Public affairs and government interaction

Examples from the Danish NREN and elsewhere...

EaP Public Affairs Workshop

DFN, Berlin
8th April 2019
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What is DeiC?

Danish e-Infrastructure Cooperation

Government non-profit organisation (FL§19.45.02)

Services: Network infrastructure, high performance computing, data management, security

Collaboration tools: Data sharing & storage, Video distribution, Video conferencing, Learning Management System components

Community: Procurement frameworks, Peer-to-peer best practices sharing groups, GDPR-community, conferences, workshops and other meetings

DeiC is the organizes the common IT-infrastructure for the academic sector

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19.45.02. Dansk e-Infrastruktur Samarbejde (Reservationen)


Udmuntningen af bevillingen sker under rådgivning fra en bestyrelse, som har ansvaret for, at samarbejdet opfylde sit formål. Bestyrelsen bistår af et sekretariat, som placeres ved en af de deltagende forskningsinstitutioner.

Særlige bevillingstjenestemængder:

<table>
<thead>
<tr>
<th>Regnskabsperiode</th>
<th>Fravæg og tilsagn</th>
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</thead>
<tbody>
<tr>
<td>BV 2.2.11</td>
<td>Tilsagn givet som tilsagn</td>
</tr>
<tr>
<td>BV 2.2.13</td>
<td>Tilsagn kan forudtages.</td>
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- **BV 2.10.2**
  - Bevillingerne i indeværende finansår kan forhøjes med tilhørende forløbssagt, der kan i øvrigt oppeholdes indstegninger og afholdes udgifter gennem forhøjelse af bevillingerne med mindre modtaget af anden side, herunder f.eks. bidrag fra offentlige institutioner, private eller fonde.

- **BV 2.10.5**
  - Af bevillingen kan afholdes begrundede udgifter til drift af sekretariat samt efter gældende regler forudtages godtgørelse til bestyrelsens formand og medlemmer samt formand og medlemmer af underudvalg og styrelser inden for en samlet ramme på 4.0 mio. kr.

- **BV 2.11.5**
  - Der kan af bevillingen under §.19.45.02.11. Højhastighedsnetet udbetales tilsagn til Danmarks Tekniske Universitet vedrørende driften af det danske forskningsnet. Udgifterne til driften af forskningsnettet forventes at udgøre 19,7 mio. kr.

Budgetspecifikation:

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Created in 2012, following a roadmap process in 2010-11 about research infrastructure, where it was concluded that Denmark needs a joint organization for e-Infrastructure.

Forskningsnettet

+ DCSC

Data management and services

+ An e-Science competency centre
A virtual organization

From the point of view of the Ministry, everything is outsourced

Danish Technical University

CEO of DeiC

DeiC team

DIx

45 FTE

University of Southern Denmark

DeiC HPC team

10 FTE

State Library

Ministry of Higher Education and Science

Board of directors of DeiC
The organization
The roles of DeiC

> The research network and related services
> High performance computing (National initiatives)
> Data management (including cloud services)
> International Relations

Extra services, commercialised under the brand “i2”
> DIX – the Danish Internet Exchange point
> Anti-spam service, web- and mail-hosting
> Housing of equipment and related services
## Financial situation

<table>
<thead>
<tr>
<th>Activity</th>
<th>Annual budget</th>
<th>One-time funds</th>
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<tbody>
<tr>
<td>NREN (Network, CERT, AAI, collaboration services etc)</td>
<td>7.0 M€ – paid 100% by the connected institutions</td>
<td></td>
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<tr>
<td>HPC</td>
<td>2 M€ – paid by the ministry</td>
<td>6.7 M€ for investments 2013-16 + 2.2 M€ 2017-19</td>
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<tr>
<td>Data management and cloud services</td>
<td></td>
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</table>
Connected institutions pay according to a cost sharing model:

- 1.54% of the turnover of the institution
- Independent of the actual connection speed
- Adjustment for multiple connections
- Including most of the services:

<table>
<thead>
<tr>
<th>Supplementary payment for extra connections (DKK per year)</th>
<th>2018</th>
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<tbody>
<tr>
<td>OADM placement (POP price)</td>
<td>100.000</td>
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<tr>
<td>1G transponder set</td>
<td>Free</td>
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<td>10G transponder set</td>
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<td>100G transponder set</td>
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<td>WAN connection (dark fibre)</td>
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### Forskningsnettets betalingsmodel 2017

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<th>Organisaation</th>
<th>Opkravet 2016</th>
<th>Betaling 2017 før korrektion for flere forbindelser</th>
<th>Betaling 2017 efter korrektion for flere forbindelser</th>
<th>POPs</th>
<th>Transparans-sæt Uriker</th>
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Areas of interaction with the political level

Mostly, NRENs operate without political involvement. However, there are some areas where interaction with the political level at some point may be needed:

- Basic mission – are we allowed to exist?
- Funding – where do the money come from, and what limitations does that impose on us?
- Organizational structure – are we free to decide this ourselves?
- Compulsory memberships: Which institutions are forced to be members?
- Who may the NREN not serve?
- What services may we not offer?
Is the political level interested in the NREN?

National infrastructure is indeed a political subject, very interesting for the media and for the voters. Is it subject for many political discussions:

- Railways
- Roads and bridges
- Airports
- Power plants and power grids
- Gas and oil extraction, distribution and transmission
- Sometimes even internet provisioning for the general public (ie. Fiber To The Home)

But what about network infrastructure for research and education?

