



Update on implementation of our strategy



Six strategic goal



1. Needs of society



2. Positioning of the NMCAs' role in the future society



3. Future services and data solutions



4. Efficient organizations



5. Shared competences



6. Cooperation in the international arena

The WG are to work on:

Needs of society

- 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 NMCA's role

- 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

The WG will:

Future Services (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

- 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

The WG should:

Shared competencies

- 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 NMCA's to speed up competence development.
 - Shorter exchange periods – days to weeks
 - Longer exchange periods - months

International Cooperation

- 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 NMCA's
- Nordic NMCA's may have different areas of emphasis in the business, so cooperation could and should be developed also bilaterally

Mapping the process

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.
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↔ Shorter exchange periods – days to weeks
→ Longer exchange periods - months



Nordic staff exchange strategy

Strategy for staff exchange was created by the Governance and competence working group.

Here you can read the strategy: [Short term staff exchange](#)

Here you can read the strategy: [Long term staff exchange](#)



Mapping the process

	NIC	Land Mapping	Cadaster	IT & Development	Land Registration	Competence and Governance (a network from 2020)
Needs of society						
Describe how the NMCAs may act to meet the future demands and highlight areas in which Nordic co-operation is a relevant tool.		Nordic Geodata Strategies - Report 2017. Megatrends: Report 2017	New technologies are in positive way challenging our way of working and delivering quality information.		Cooperation and sharing of experiences	
Map out relevant technical and social trends that might influence current and future needs of our societies.		Discussion about how user needs could be identified. Result: Workshops, ongoing work.	GPS everywhere, openness of data, demand for more accurate and timely data.	Our continuous knowledge exchange in our meetings	The trust in the land registration system itself together with stable service time seems to be the customers' basic needs. Digitization, electronic applications, electronic deeds and contracts, automation, digital authorization, rising expectations that come together with more transparent processes. Data-protection, EU and international influence. GDPR, cloud services.	Network analyzes trends from competence and governance point of view.
Positioning of the NMCA's role						
What is the core business for the NMCA's		Discussed as part of other discussion	All NCA's are updating cadastral register (including cadastral map) in their country.	We see our role as a result of what our different working groups need in close co-operation	Maybe change the name? NMCLRA (mapping, cadastre and Land registration authorities). Land registration is the core business. We register somewhat different things and in different ways but registration and control of ownership and rights is the core.	
Create high level description of organizational architecture in each country		Nordic Geodata Strategies - Report 2017	Some NCA's (Finland and Sweden) take care of cadastral surveys by themselves. Others conduct and coordinate cadastral surveys done by private sector, municipalities or other activators.	We have exchanged our IT organizations governance for each country	We have shared information about each country and their organizations.	
Strategy for geodata-based cooperation between the public and private sectors and across domains		Discussed as part of other discussion i.e. Spatial Data Platform			Non applicable? Our interest is not of Geo data but rather Land registration data and information about how business is governed and progress. For example the sharing of key figures.	
How can geodata be a means to support the policymaking in the public society		Discussed as part of other discussion	As a result of digitalization, utilisation of cadastral data has heavily increased. That's why a data quality and services has more and more important role in societies.		Non applicable? Our interest is not of Geo data but rather Land registration data. Data is essential for managing properties in a country and securing rights and mortgages. This is necessary for a functioning market economy.	
The NMCAs as a catalyst for creating efficiency in the public sector and growth in the private sector		User needs within the Bio economic ecosystems: Meetings and report 2018-2020	All nordic NCA's are benchmarking processes from each other. Open data, data quality and coverage are in important role.		Sharing of competences, experience, ideas and innovations.	
Future business models for NMCAs		Discussed as part of other discussion	Using a lot of different datasets together has an important role in future. NMCA's are more and more important players in different ecosystems.		Digitization, automation, registering new objects? (boats and movables in some countries, condominiums) sharing information about key figures, costs, numbers of applications managed etc.	Governance (e.g. funding) of future business models

