

*Strategy for the cooperation
between
the Nordic National
Mapping and Cadastre Authorities
(NMCAAs)*

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Strategy for the cooperation between the Nordic National Mapping and Cadastre Authorities (NMCAs)

The strategy for the cooperation between the Nordic NMCAs aims to find best ways of working together in order to further develop the services and the role of the Nordic NMCAs.

The Nordic countries have a shared history, similar values and high level of trust in each other. Similar institutions and a common Nordic socio-economic model give a good ground for cooperation.

The strategy sets the main aims and areas for cooperation between the Nordic NMCAs.

The strategy will be updated regularly and when necessary.

Six common strategic goals

1. **Needs** of society - present needs and future trends
 - First we have to realize the needs of our society and where it is heading. With a clear view of needs and trends our organization leaders can have well founded discussion with stakeholders and end users or our data and services
2. **Positioning** of the NMCAs' role in the future society
 - Based on needs and trends we can find out the best position/role of the NMCA's in our future society.
3. Future **services and data solutions**
 - When our role is clear we can develop and work with the right deliverables, solutions, services etc.
4. **Efficient** organizations
 - To succeed our organizations have to work efficiently in today's competitive environment.
5. Shared **competences**
 - In our specialized world we need to cooperate and share knowledge and resources where feasible.
6. **Cooperation** in the international arena
 - The Nordic NMCAs are stronger together in the international arena and can specialize and share workload.

Needs of Society – Present Needs and Future Trends

Goal:

The Nordic NMCAs will facilitate easy access to a wide range of authorized geographic and land related data which are: updated, standardized and suited for wide and free use.

Background:

Geographic information is vital for planning and action wherever location is introduced as an element. Geographic information and effective technological systems are tools for reducing both existing and future risks, as well as vulnerability within fields like natural hazards, effective emergency response and security. Successful handling of such events will require utilization of for instance 4D-data and weather data in addition to traditional geographical information.

To meet these challenges the NMCAs take an active part in co-operation between public sector, private sector and private users. Geographic information is a constantly growing crisis management tool where a cross Nordic data sharing environment will be important to develop.

Using official data to handle serious events presupposes easy access to authorized geographic information covering both sea and land in an e-governance environment. This means that public databases shall be kept updated, dynamic, accessible 24/7 with interoperability between registers and databases.

High quality, authorized GI at hand combined with effective technological systems are tools that will help make daily life more secure and reduce risk and vulnerability.

The Nordic working groups concerned are to:

- describe how the NMCAs may act to meet the future demands and highlight areas in which Nordic co-operation is a relevant tool.
- map out relevant technical and social trends that might influence current and future needs of our societies.

Positioning of the NMCAs' role in future society

Goal:

The Nordic mapping and cadastre agencies (NMCA) will work to safeguard the instrumental role played by the NMCAs in underpinning and supporting an efficient public sector and growth in the private sector to the benefit of citizens and society at large. This should be accomplished through a user driven development of geodata in response to new technologies and changing societal needs, thus realizing the full potential of location based data.

Background:

The geodata field has gone through a series of dramatic developments in recent years, both technologically and in terms of the underlying business models supporting the NMCAs. A crucial game changer is the fact that many data are now free – a trend that may spread to include all geospatial data. The NMCAs must now define and redefine their role in the new and emerging governance structures. This faces them with the challenge of asserting and developing their responsibilities for providing reliable and authoritative information.

The infrastructure for geographic information is maintained, developed and put to use by a variety of actors. To realize the full potential of geodata in public administration and private innovation new structures of formal and informal collaboration must be formed to ensure an effective implementation of the infrastructure for geographic information.

The Nordic working groups concerned are to work on the following topics and find fields for cooperation between the Nordic NMCAs:

- What is the core business for the NMCA's
- Create high level description of organizational architecture in each country
- Strategy for geodata-based cooperation between the public and private sectors and across domains
- How can geodata be a means to support the policymaking in the public society
- The NMCAs as a catalyst for creating efficiency in the public sector and growth in the private sector
- Future business models for NMCAs
- Operationalising a business case approach

Future services and data solutions

Goal:

The Nordic NMCAs facilitate decision making through services, data solutions and products in accordance with the society's needs at any time using authoritative data.

Background:

In the information society everything changes very fast. Technology has developed in a way no one could have predicted 20 years ago. We are e.g. today working mainly in a digital world, moving towards online services as well as 3D (or even 4D). The digital society today and tomorrow have different requirements, and to be relevant in the future the NMCAs must meet these new requirements.

