

Nordic cloud computing collaboration

- The aim is to validate and elaborate the findings of the report "Nordic Public Sector Cloud Computing – a discussion paper" published by the Nordic Council of Ministers, January 2012.

March 9th 2012

Agenda

- Introduction to the project
 - Cloud computing in Europe
 - Presentation of the findings and recommendations of the report.
 - Discussion of the recommendations.
 - Summarise of discussion
 - The next steps
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Introduction

Cloud computing has the potential to reduce cost on operation and maintenance of it significantly.

But there are many barriers that prohibits the use of cloud computing in the public sector.

This work has been established to overcome these barriers so the public sector in the Nordic countries can take advantage of the potential.

Organisation

The Informal Forum of IT Directors in the Nordic Council launched the project in the beginning of 2011. Nordic working group established.

Report launch January 2012.

Road show/workshop in the Nordic countries.

Future Nordic cooperation – establishing permanent working groups?

Cloud computing in Europe

The European Commission will launch a European **strategy on cloud computing** focusing on:

- The legal framework.
- The technical and commercial fundamentals.
- The market.

Reform of the **data protection rules**:

- The Commission launched a proposal for a regulation (25. January 2012).
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“Nordic Public Sector Cloud Computing - a discussion paper”



- Will a Nordic collaboration be advantageous?
 - Cloud computing in a Nordic perspective:
 - Possibilities
 - Barriers
 - Cooperation can lead to faster realization.
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Main findings of the report

The Nordic countries have a solid foundation for taking up cloud computing due to the high level of e-readiness (infrastructure and fast adaption of new technologies).

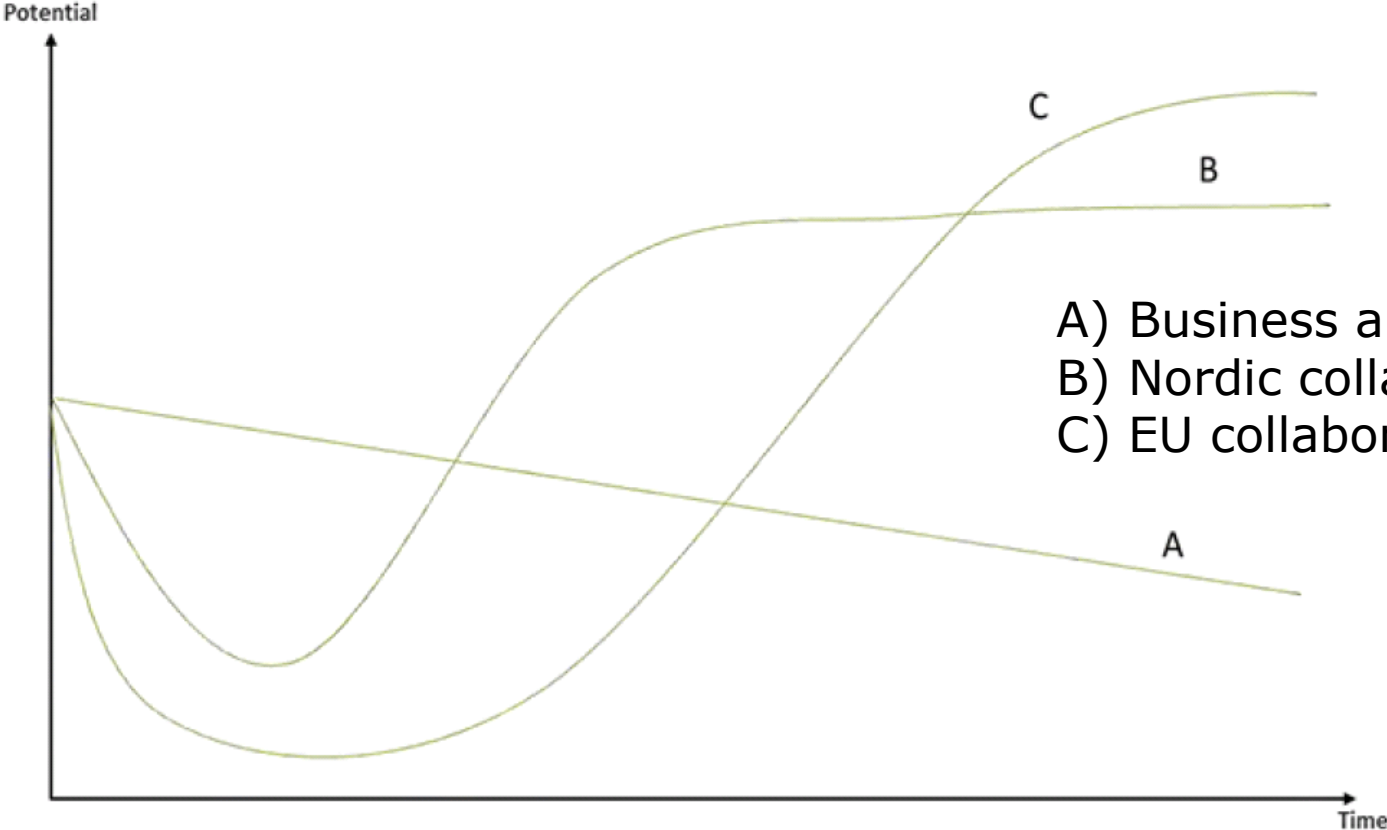
There are several benefits of Nordic cooperation on cloud computing:

- Public innovation.
- Faster realization of benefits.

