

# Nordic Testbed Network



Supporting digital transformation in  
the Nordic bioeconomy



Facilitating knowledge transfer, allocating seed money, running Nordic projects...

**What do YOU want the network to focus on?**

## WORKSHOP

**WHEN:** November 12, 10-14 CET. Coffee and registration from 9.30  
**WHERE:** Studio Meetingpoint, Nordenskiöldsgatan 24, Malmö, Sweden  
**FOCUS:** Vision and structure of the Nordic Testbed Network

Join us in setting the vision and structure of the  
**Nordic Testbed Network**



Dear participant,

This workshop constitutes an important part in establishing the Nordic Testbed Network – supporting digital transformation in the Nordic bioeconomy. In addition to networking and knowledge transfer, we will make decisions about the vision and structure of the network. We will also discuss how to best allocate existing seed money aimed to ensure the network's long term sustainability and relevance. **To ensure a productive and efficient workshop, we have prepared this briefing.** We kindly ask you to read through this material in advance of the workshop. Do not hesitate to contact us with any questions or comments.

*The steering group*

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What's in this brief?

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Registration and coffee from 9.30

What's on the agenda?

## Programme

**10.00**

**Welcome** and an introduction to the Nordic Testbed Network

**Nordic Innovation** on the role of testbeds and Nordic cooperation in digitalising the bioeconomy

### **Inspiration talks**

- **Organizing for digital innovation**

*Frida Magnusdotter Ivarsson, University of Gothenburg & Swedish Center for Digital Innovation*

- **Mobilizing testbeds**

*Monika Svanberg, The Bioeconomy region*

**Testbed presentations** introducing you to cutting edge facilities supporting the digital transformation in the Nordic bioeconomy

**Workshop part I: Setting the vision and structure for the network** discussing and deciding on vision and structure for the network

**12.00**

**Lunch**

**12.45**

**Workshop part II: Allocating seed money** discussing how to allocate existing funding aimed to ensure the network's longevity and relevance

**Summing up the day**

**13.45**

**Mingle, exhibition and afternoon treats**



Are we on the same page?

## Defining core concepts



**Bioeconomy** refers to the biomass-based part of the total economy. It is often associated with concepts like green economy and circular economy. In the Nordic Testbed Network, it is defined as agriculture and forestry and focus lies on primary production.



**Digitalisation** is a process of comprehensive social changes (e.g. new business models and infrastructure solutions). Digitisation is one component of digitalisation and refers to the conversion of information from analogue to digital format.



**Testbeds** are physical or virtual environments where businesses, academia and other organisations can interact in the development, testing and introduction of new products, services, processes or organisational solutions in selected areas. A well-designed testbed has effectively integrated both "hardware" (equipment, physical facilities etc.) and "software" (competence, organisation, service offerings etc.).



**Network** is defined as a group of people or organizations in different places who work together and share information.





**BACKGROUND** Nordic Testbed Network is based on the initiative 'Digitalisation in the Nordic bioeconomy' undertaken by SNS and NKJ during 2018. Testbeds were then raised as an important part of strengthening the Nordic bioeconomy's profitability and competitiveness.

What is it about?

# Nordic Testbed Network

Digitalisation plays a vital role in the rapid development of the Nordic bioeconomy. Access to **cutting edge platforms for development, so-called testbeds**, where new digital knowledge and technology can be developed is fundamental. Managing a testbed is however a complex task.

To facilitate the development of new and existing testbeds, the Nordic Testbed Network aims to **unite and strengthen testbeds** aimed at supporting the digital transformation of the bioeconomy.

The Nordic Testbed Network is managed by **Nordic Forest Research** and **Nordic Agri Research** and aligned with initiatives such as the North Digital Declaration and the Nordic Bioeconomy Program.

**NORDIC ADDED VALUE** High-performing testbeds require extensive resources. Add to the equation that there are plenty of engagements in testbeds all over the Nordics. By creating networks, we facilitate the exchange of information and knowledge in the Nordic region. In this way, more people have easier access, and possibility to contribute, to the development of testbeds that suits them, no matter where in the Nordic region they are located. This is resource optimisation in practice.



Who can join the Nordic Testbed Network?

