To whom it may concern



Dear Sir/Madam,

With this letter we would like to express the support of CycloMedia for the research proposal 'nD-PointCloud' (for the H2020-FETOPEN-2014-2015-RIA call).

The company CycloMedia has been very active in geographic data acquisition, on the R&D systems side, but also on the actual data collection and dissemination side. The importance of point cloud data is increasing rapidly, both by 'direct' acquisition techniques (such as LiDAR), but also via 'indirect' techniques (photogrammetric dense matching of images). Besides the obvious 3 spatial dimensions, these point clouds also have other attributes/dimensions, such as time, intensity, colour (RGB) etc. This makes these datasets really multi-dimensional and also requiring proper data organization, as data volumes can be huge. For example, CycloMedia is investigating a new data production and processing chain that would result in 35 trillion (35.000.000.000.000) points with RGB-colour to cover the Netherlands, potentially every year. Similar data products would of course also be of great importance in other countries where CycloMedia is operating.

Modeling, storing, managing and using these nD-PointCloud data sets brings along unprecedented challenges. The deep integration of dimension and the novel approach of continuous level of importance (detail, scale) as described in the nD-PointCloud proposal, would mean a breakthrough in handling point clouds. Therefore CycloMedia, a company producing larger and larger data sets (among which the future point clouds), has great interest in the H2020 FET nD-PointCloud proposal. If the project is approved, I expect major benefits from this research, not only for geo-information sciences and applications, but also for other sciences (and their applications) using spatio-temporal representations. This includes the direct use of point clouds (even very large data sets) without converting to other representations, such as grid/raster or object/vector with all associated drawbacks as 'damaging' data, time-costly conversions and delays etc.



As a member of the H2020 FET nD-PointCloud User Board, representing a company with great interest in the future use of the project results, we would be happy to be actively involved during the project by providing feedback, suggestions and also by learning in a very early stage from the latest developments. CycloMedia is also willing to provide large volumes of test data to the project, and is very much wanting to implement the successful results of the project (if possible already during project life-time).

We look very much forward to participate in the nD-PointCloud User Board, the collaboration with the project partners and the other members of the board from science and industry. We hereby provide our strongest support of the H2020 FET nD-PointCloud proposal and hope that you will consider this in your assessment.

Yours sincerely,

Frank J.V. Pauli

CycloMedia Technology B.V.