The Nordic public sector share organisational similarities.

Nordic cooperation has a potential for economy of scale which can not be achieved at a national level.

Nordic collaboration potential estimation



Possibilities

1. Cost effectiveness
2. On-demand self-service
3. Scalability
4. Green savings
5. Reliability – continuity
6. Security

Public innovation

- Cloud computing has the potential to drive public innovation – with cloud computing the Nordic governments can act upon new ideas, new operating methods and new ways of delivering services.
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Barriers for cloud computing

1. Legal issues – data protection
 2. Security
 3. Loss of governance
 4. Lack of interoperability – vendor lock-in
 5. Integration with existing business applications
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Proposed actions

Working Group **Nordic Public Cloud Cooperation**

Knowledge Sharing	Regulations	Standardisation	Procurement processes	Attracting Datacenters
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Products of cooperation

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|--|--|---|---|--|
| <ul style="list-style-type: none"> • Reference cases • Vendor solutions overview • Monitoring overview • Establishment of Annual Public Cloud Innovation Award | <ul style="list-style-type: none"> • Overview of decision made by law • Cooperation with Nordic data protection agencies | <ul style="list-style-type: none"> • Guidelines and standardisation principles • Study on potential for common components and Pilot project • Nordic Public Cloud Tool Box | <ul style="list-style-type: none"> • Common service descriptions • Common framework agreements • Analysis of possible attraction of data centers | <ul style="list-style-type: none"> • Common marketing presentations on the Nordic region as a standardised and well-functioning area for data centers |
|--|--|---|---|--|

Annual activities

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|--|---|---|--|--|
| <ul style="list-style-type: none"> • Monitoring overview report | <ul style="list-style-type: none"> • Annual report on public regulation on Cloud Computing | <ul style="list-style-type: none"> • Annual update on standardisation initiatives and guidelines | <ul style="list-style-type: none"> • Overview of framework agreements | <ul style="list-style-type: none"> • Annual status report |
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Discussion 1 – Knowledge Sharing



Knowledge sharing can be an enabler for the public sector to overcome some of the barriers for cloud computing.

1. Reference cases on existing cloud solutions
2. A common database and knowledge centre on vendor solutions and opportunities
3. Common monitoring of progress and situation in the Nordic countries
4. Maybe an annual 'Nordic Public Cloud Innovation Award' – awarded for the best public cloud solution in the Nordic region to improve public innovation or welfare.

Discussion 2 - Regulation

Issues related to data protection and laws for protection of personal data is one of the biggest barriers for cloud computing.

1. Knowledge sharing and best practice on regulation and law on cloud solutions.
 2. The Nordic Council could acts as enabler to create greater cooperation and knowledge sharing about the legal demands in the Nordic countries.
 3. Discuss the legal requirements and create a unified approach towards cloud computing in the local data protection agencies.
 4. Could lead to the publishing of guidelines, common stand on data security policy and other publications on how to handle regulations in a cloud context.
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Discussion 3 - Standardisation



Emerging technology - standards not yet ready. The Nordic countries should seek influence in the development of standards

The standardisation initiatives should reduce vendor lock in and improve common solutions on the long run.

Standardisation initiatives could be organized in the following order:

1. Infrastructure – servers, storage and network
2. Platform – operating systems, databases, web
3. Software – solutions

The Nordic cooperation could find a common Nordic project to act as proof of concept (GIS, property and housing data, environmental information and data, agriculture data, health care information.)

Discussion 4 – Procurement processes

1. To assist public organizations in the procurement process, common service descriptions and minimum requirements should be discussed and published by a working group.
2. Common frameworks agreements and common procurement processes and tools – such as vendor assessments or requirement specifications – can be developed.
3. SKI (Denmark), Hansel (Finland) and Statens inköpscentral (Sweden) could work together in harmonizing technical and legal requirements which would lead to a more predictable market for the vendors and a safer procurement process for the public sector.

Discussion 5 – Attracting Datacenters



Common communication and marketing presenting the Nordic region as a good region to place data centers.

The Nordic region has:

1. A high maturity when it comes to it
2. Good infrastructure
3. Cold climate
4. ...

Other relevant topics

- Is there other points of actions where cooperation could be (more) relevant?
 - Priorities the proposed actions where the Nordic Counsel of Ministers should launch cooperation.
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Summary of the discussion

Prioritization of the discussions

- Top 3 of the most important issues.
 - Concrete ideas of how to initiate the proposed actions (e.g. initiate working groups).
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The next steps

- Workshops in all the Nordic countries.
 - Input to a mandate for Nordic cooperation on cloud computing.
 - Approval of the mandate by the Informal Forum of IT Directors.
 - Establishing working groups under the Nordic Council to address barriers.
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