New techniques to provide correct and trustworthy spatial data in near real time - Machine Learning

With an ever-increasing focus on National Mapping Agencies being able to provide correct and trustworthy spatial data in near real time and at a budget, new mapping techniques are needed.

The most promising new technology for this is Machine Learning, and it is expected to play an integral part of mapping in the future ensuring that reliable data for e.g. change detection, flood management, greenhouse emissions etc. are available.

Sweden, Norway and Denmark are already working on Machine Learning, but this work is done detached with no coordination and little exchange of knowledge between the countries. By coordinating the NMAs work across the Nordic it is expected to enhance the development by avoiding duplicate research and making it possible to coordinate, share data and research different aspects at the same time.

The goal for this ad-hoc group would be to share knowledge concerning ML, to coordinate research ideas and to work on a "best practices" for ML in an NMA context. Experiences show that more than 70% of the time used for training ML algorithms is used on preparing training data. For this reason, sharing training data between the NMAs could help all involved greatly.

Proposal is that the ad hoc group would best be suited to fall under the "Nordic NMA Aerial Photography and Lidar group" where the topic of ML is already being addressed.