- The answer is NO – the political level is generally NOT interested in the NRENs.
- Politicians have bigger problems to deal with
- We are too small and too cheap to run
- Therefore, we often have to work with government administration: Civil servants at all levels in relevant ministries and agencies
Are we allowed to exist?

Your NREN exists today. Your NREN is allowed to exist as is. So far, so good.

> But all this can change very fast,
> and you need to get yourselves involved those processes, from the beginning

Examples:

> From one day to the next, one ministry tried to close our NREN!
> Government decision to create a new network (or IT-organization) for all public entities, including the universities (EE+PT)
> Creation of a joint public procurement agency which is mandatory for all institutions (DK)

What can we do to mitigate this threat:

> Continuous PR activities – including articles in leading media about your NREN
> Regular interaction with people at all levels in the relevant ministries
Funding – how to get it (continuously)?

> From a political point of view, the most stable situation for an NREN is when it gets most of the funding from member institutions.

> However, if you need continuous public funding for your annual budget, you can usually NOT go to your politicians and simply ask for it, and you therefore need to address relevant levels in government administration.

> A basic level of infrastructure is needed for research: Use the GÉANT compendium to make the case that (nearly) all other countries are using more than you on NREN infrastructure and this is bad for research.

> Need to support the already existing research infrastructure: All the accelerators, radio telescopes, genome sequencing machines etc. are worthless unless they are connected with a high-speed resilient network.

> Your country is maybe not getting as much funding from international projects as it could. If you get just a little more funding for project participation in GÉANT, other EU projects, structural funds and even private donations, you can multiply this many times and also help get funding for your universities.

> Find out what is important at the moment for the people in your ministry and work with them...
> Ranking your country…
Funding – how to get it (investments)?

- From time to time, you need to make bigger investments or start new services.
- One option is, of course, to save up money, but this is often not possible.
- Therefore, grants from government and other sources are needed from time to time, and this can be pursued on a number of ways:
  - Upgrade to maintain state-of-the-art infrastructure
  - Seed money for a self-sustaining operation
  - A positive PR opportunity for politicians
Funding – how to avoid the unwanted side effects?

Government grants often come with a number of preconditions
You get the funding, but it gives you a number of other problems

Examples:
We get government funding for our AAI federation (WAYF.dk), but as the funding was only for the institutions under our ministry, and therefore, from one day to the next, we had to go from a free-of-charge service to full price for all other institutions, causing a lot of them to leave

Services supported by public money may not be offered to private research institutions or student homes because this will constitute unfair competition towards private service providers

How to deal with this:
Before you apply for money or as early as possible, think the whole scenario through and make sure that the government knows what the problems are, so the grant preconditions can be adjusted accordingly.
Organizational structure

There are a range of different organizational structures used by NRENs:

- Government agency (Norway)
- Part of government IT (Belgium, Portugal)
- Limited company (Holland)
- Charity (or not for profit company) (France)
- Shareholders’ company (Finland)
- Association (Germany)
- Simply one member institution doing the whole thing for everyone (Austria, Iceland)
- …or even a mixture of all these

- They each have pro and cons
- Often, you, the current NREN people are not really involved when government wants to change this
- Insist on being involved! Influence all stakeholders!
Compulsory memberships

> If institutions leave the NREN, it can create a "tsunami" effect
> Therefore, there are various ways of forcing the institutions to remain members
> Often, it is a requirement for government funding
> Work with your government people to get rules if you have none today

Examples:
> Our universities are forced to be members by law, but they all have a seat at the board of directors
> If the universities were not all forced to pay, some of them would leave

> The actual mechanism for keeping a core number of institutions as members may vary depending on the organizational context, but you need to think this through
Who may the NREN not serve?

It is often regulated by government (possibly as a funding condition) who may be served by the NREN:

- Private universities?
- Private research units?
- Student dormitories?
- Other parts of public administration?
- Libraries?
- Hospitals?
- Primary schools?
- Tenants and service providers inside university campuses?
- Startup and innovation hubs? University spin-out companies?
- Cloud providers? Data exchange partners?
- May the NREN generate extra income from serving private companies (domain registries, Internet exchange points etc)

> You need to make sure you understand where all the limitations of this kind come from, and possibly work systematically to get rid of the most inconvenient ones.
What services may we not offer?

- Are you allowed to offer the services you want?
- Government procurement regulations may dictate that universities must buy some services from someone other than the NREN
- Due to rules regarding unfair competition from public sector in commercial markets, you may not be allowed to offer some services to some members

- This just be regarded as a fact of life...
- ...but in a number of cases, you can work with the political level to change this

Example:
- We offer housing to commercial companies as part of the Danish Internet Exchange operation. Years ago, some companies complained to the ministry that this was unfair competition. Before the ministry got nervous and would possibly ask us to close this, we made one of the companies do a formal complaint to the competitions & anti-trust authority. They subsequently rejected the complaint, and therefore our own ministry has no reason to ask us to close this service.
> **Public affairs**

Just like you need to set aside resources for network operations, for public relations, for personnel training and many other things, you also need to

> Work with all levels of the government
> Track what is important targets and issues currently at the different levels of government
> Proactively provide ideas, proposals and solutions to these issues
> Follow the public debate in your society

This can be just as important as the classical NREN activities

Example: The creation of DeiC. From total rejection to actual policy.
Think about your top three problems

- Your top three problems are maybe not the same as my examples here.
- What are your problems?
- How could changes/initiatives from the political level help you solve these problems?
- How can you make this happen?

- If you don’t use resources on this, policy changes will probably never happen
- As we say: You can only win the lottery if you spend money for a lottery ticket

Thank you! Debate and questions...