## Network members

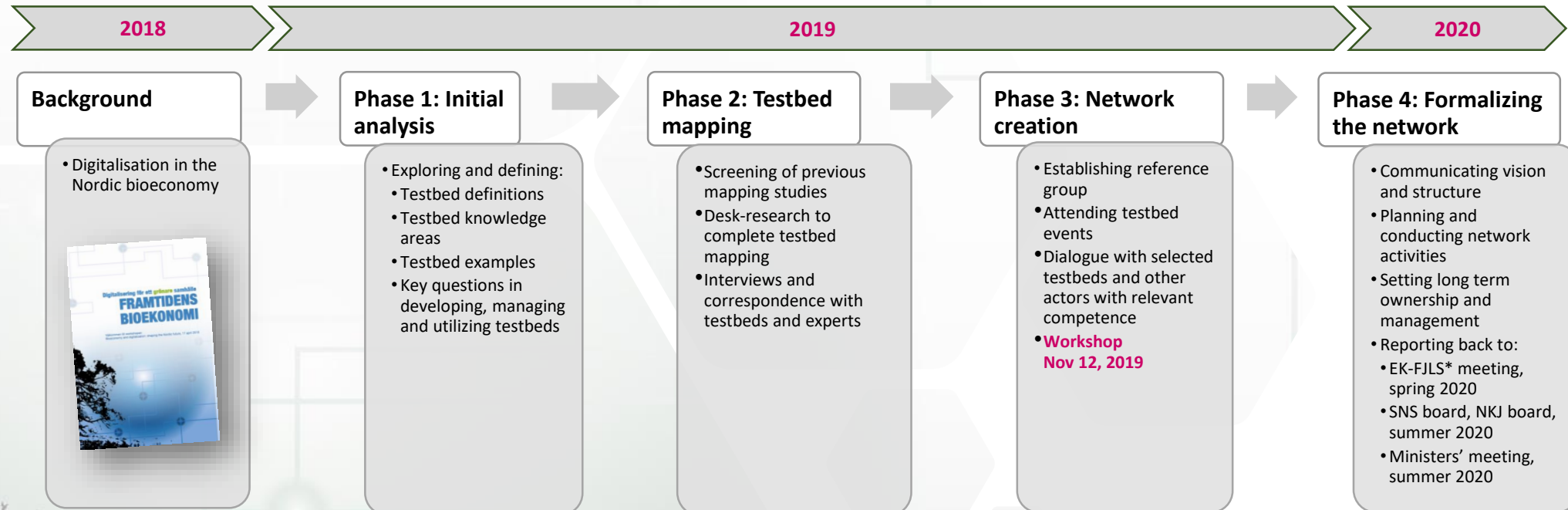
The Nordic Testbed Network is purpose driven. This implies that it is open to anyone willing and able to contribute to the vision of the network. Hence, the network has no defined outer borders. It does however have a **well-defined core: Testbeds\* engaged in digitalising the Nordic bioeconomy.**

\*according to the definition on previous slide

Testbeds (according to the definition on previous slide) situated in a Nordic country, focusing on digitalisation aspects in the bioeconomy.

- Testbeds (according to the definition on previous slide) focusing on digitalisation or bioeconomy aspects.
- Innovation environments or projects (not fulfilling the definition of a testbed on previous slide) relevant to the topic.

Other stakeholders interested in/with knowledge about the topic.

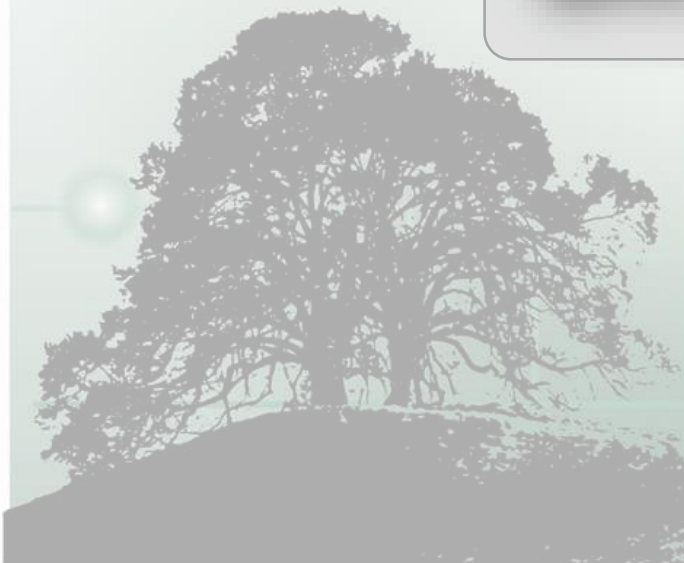


\*Nordic Committee of Senior Officials for Fisheries, Aquaculture, Agriculture, Food and Forestry

*Built upon previous studies and existing listings, close to 600 Nordic testbeds were identified and screened based on relevance to the network.*



What's the context?  
**The process**







Who will join the workshop?

