

Report from workshop

Sharing Test and Demonstration Infrastructures - an opportunity for Smart Specialisation in the Baltic Sea Region

Tampere, Finland, 6 April 2017

On 6 April 2017 32 stakeholders from Denmark, Germany, Estonia, Finland, Norway, Lithuania, Poland and Sweden met in Tampere to discuss opportunities for sharing test and demonstration infrastructures to support innovation in SMEs in the bioeconomy and digital economy in the Baltic Sea Region.

The workshop was organised within the framework of the project BSR STARS S3, co-financed by the European Union Interreg Baltic Sea Region Programme, and more specifically by the project partners Nordic Council of Ministers and Baltic Development Forum. The project lead partner, Baltic Institute of Finland, helped organising the event.

The detailed workshop programme and participants list are attached. Also attached is related workshop documentation.

Below follows a summary of the key findings:

Abundance of specialised test and demonstration infrastructures – learning opportunities

Two mappings of test and demonstration infrastructures – in the bioeconomy respectively the digital economy – demonstrate that there are well-developed national networks of technology service providers that SMEs can benefit from to test new products, services or processes – however currently more such infrastructures in the Nordic countries than in the Baltic countries.

Developing and delivering technology, test and demonstration services is by far an exact science. Because of this complexity a number of stakeholders *expressed an interest for sharing experiences on*

how to successfully deliver bioeconomy and digital economy test and demonstration infrastructures and technology services to SMEs. Particularly such knowledge sharing will benefit those countries, whose test, demonstration and verification infrastructures is currently less advanced than infrastructures in other parts of the Baltic Sea Region. Also, a number of stakeholders from countries already equipped with more advanced test and demonstration infrastructures expressed interest in to work with and learn from peers.

Similarities and complementarities in testbed infrastructures – specialisation opportunities

Looking at complementarities in the bioeconomy, very generally, Denmark has a stronghold in test and demonstration infrastructures in the agriculture-based bioeconomy; Norway has such stronghold in the forestry and maritime-based bioeconomy; and Finland and Sweden have particular in test and demonstration infrastructure excellence in the forestry-based bioeconomy.

Similarly, in the digital economy, Denmark has particular digital testbed excellence related to the energy sector; Norway has particular excellence in related to the maritime sector; and Sweden and Finland have particular excellence related to the communication sector.

For both the bioeconomy and digital economy it was agreed that this provides opportunities for SMEs in the Baltic Sea Region to access technology services that in some cases are better tailored to their specialised needs if they were able to commission test and demonstration services across borders, rather than “mainly shop for such technology services” at home.

A first step in such efforts could include additional awareness raising on the various areas of particular excellence and the identified complementarities of test and technology services around the Baltic Sea Region. Provision of test and demonstration infrastructures to SMEs requires significant financial as well as human capital. The same goes for SME’s that want to make use of these facilities. Also, test and technology service providers are mandated to provide a rather extensive set of “basic” technology and test services locally and nationally. For these reasons, clear incentives and added value of transnational collaboration is a precondition for taking further steps.

It was agreed that efforts to identify transnational added value should focus on the specific areas where it will be particularly beneficial to concentrate efforts due to complementary advantages. E.g. within the bioeconomy, Denmark could further specialise in “advanced” test facilities related to the agricultural sector, Norway in the maritime sector and Sweden and Finland in the forestry sector. Related to this was a call for “smart collaboration in the Baltic Sea Region” i.e. collaboration in areas of test and demonstration that are too large / too complex for regions and countries to address individually.

Also, it was agreed that because test and technology service providers compete with their neighbouring peers on commissioned services for SMEs it is important to identify a set of cooperation areas that emphasise on complementarities and mutual benefits without risk of impacting negatively on current test and technology service delivery. Among such benefits could be to get access to new knowledge and technologies, a larger market etc. “Sharing” T&D facilities should be seen as “broadening” or extending opportunities.

Sharing test and demonstration infrastructures – encouraging SMEs to work across borders

The existing test, demonstration and verification infrastructures are in principle available for both domestic and foreign SMEs. However, in reality most SMEs shop for test and technology services at home. *It was agreed that if test and technology service providers will be making efforts to benefit from complementarities in excellence – specialisation – there is a real need to develop a mechanism to ensure that SMEs are informed and encouraged to commission test and technologies across borders. “Transnational one-stop-shops” or similar concepts could be developed on a pilot basis.*

Improving the overview/inventory of existing infrastructures, excellence areas, existing equipment and machinery etc. is needed in this regard. Subsequently, obviously it is crucial that this information is made available to the SMEs. It was expressed from SME's that better targeted information, more transparency, more attention to company needs and earlier involvement are important preconditions for engaging SME's in transnational projects as well as looking cross-border for test facilities. A large number of bioeconomy clusters and other intermediary organisations could be engaged in further cooperation efforts for this outreach purpose.

