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<p><u>Relevant projects</u></p>	
<p>2015-08 – d.d.</p>	<p>Project: Areal planning in 3 dimensions</p> <p>Funding: Ministry of Local Government and Modernisation / Department for Planning</p> <p>Other participants: 4 software companies in Norway</p> <p>Project scope: Develop an joint draft to how areal plans can use 3D information, and thus become easier to understand, and easier to use.</p>
<p>2015-01 – d.d.</p>	<p>Project: Better documentation of information flow for utility information</p> <p>Funding: Ministry of Local Government and Modernisation</p> <p>Other participants: 5 National organizations responsible for utility infrastructure.</p> <p>Project scope: Develop a better, and hopefully joint method for documentation of utilities, mainly underground, using the Norwegian standard for utility networks (SOSI Ledning, 2013)</p>
<p>2009-08 - 2014-08</p>	<p>Project: National Standardisation</p> <p>Funding/Responsible: Norwegian Mapping Authority</p> <p>Project Scope: Development of National standards for geographical information. I participated as editor. The most important standards developed:</p> <ul style="list-style-type: none"> • Areal Planning (SOSI Plan), latest version 2012 • Utility network (SOSI Ledning, latest version 2013) • Quality in geographic Information (Geodatakvalitet), 2014
<p>2009-08 - 2014-08</p>	<p>Project: International Standardisation</p> <p>Funding: Norwegian Mapping Authority</p> <p>Project content: participation as expert in ISO/TC211 project teams. The most important standards:</p> <ul style="list-style-type: none"> • ISO 19113 Geographic Information – Quality Principles (2002) • ISO 19157 Geographic Information – Data Quality (2013) • ISO19115-1 Geographic Information – Metadata Fundamentals (2014)
<p>2002-12 - 2009-08</p>	<p>Project: E-GIS and E-GIS+</p> <p>Funding: EU/Leonardo da Vinci</p>

	<p>Participants: Universities and University Colleges in Norway, Sweden, Lithuania, Netherlands, Bulgaria, Greece and Portugal.</p> <p>Goal: Develop 1-year netbased GIS course</p>
1994-08 - 2005-12	<p>Project: PhD-project Investigation into Geographic Information Quality</p> <p>Funding: The Research Council of Norway</p> <p>Project: PhD-study</p>
<u>Publications/reports</u>	
2016-04	<p>Project report (Norwegian) not published</p> <p>Title: Information flow water supply and wastewater</p> <p>Funding: Norsk Vann (Norwegian Water: a national association representing Norway`s water industry)</p> <p>Co-writers: Inger Hokstad, Renè Astad Dupont</p> <p>Content: The report describes the status for information flow for work processes in water supply and wastewater projects, and propose action to automate these processes. The report also gives examples of maintenance processes for utility networks, explains involved actors and give brief list of information needed for each. The project work is based on the Norwegian standard for utilities (SOSI Ledning)</p>
2015-03	<p>Project report (Norwegian) not published</p> <p>Title: Eksempeldatasett 3D GML</p> <p>Funding: Ministry of Local Government and Modernisation / Department for Planning</p> <p>Content: Develop and document an example dataset using GML (ISO 19136) and 3D geometries, i.e. volumes.</p> <p>Available from: http://gml.arkitektum.no/eksempeldatasett/</p>