

Acronym	ScienceCloud4Cities		
Title of proposal	International Infrastructure Integration of Danish Science Cloud for Smart Cities		
Proposal summary	<p>On basis of existing components and a working prototype of a science cloud, the strategic research centre, CITIES, will further developed and test this concept towards a potential, national infrastructure component. The main foci of the infrastructure will be horizontal scalability and integration with existing national and international e-science infrastructure services. Due to the fact that smart cities are based on triple- to quadruple helix constellations, the access of non-research stakeholders is crucial. The following concrete infrastructure components will be developed on open source principles in the given priority:</p> <ul style="list-style-type: none"> • a CITIES cloud storage prototype for smart city data based on OwnCloud • a CITIES cloud computing prototype that is handling data from the data component • case studies by project partners and Cities with open data • integration with DataCite to enable citation similar to publications and the integration with DOIs – the same service is necessary for the integration with Zenodo • integration with Zenodo at Cern, enabling long-term archiving by a minimal effort on the current science cloud concept • integration with ORCID for research contributions and analysis • development and demonstration of a security solution for the sharing of sensitive data • poof of concept for the access to subsets of the data by municipalities, private companies and private persons <p>The work will be guided by concrete science use cases. For this, “smart cities” data sets will be collected, stored and processed for both historical data and near real time data (e.g. 1 min. response time).</p>		
Part(s) of the research data life cycle which are addressed	2: data collection, 3: data processing, 4: data analysis		
Main area (tick more than one if applicable)	<input checked="" type="checkbox"/> Humanities <input type="checkbox"/> Social Sciences	<input type="checkbox"/> Health Sciences <input checked="" type="checkbox"/> Natural Sciences	<input checked="" type="checkbox"/> Technical sciences
Types of infrastructure	<input checked="" type="checkbox"/> New infrastructure <input checked="" type="checkbox"/> Already realised data management infrastructure, where the proposal concerns significant modifications or extensions <input checked="" type="checkbox"/> Digital tools that support and promote the use of already realised data management infrastructure		

Proposers

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Co-proposers (title, name and institution)	Prof. Henrik Madsen, DTU (Center leader of CITIES) <small>Signing person for application</small> Assoc. Prof. Per Sieverts Nielsen, DTU (Head of Operation, CITIES) Library Director Bertil Dorch, Ph.D., University Library of Southern Denmark, SDU Director Martin Brynskov, Aarhus University Supporting organizations: AAU DiCyPS Center; Dong Energy; Lyngby Taarbæk Municipality, SDU Mechtronics

Project duration and budget

Project start	Project end
1/8-2016	02/12.2017

Total budget	Self-financed share	Share applied for
4.201.200 DKK	Min 50%	2.100.600 DKK