data is of consistent standard, which will result in an accurate FCW spatial data set.

To ensure that the quality of the digital spatial data sent to FCW is acceptable, the following standards must be followed:

- All map data **must** be made using OSMM².
- Boundary of the application **must** be snapped to OSMM where it follows an OSMM feature.
- Sub-compartment boundaries **must** be snapped to OSMM where they follow an OSMM feature.
- Linear features (fences, footpaths, etc) **must** be snapped to OSMM where they follow an OSMM feature.
- Area features **must** always be closed polygons.
- Sub-compartments should have the scheme number and sub-compartment letter attached as attributes (fields).
- Sub-compartment letters should contain only one letter of the alphabet: sub compartment 'aa' for example, will not be acceptable.
- Where forest roads/rides represent the boundary between compartments or sub-compartments, the centre of the road **must** be taken as the boundary. Although, OSMM depicts roads as parallel lines rather than a single centre-line.
- Case shapes **must** have a scheme number and a case shape label in the attribute table
- Linear Features **must** have a scheme number and a linear feature label in the attribute table
- Data **must** be supplied using OS GB National Grid, Transverse Mercator projection.

FCW Procedures for Importing and Interpreting Digital Spatial Data

FCW uses ESRI products for GIS and can import the most common data formats. Spatial data can be submitted either by email or by CD (depending on size) to the Technical Services Team in Ruthin.

FCW will try to accommodate and import other formats but cannot guarantee that this will always be possible³. If it proves to be difficult to import data then FCW will ask that the application is resent on an OSMM paper map supplied via the FC website.

² Digital data captured against other OS backdrops will be acceptable until 31st March 2008. FCW will realign boundaries to match the FC's OSMM database. If boundaries submitted are of a poor quality and not easy to interpret, FCW will ask that the applicants order a OSMM paper copy from the FC website and resend the application map on a marked up paper print at which time mapping standards for paper applications must be adhered to.

The BWW Technical Services Team (TST) will be responsible for deciding if the quality of the applicant's map is acceptable for data capture and future management purposes. If the map is not acceptable, it will be returned to the Management Planner with the reason(s) why it did not meet the required standards (see Appendix 1).

The TST will interpret the boundaries submitted and snap them to OSMM where appropriate.

Where application boundaries follow an actual feature every effort will be made to ensure that boundaries follow OSMM detail. For example an application boundary may follow a fence line. The actual shape of the boundary may differ slightly between OSMM and the submitted boundary but if, after consulting other data sources (i.e. aerial photography, RLR etc), it is clear that the two boundaries are meant to be the same, cartographic interpretation will be used and the OSMM boundary will be followed as the definitive boundary.

However, it may not always be possible to interpret all boundaries. If it is not possible, even after consulting other data sources and there is still uncertainty as to which feature a boundary should follow, then the Management Planner will be consulted via the BWW Technical Services Team. It is not always easy to discuss maps and boundaries over the phone therefore a digital image (e.g. JPEG) will be sent by email requesting clarification.

When capturing data on screen, against the OSMM, a suitable scale will be used for boundary interpretation and snapping. This scale will not be less than the submitted map scale. A scale of no less than 1:2500 is recommended to digitise 1:10000 data. It may be necessary to zoom in further if it is not clear which features boundaries are meant to follow.

The digital spatial data captured by FCW will be used to generate the definitive area (ha) and length (m) on which grant payments will be based.

³ FCW will, up until March 2008, help applicants/agents and make every effort to import digital data in various formats. From April 2008 onwards, all data supplied to the FCW should be in GML format or a format that is defined by the Forestry Data Transfer group.

APPENDIX 1

Return of unacceptable digital data

Return of digital data

We regret to inform you that your digital data does not meet the standard required for us to progress with your application. Below is an indication of the reason why it has been returned.

- o Not spatially referenced
- o Not supplied in OS National Grid Projection
- o Not used Ordnance Survey MasterMap
- o Not clear which features boundaries follow
- o Compartment numbers(s) missing
- o Sub Compartment letter(s) missing
- o Problems encountered when importing data
- o Not in a format that FC can import
- o Polygons not closed
- o Does not comply with the application text

Other Comments

If you have any queries or would like further guidance please contact the Technical Services Officer who is dealing with your application.

Your application will not be processed until we have received satisfactory data

Yours sincerely