Piloting Innovation Vouchers to SMEs in the bioeconomy

To investigate further the opportunities for specialisation in test excellence and to encourage SMEs to acquire specialised services across borders, *it was welcomed that the BSR STARS S3 project provides funds to pilot innovation voucher scheme that SMEs in the bioeconomy can benefit from when commissioning test services across borders.*

Such vouchers may offer complementary support to national innovation vouchers. *A number of stakeholders noted that in many cases the current national innovation vouchers are not attractive to SMEs because the funds offered are too small considering the costs of carrying out test and demonstration. If a macro-regional innovation voucher could be organised to provide additional funds to national innovation vouchers the support package to SMEs would be more attractive.*

It was agreed that the Nordic Council of Ministers – in partnership with VTT Finland, Danish Technological Institute, Paper and Fiber Research Institute Norway, RISE and more – over the coming months will develop the framework for such Baltic Sea Region Bioeconomy Innovation Vouchers with a view to launch these in October 2017.

Taking the discussion further

The workshop organisers will prepare an “information package” including the two mappings, the conclusions from Tampere and recommendations for further exploring the potential for transnational sharing of R&D facilities in the BSR. This material will be disseminated to stakeholders in the region.

Program

Workshop

Sharing Test and Demonstration Infrastructures - an opportunity for Smart Specialisation in the Baltic Sea Region

Tampere, Finland

6 April 2017

There is strong evidence for the correlation between the competitiveness of technology-based SMEs and their access to test and demonstration infrastructures. Thus, improving SMEs access to specialized test and demonstration infrastructures is likely to increase the competitiveness of SMEs.

There is an abundance of test and demonstration infrastructures in the Baltic Sea Region – with partly overlapping, partly complementary areas of excellence.

The project BSR STARS S3, co-financed by the EU Interreg Baltic Sea Region Programme, aims to support that SME's gain access to test and demonstration infrastructures that best suit their particular needs when attempting to commercialise new products, services or processes in the digital economy as well as in the bioeconomy. In other words, BSR STARS S3 aims to provide opportunities for *smart specialisation* among test and demonstration infrastructures in the Baltic Sea Region: <http://www.bsr-stars.eu/bsr-stars-s3/>

The workshop in Tampere will present two recent mappings of test and demonstration infrastructure in respectively the bioeconomy and the digital economy. The workshop will provide key stakeholders with an opportunity to explore opportunities for actually and practically facilitating transnational access of these infrastructures for SMEs in the Baltic Sea Region. The workshop welcomes representatives of test bed and demonstration facilities, innovation agents, policymakers, business representatives, researchers and other stakeholders that want to explore the transnational opportunities in this area of innovation.

Venue: Conference center Pellava (Tampella), address: Kelloportinkatu 1 B, Tampere.

Agenda

Morning session – setting the scene (room Tammer-koski)

09:00 Welcome by the Nordic Council of Ministers and the Baltic Development Forum

09:10 Setting the Scene: Test and demonstration infrastructures in the Baltic Sea Region

- *Thomas Winther, Innogate ApS*

09:30 Policy perspectives on sharing test and demonstration infrastructures

- *Lasse Månsson, Supporting test and demonstration in SMEs in Denmark, Danish Business Authority, Head of Section*
- *Jukka Reunavuori, Regional innovation vouchers, Tampere Region Economic Development Agency, Project Manager*

Parallel track I. Bio-business testbeds & smart specialisation in the BSR (room Valimo)

10.00 Perspectives from test and demonstration infra-structures providing technology services to SMEs in the bioeconomy:

- *Mika Härkönen, VTT Finland, Principal Scientist, Pilot plant development, Solutions for natural resources and environment.*
- *Anne Maria Hansen, Danish Technological Institute, Director Innovation*
- *Karin Øyaas, Paper and Fiber Research Institute Norway, Research Director*
- *Björn Alriksson, RISE Processum og Invention, R&D Head Biotechnology*

11.00 Panel session: Persistent bottlenecks and opportunities for cooperation aimed at sharing test and demonstration infrastructures.