## Participants

Representatives from:

- Nordic Council of Ministers
- Nordic Innovation
- Private actors
- Regional/Public actors
- Academia & Research institutions
- Testbeds

*A complete list of participants and contact  
details will be provided after the workshop*

- Smart Farming Centre  
[eng.au.dk/forskning/forskningsprogrammer-og-centre/au-agricultural-technology-program/smart-farming/smartfarming/](https://eng.au.dk/forskning/forskningsprogrammer-og-centre/au-agricultural-technology-program/smart-farming/smartfarming/)
- Digitaliserat jordbruk  
[www.testbedsweden.se/test-demo/digitaliserat-jordbruk](https://www.testbedsweden.se/test-demo/digitaliserat-jordbruk)
- Auto 2  
[www.skogforsk.se/nyheter/2018/nytt-projekt-ska-utveckla-sjalvstyrande-skogsmaskiner](https://www.skogforsk.se/nyheter/2018/nytt-projekt-ska-utveckla-sjalvstyrande-skogsmaskiner)
- Ouluzone+  
[www.ouluzoneplus.com](https://www.ouluzoneplus.com)
- Swedish Drone Centre  
[www.dronecentersweden.se](https://www.dronecentersweden.se)
- Mistra Digital Forest  
[www.mistradigitalforest.se](https://www.mistradigitalforest.se)
- FITPIG – pigs on internet  
[www.iof2020.eu/trials/meat/interoperable-pig-tracking](https://www.iof2020.eu/trials/meat/interoperable-pig-tracking)
- Odlande stadsbasarer/Alovivum  
<https://odlandestadsbasarer.se/alovivum-2/>

In the loop but not able to attend the workshop

- Agro- og Planteknologi  
[www.teknologisk.dk/ydelser/agro-og-planteteknologi/36802](https://www.teknologisk.dk/ydelser/agro-og-planteteknologi/36802)
- Senter for presisjons-jordbruk  
[www.nibio.no/om-nibio/senter-for-presisjonsjordbruk](https://www.nibio.no/om-nibio/senter-for-presisjonsjordbruk)



Workshop proceedings

# Part I: Vision and structure

60 minutes

The concept vision can be interpreted in multiple ways. During this workshop we will use it to discuss and decide what the network will aim to achieve in the short-term and long-term. It is intended to serve as a guide for choosing current and future courses of action.



**WHY DISCUSSING VISION AND STRUCTURE?** Bioeconomy, digitalisation, testbeds, network. These are all broad concepts so to ensure we stay focused and create a **network which brings value and meaning to its members** we need to identify and settle on a vision. Then, we have to decide what structure is needed to enable the chosen vision.

**HOW TO ORGANISE THE DISCUSSION?** In preparation for this workshop we have conducted interviews with multiple stakeholders engaged in testbeds and the digital bioeconomy. This has allowed us to identify possible ambitions levels for the Nordic Testbed Network. These ambitions levels have been organised with guidance from the *The Collaboration ladder* (Samverkanstrappan), a pedagogical model used by e.g. INTERREG to facilitate discussions in collaboration projects.

Based on the Collaboration ladder we will discuss two questions:

**1) What do you think is a realistic and meaningful vision for the network**

- In the short term (1 year from now)?
- In the longer term (3 years from now)?