Mapping the process

Shared competencies						
Share know-how through a dynamic structure of working groups and networks.	NIC share information and work as a bridge between the directors and nordic groups	Joint meetings with other WG's and Networks	NCWG shares information between member countries and between members of other nordic working groups.	Our continuous knowledge exchange in our meetings	Sharing information about progress, new legislation (electronic applications, electronic contracts, new forms of registration about mortgages, register of condominiums. New strategies for registration, combined parcelling and land registration in Finland.	Network shares know-how for competence development and governance competence in each NMCA
Work on joint projects and innovation for competence sharing and fill in gaps of know-how between participating agencies.		Joint meetings with other WG's and Networks Harmonized Cross Border Data project with KrisGis		We have now started the Ad-hoc group Machine Learning, also discuss other working topics with other working groups.	No joint projects but we have informed each other about future and ongoing projects such as GDPR, Swedens RPA (BOB) help with legal issues regarding both legislation and operative cases (applications).	Employer branding, employee engagement
Cooperate with Universities on development of studies related to professions, e.g. geodetic, geographical information, spatial data infrastructure, cadaster and computer science.					No cooperation with any university.	Share best practices for NMCA's and university co-operation
Sharing best practices regarding re-educating staff to meet the need for new competencies.					Has been discussed briefly and was one of the intended topics for our meeting on the Faroe islands. In a time of digitization and increasing automation. What competences are needed for the future. How are employed lawyers organized and used in the organization, good examples from Finland.	Re-education is one method to gain new competencies
Develop structure for staff exchange (potentially even scholarships) between the Nordic NMCAs to speed up competence development.					Legal "network" we have shared contact information between the lawyers (legal advisors) in the different countries in order to help each other in applications concerning foreign legislation, for example applicable family law from another nordic country. But no actual exchange.	Done 2016 - ought to be revised
Shorter exchange periods – days to weeks						Done 2016 - ought to be revised
Longer exchange periods - months						Done 2016 - ought to be revised

International Cooperation						
Seek ways to develop further the Nordic cooperation in the international arena, its efficiency and possibly also identify new fields of cooperation		ELF Copernicus KEN	NCWG members have their personal networks in international level.		To some extent this has been made between Sweden and Finland through ELRA. Even Denmark has attended meetings.	Mentor/training program for staff in International services
Develop further the networking between Nordic NMCAs	NIC help facilitating the cooperation between the Nordic grups	Discussed as part of other discussion. Active in planning joint meetings and projects	NCWG will co-operate in the international level via our members.	We see this as important and key activity in every meeting.		
Nordic NMCAs may have different areas of emphasis in the business, so cooperation could and should be developed also bilaterally				We have previously have discussion in this area and it's still relevant to identify and find areas where we could possibly go to implementation/production		

Mapping the process

Future Services (make proposals on)				
what changes in the working processes, services and data solutions that are necessary to meet the future demands		Experiences on 3D/4D data - report 2018. Harmonized Cross Border Data project with Kris-GIS 2017-2019 Joint collection of data - survey and report 2018	Augement reality, Blockchain technology, crowdsourcing, smart cities, linked data are some possible trends in cadastral issues.	Here we need to work with the other working groups to make sure we work on the right topics - to solve the business challenges we have in our organizations. Would be great to be co-ordinate by NIC-group.
how the NMCAs cooperate with the academia, or engage in research themselves to enable the development needed				Digitization, electronic solutions and automation, GDPR, possibly also new work areas (condominiums, movable property etc.)
how NMCAs can include crowd sourcing as a way of maintaining accurate, reliable and authoritative spatial information		Discussed but not prioritized	For instance by updating cadaster map coordinates.	

Efficient organizations				
Influence and implement standards in our field			Key topic for the discussions and deliverables. (Knowledge sharing and inspiration)	
Use and develop modern management				Organizational questions are discussed. Sustainable development, co-operation model between NMCA's and ministries
Agile management where we speed up development			Teambased and agile working method has been one of the topics during last year.	
Lean management where we eliminate waste of time, defects, transport, inventory, etc.			Presenting new business models.	Finlands strategy of combining parcelling and land registration by giving employees the possibility to decide on both applications simultaneously.
Focus of e-services, eGovernment, real time data and automation of processes within our organization and toward our customers		A topic in the work about user needs and a cross-cutting issue in discussion. Licencing work is starting	Need to be considered together with the other working groups. Interesting area, but important to do together	Swedens RPA:s, Denmarks automation, Finlands mortgages? Norways e-solutions, wo owns the property, e-conveyancing etc.
Invest in Research, Development & Innovation. Optimize our organization so that it reflects the technical and business reality in our society		Discussion about new technology is a key activity in every meeting.		Jointly-utilized resources and shared services
Create high level Cadastral data models in each country				Not our core business
Create high level Cadastral business processes in each country			Presenting each country's models in NCWG meetings and discussing about pros and cons in each process.	Not our core business
Operationalising a business case approach			Using benchmarking methods.	SROI, productivity measurement, KPI selection

Result

- 180 fields in the matrix
 - 101 fields were „Not relevant“ for the WG’s
 - 9 (11%) are „Finished“
 - 44 (56%) are „Relevant and in process“
 - 26 (33%) are „Relevant but not prioritized“
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- Two Topics are finished
 - Many Topics are continuously worked on
 - One Topic is irrelevant to all WG’s