- *Moderated discussion with contributions also from industry.*

11:45 Presentation of ambition to pilot a Baltic Sea Region Innovation Voucher Scheme for SMEs in the bioeconomy

- *Torfi Johannesson, Nordic Council of Ministers, Senior Adviser*

Parallel track II. Digital business testbeds & smart specialisation in the BSR (room Tammer-koski)

10:00 The BSR as a hub for transnational digital collaboration

- *Torben Aaberg, BDF, Head of Public & Digital Affairs*

10:20 Perspectives from test and demonstration infrastructures providing technology services to SMEs in the digital economy

- *Kurt Nielsen, Robot Technology, Danish Technological Institute, Director (on Skype)*
- *Johan Olsen, ALMI/Skåne, Sweden, Head of Innovation (on Skype)*
- *Jarno Pinola, 5G Test Network, VTT Technical Research Centre of Finland, Senior Scientist*

11:30-12:00 Technological services for digital SME's: Local cases

- *SMACC-Labs: Jarno Videnoja, VTT Technical Research Centre, Research Scientist*
- *Henna Paakinaho, Collapick Company OY, Sales Engineer*

Lunch 12.00-13:00

Served at restaurant Tampella

Afternoon: Joint session on sharing test and demonstration infrastructures

Venue: Talent Space (Finlayson), address: Satakunnankatu 18A (200 m. walk from Tampella)

13:00 Reports from morning session

- *by rapporteurs*

13:30 Moderated discussion: Opportunities for sharing test and demonstration infrastructures – and synergies with other on-going cooperation efforts

Food for thought contributions from Manufacturing Nordics, Baltic TRAM, ECO3/Kolmenkulma Eco-Industrial Park project etc.

15:00 Concluding remarks and next steps

- *Baltic Development Forum and Nordic Council of Ministers*

15.15 End of programme

7 April – optional programme

An opportunity to participate in a Bio- and Circular Economy public-research-business matchmaking event at Tampere University of Technology, including an evening program on 6 April. The matchmaking event provides networking opportunities with key Finnish bio-and circular economy actors. The speeches are held in Finnish, but there is possibility for bilateral meetings in English. Visits and meetings at Tampere University of Technology research laboratories will be organized upon request.

<http://www.bsr-stars.eu/events/bio-and-circular-economy-matchmaking-event/>

Contact

Bioeconomy track:

Torfi Johannesson, Senior Adviser, Nordic Council of Ministers, torjoh@norden.org

Digital economy track:

Torben Aaberg, Head of Public & Digital Affairs, BDF, ta@bdforum.org

BSR Stars S3

Workshop

Sharing Test and Demonstration Infrastructures
- an opportunity for Smart Specialisation in the Baltic Sea Region
6th of April, Tampere

Name	Organisation	Digital Track	Bio Track
Alakerttula, Johanna	Council of Tampere Region, FI		X
Alriksson, Björn	RISE, SE		X
Deschryvere, Matthias	VTT Bioruukki pilot plant, FI		X
Ermala, Sakari	Verte, FI		X
Fröberg-Niemi, Linda	Smart Chemistry Park Turku, FI		X
Halonen, Nillo	Council of Tampere Region, FI		X
Hansen, Anne Maria	Danish Technological Institute, DK		X
Aranowski, Robert	Gdansk University of Technology, PL		X
Härkönen, Mika	VTT Bioruukki pilot plant, FI		X
Johannesson, Torfi	Nordic Council of Ministers, DK		X
Koistinen, Arto	Univ. of Eastern Finland, FI		X
Laiho, Taina	University of Turku, FI		X
Leino, Johanna	The Baltic Institute of Finland, FI		X
Molin, Anu	Smart Chemistry Park, Turku, FI		X
Reunavuori, Jukka	Tredea, FI		X
Øyaas, Karin	Paper and Fiber Research Institute, NO		X
Stasiškienė, Žaneta	Institute of Environmental Engineering, LT		X
Winther, Thomas	Innogate ApS, DK		X
Ninetta Chaniotou	Kainuun Etu Oy, FI		X
Sirli Pehme	Ministry of Rural Affairs, EE		X
Paakinaho, Henna	Collapick Company Oy, FI		X
Kristian Mattila	VTT Solutions for natural resources and environment, FI		X
Sassenberg, Uwe	DESY National Research Centre, DE		X
Bistrickas, Mykolas	Vilnius Gediminas Technical University, LT		X
Pinola, Jarno	VTT Technical Research Centre, FI	X	
Olsén, Johan	ALMI Skåne, SE (on Skype)	X	
Korpela, Kari	LUT School of Business & Management, FI	X	
Katajisto, Kati	Seinäjoki University of Applied Sciences, FI	X	
Nielsen, Kurt	Danish Technological Institute, DK (on Skype)	X	
Månsson, Lasse	Danish Business Authority, DK	X	
Mäkelä, Petteri	Seinajoki University of Applied Sciences, FI	X	
Leščinskas, Ričardas	Vilnius Gediminas Technical University, LT	X	
Scharff Andreassen, Rune	Danish Business Authority, DK	X	
Aaberg, Torben	Baltic Development Forum, DK	X	
Videnoja, Jarno	VTT Technical Research Centre, FI	X	
Latokartano, Jyri	Tampere University of Technology, FI	X	
Paakinaho, Henna	Collapick Company OY, FI	X	