

Title: Agroportal - A user friendly WEB-GIS analysis and reporting tool using deegree.

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Policy makers at governmental organizations like to use GIS systems to analyze the current situation in a certain area or the effect of proposed measures. For this analysis often overlays between different thematic data layers must be done. For example to find the number of hectares of vulnerable nature within a certain distance of a farm or factory. For this goal desktop GIS systems are available but the problem is that these systems are often too complicated to be used by non GIS experts. This is one of the reasons that the Agroportal system has been developed. Other reasons are: To make available data on agricultural, landscape and nature easy queryable in an integrated system and give all involved employees of organizations at different locations, e.g. municipalities and water boards, access to this system.

By means of a demonstration of different relevant use cases the presentation at deegreeday will discuss requirements and functionality of the Agroportal system, the technical challenges and solutions.

The typical functionality of the Agroportal system is: - All relevant data on agricultural, landscape and nature logically grouped together in one map; - Description of the content of all layers ("metadata"); - Query of information of all layers or a specific object on a certain spot; - Selecting a report area by means of drawing a geometry or selecting a geometry from a specific layer; - Location report: Summary of area and length within the report geometry for every group in the legend, supplied with small maps containing the layers of the concerning legend group; - Nature policy report: Summary of area and length of different nature policies within the report area; - Policy summary: Summary of all relevant policies, i.e. "metadata" of layers, within the report area; - Map print: Nicely formatted, good quality printing on A4 and A3 of selected layers in the map viewer, including legend, title, scalebar, feature info, etc. The technical challenges in this project were: - Provide a user friendly, interactive printing functionality which results in good quality printed maps on A4 and A3; - Overlay analysis with intersects between layers using WEB GIS tools; - Combining multiple maps with summary statistics in one report; - Summary report on description of layers resulting from the overlay analysis. The system was realized using deegree, JTS, JasperReports and Flash.