The need of updated, quality assured data in real time has increased and will increase even more. High quality data is addictive! This does not matter if the usage is for e.g. navigation of a car for a citizen or for decision making concerning development of infrastructure as buildings.

One of the most important roles of the NMCA in the future will be as a provider of authoritative data. This requires constant development and innovation. A prerequisite for this is research that provides new knowledge.

The Nordic working groups concerned are to make proposals on:

- what changes in the working processes, services and data solutions that are necessary to meet the future demands
- how the NMCAs cooperate with the academia, or engage in research themselves to enable the development needed
- how NMCAs can include crowd sourcing as a way of maintaining accurate, reliable and authoritative spatial information

Efficient organizations

Goal:

The Nordic NMCA's have efficient operation internally that delivers new relevant data solutions and fast quality services to individuals, companies and governments.

Background:

Demands on new and improved products and exponentially faster services put new challenges on our organizations. We do not have years to develop data solutions and services. We cannot use old time consuming technology to collect data. We cannot use old fashioned processes to serve our customers. We need to cooperate and streamline governmental and private organizations to be efficient in delivery of our services.

The Nordic NMCAs and working groups will:

- Influence and implement standards in our field
- Use and develop modern management
 - Agile management where we speed up development
 - Lean management where we eliminate waste of time, defects, transport, inventory etc.
- Focus of e-services, eGovernment, real time data and automation of processes within our organization and toward our customers
- Invest in Research, Development & Innovation. Optimize our organization so that it reflects the technical and business reality in our society
- Create high level Cadastral data models in each country
- Create high level Cadastral business processes in each country

Shared competencies

Goal:

The Nordic Mapping and Cadastre Agencies should aim for sharing of competence and good cooperation in order to have the best possible knowledge to meet ever changing technology as well as changing political and strategic goals.

Background:

The Nordic countries are rather small, with regard to population. Therefore sharing knowledge is even more important than in larger countries, either within countries or between individual countries. Lack of competence is one of the challenges the Nordic Mapping and Cadastre Agencies are facing in a fast changing technical environment. By defining each agency's core competence and by sharing competence through cooperation, organized networking and best practice the Nordic NMCAs may collectively become stronger.

The Nordic NMCAs should:

- Share know-how through a dynamic structure of working groups and networks.
- Work on joint projects and innovation for competence sharing and fill in gaps of know-how between participating agencies.
- Cooperate with Universities on development of studies related to professions, e.g. geodetic, geographical information, spatial data infrastructure, cadaster and computer science.
- Sharing best practices regarding re-educating staff to meet the need for new competencies.
- Develop structure for staff exchange (potentially even scholarships) between the Nordic NMCAs to speed up competence development.
 - Shorter exchange periods – days to weeks
 - Longer exchange periods - months

Cooperation in the international arena

Goal:

The Nordic NMCAs should aim for close cooperation in the international arena, in order to have stronger voice together and divide responsibilities when possible in order to save resources.

Background:

International activity has become a part of daily work of the NMCAs. It is vital to be aware of what happens in the industry, to follow the technical development and to influence the political decisions. In the Nordic countries the cooperation has been natural, but as activities are increasing and resources are decreasing, more efficiency and focus is needed also in this field.

The Nordic NMCAs have cooperated in several fields:

- **Divided** international work/roles
Nordic NMCAs have agreed on joint presentation in the EuroGeographics Management Board and WPLA Board and to support a Nordic candidate for the UN-GGIM: Europe presidency.
- **One voice** on international level - **Together we are stronger**
The importance of the Nordic countries together is stronger than alone, if we can find common Nordic position on issues of importance (INSPIRE, UN, ISO). Value of opinion of 26 million Nordic people is stronger than one country alone.
- **Shared** knowledge and experience - **Network** of people
The NMCAs gain benefit through cooperation and knowledge exchange within common fields such as technology, strategic and organizational development, competence/education, recruiting, best practice, benchmarking. Also value of networking with colleagues in same field and at the same organizational level has been useful.

The Nordic NMCAs should:

- Seek ways to develop further the Nordic cooperation in the international arena, its efficiency and possibly also identify new fields of cooperation
- Develop further the networking between Nordic NMCAs
- Nordic NMCAs may have different areas of emphasis in the business, so cooperation could and should be developed also bilaterally.