**2) What do we need in terms of structure (meeting frequencies, facilitator, funding etc) to enable the vision?**

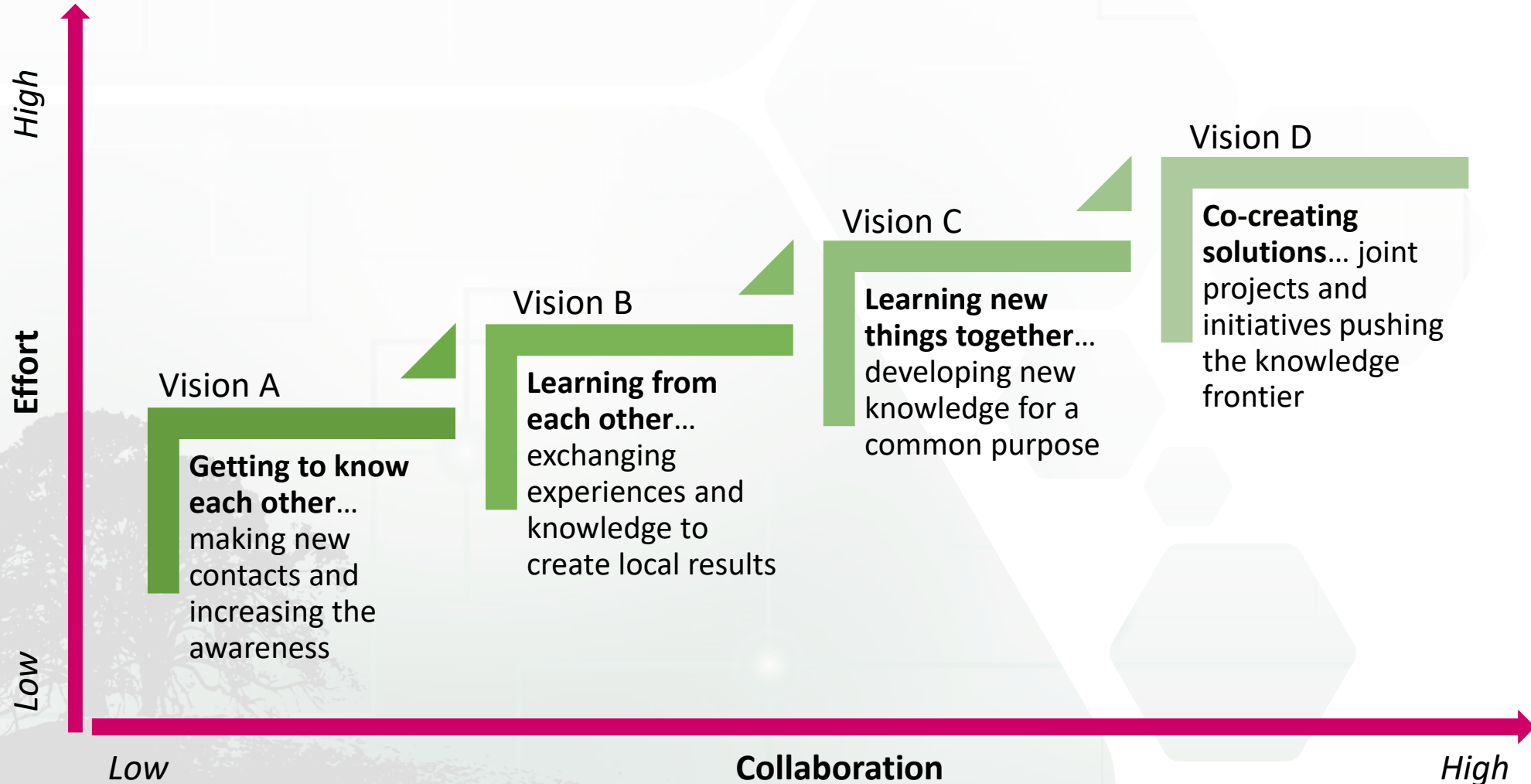
## SESSION OUTLINE

- Introducing the session
- Group discussions on your needs in relation to the network, and what step in the collaboration ladder that meet those needs
- Voting exercise to settle on one short term and one long term vision
- Group discussions on what structure is needed to enable the chosen visions



# THE COLLABORATION LADDER

a pedagogical tool for discussing ambition levels for the Nordic Testbed Network





Workshop proceedings

## Part II: Allocating seed money

45 minutes

**WHY ALLOCATING SEED MONEY?** Longevity and relevance are highly prioritized objectives in establishing the Nordic Testbed Network. These objectives can only be met if its members find the network interesting and useful. Therefore, we need to pick your brains again. **What activities do you want to see within the network?** All ideas are welcome! To boost the process of generating ideas and carrying out activities, SNS and NKJ have set aside seed money.

**SEED MONEY FOR WHAT?** The funding is reserved for activities aiming to develop and strengthen the network, and to fill it with meaningful content. For this purpose, SNS and NKJ may provide a total of up to 350 000 SEK during 2020. The exact conditions for accessing these funds depend on the nature of the activity.

Generic conditions to consider:

- Nordic added value
- Collaboration across country borders
- Inclusion, equality and diversity

Example of activities:

- Seminars, network sessions, workshops
- Pilot or feasibility studies
- Marketing of testbeds or events

### SESSION OUTLINE

- Introducing the session
- Group discussions on what activities you want to see within the network
- Presentations of each group's top 3 ideas







Who's working with establishing the network?

## The people behind the scene

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### Steering group

Jonas Rönnberg, Head of SNS

Per Hansson, Secretary general of NKJ

Mimmi Blomquist, Secretary, SNS and NKJ

Katarina Ekegren, Communication, SNS and NKJ

Maria Tunberg, Project manager, Analysys Mason

### Reference group

Tuula Savola, Senior Specialist Circular Economy and Bioeconomy, Ministry of Economic Affairs and Employment of Finland

Søren Marcus Pedersen, Associate Professor, Department of Food and Resource Economics (IFRO), University of Copenhagen

Kolbrún Bjargmundsdóttir, Senior adviser, Technology Development Fund, The Icelandic Centre for Research – RANNÍS

Gudmund Høst, Director of the Nordic e-Infrastructure Collaboration (NeIC), Nordforsk

Anna Wiberg, Programme manager, Bio Innovation



*The reference group will assist with guidance in identifying key questions and vision for the network, and guidance in ensuring long term ownership.*

# Nordic Testbed Network



Supporting digital transformation in  
the Nordic bioeconomy



Looking forward to  
seeing you in Malmö!

