

ROADMAP

A ROADMAP FOR INCREASED MANAGEMENT CAPACITY IN INNOVATION INFRASTRUCTURE ORGANISATIONS

SUMMARY

The peer review concept has been used in the IRIS project as a tool to contribute to the improvement of governance structures and organisational set-up among incubators in the Baltic Sea Region. It was evident during the project that there are clear benefits for all the participating individual incubators, as well as for the collective, to conduct the peer reviews in a trusted network such as IRIS.

The methodology and the network resulted in participating incubators having the opportunity to get insight and learnings from colleagues, allowing them to evolve as an incubator. Connecting with other incubators, learning best practices and share innovations, has thus been demonstrated to be a powerful way to develop their capabilities to support start-ups and SMEs.

All participating incubators demonstrate a significantly higher management capacity at the end of the project as a result of knowledge being formulated and accessible during the process.

Identified areas of excellence among the incubators were that they all are well integrated with their local and regional ecosystem of universities, municipality and industry and have a multitude of international collaborations.

Identified areas for improvement among some of the incubators were a need to improve their marketing and communication capacity, improve the description of incubation processes and criteria for entry or exit. Common feedback was that participants were lacking supporting methods and tools that tackle sustainability issues for growth in start-ups and SMEs.

RECOMMENDATIONS

Based on the results, effects and learnings, the IRIS project gives the following recommendations:

- Continue to invest in peer review for incubators for increased coherence in the Baltic Sea Region. Peer reviews on a regular basis will provide the participating incubators excellent opportunities to develop continuously, and quality assure their activities.
- Stakeholders and end-users shall be included in the peer review process.
- Diversity among participating incubators should be encouraged.
- Encourage the development of new hands-on incubator sustainability tools for business development and growth. This is a common need among the participating partners.
- Encourage incubators to describe and promote their offers and processes.
- Encourage incubators to clearly define criteria for entry into and exit from an incubator process.

INTRODUCTION

ABOUT THE IRIS PROJECT

IRIS aim is to improve and strengthen management and support capacity in the Baltic Sea Region (BSR) incubator organisations. The project shall contribute to interconnected incubator organisations with strengthened performance, leading to more optimal utilization of resources. A more even and professional level of operation will enhance the ability to manage Innovation Infrastructure Organisations (below also referred to as Incubators) efficiently and to deliver results.

The peer review concept was used as a tool to contribute to the improvement of governance structures and organisational set-up. It also aims to increase the partner capability to work in a transnational environment and foster cross-border cooperation in BSR. The network created during peer reviews should increase the fellowship, leading to more exchange and collaboration.

The following 14 organisations are partners in the IRIS project:

- Dalarna Science Park, Sweden
- Gdansk Entrepreneurship Foundation, Poland
- DESY Deutsches Elektronen-Synchrotron, Germany
- Kaunas Science and Technology Park, Lithuania
- Turku Science Park, Finland
- Ventspils High Technology Park, Latvia
- Rzeszow Regional Development Agency, Poland
- Tehnopol Tallinn, Estonia
- Startup Division, Lithuania
- WTENO, Germany
- Latvian Technological Center, Latvia
- Business Hub Central Denmark, Denmark
- Fund "Victoria", Russia
- Science and technology park of BNTU "Polytechnic", Belarus (third country participation)

ABOUT PEER REVIEW IN THE PROJECT

Peer review is a proven method to get useful, practical and high-quality recommendations for improvement and development of processes and organisations. It is a learning process since the entire review team of 3-4 partners will benefit from the presentations, discussions and findings.

The Peer review approach used in IRIS is inspired by EFQM Excellence Model (efqm.org) and have previously been used on Science Parks in Sweden. Transnational peer reviews had not previously been performed between innovation organisations within the BSR.

Swedish Incubators & Science Parks (SISP), with extensive experience from both the methodology and innovation ecosystems, were assigned to carry out the peer reviews. All partners were involved on management level in peer review activities, which have generated a broad perspective of diversified management solutions, governance structures and organisational set-up.

The objectives for the peer reviews were to:

- Increase and improve the management capacity
- Contribute to interconnected organisations with strengthened performance, leading to more optimal utilization of resources
- Contribute to a more even and professional level of operation with enhanced ability to manage innovation organisations efficiently and to deliver results.
- Contribute to the improvement of governance structures and organisational set-up

The process started with a kick-off conference, October 2017 in Dalarna, Sweden, where the peer review concept was explained, groups and time plans were formed. Much effort was put into building a positive and cooperative culture among the participants.

14 peer review processes were conducted from January 2018 to February 2019 on-site at the partners in the Baltic Sea Region. All partners have performed tests of recommendations until September 2019. A draft of this report was presented at a project meeting in Tallin in March 2020.

OVERALL FINDINGS AND CONCLUSIONS

COMMON BACKGROUND

Business Incubation as a concept started to take off globally in the late 1990s as support for start-up companies needing advice and venture capital to get their ideas off the ground. In the case of IRIS participants, the experience and maturity varied, with some incubators having extensive experience from business incubation, and others having recently started their operations.

The project has shown that regardless of the origin and age of the participating incubators, the overall framework for business incubation is the same, consisting of activities designed to accelerate the successful development of entrepreneurial companies. The innovation support is performed through an array of business support resources and services, developed and managed by incubator management and offered both in the incubator and through its network of contacts.

The common objective for all business incubators in the project is to encourage the development of new business within the local community. By assisting a local entrepreneur to start a company, the community is likely to benefit from an increase in the number of available jobs and the additional revenue that is brought to the city or town as a result of the new business activities. Both elements can help to revitalize a local economy and thus enhance the quality of life for everyone. The objective to revitalise and strengthen the local economy is clearly the common ground for the incubators who participated in the peer reviews.

COMMON SERVICES

Incubators vary in the way they deliver their services, in their organisational structure, and in the types of clients they serve. Most common incubator services are:

- support with business basics
- business training programs
- support with presentation skills
- marketing assistance
- networking activities
- access to funding, angel investors or venture capital
- links to higher education resources
- links to strategic partners
- advisory boards and mentors
- technology commercialisation assistance

Many of the participating incubators offer their tenants office space and shared administrative services. Still, it is evident that the core of the business incubation program is the services it provides to start-up companies. Thus, it is essential to define and describe the incubator's offers and processes clearly, and this was an area of improvement shared by many incubators in the project.

None of the incubators serves all companies, and consequently, entrepreneurs who wish to enter must apply for admission. The criteria that start-ups must meet to participate in the incubator process vary among the incubators, but only those with feasible business ideas are admitted.

The time a company spends in an incubation program seems to vary widely among the participating incubators. Time seems to be depending on several factors, including the type of business and the entrepreneur's level of business expertise. Businesses with long research and development cycles require more time in an incubation program than manufacturing or service companies that can immediately bring a product or service to market.

Frequent feedback in the peer reviews was vaguely described criteria for entry into an incubator process and the following exit criteria.

FINDINGS AND CONCLUSIONS

It is evident that the peer review process is a powerful methodology in the development of Innovation Infrastructure Organisations on an individual, organisational level as well as on a system level. In the IRIS project, we have found that those two dimensions go hand in hand.

On an aggregated level, the following overall findings and conclusions were made from the 14 peer reviews conducted.

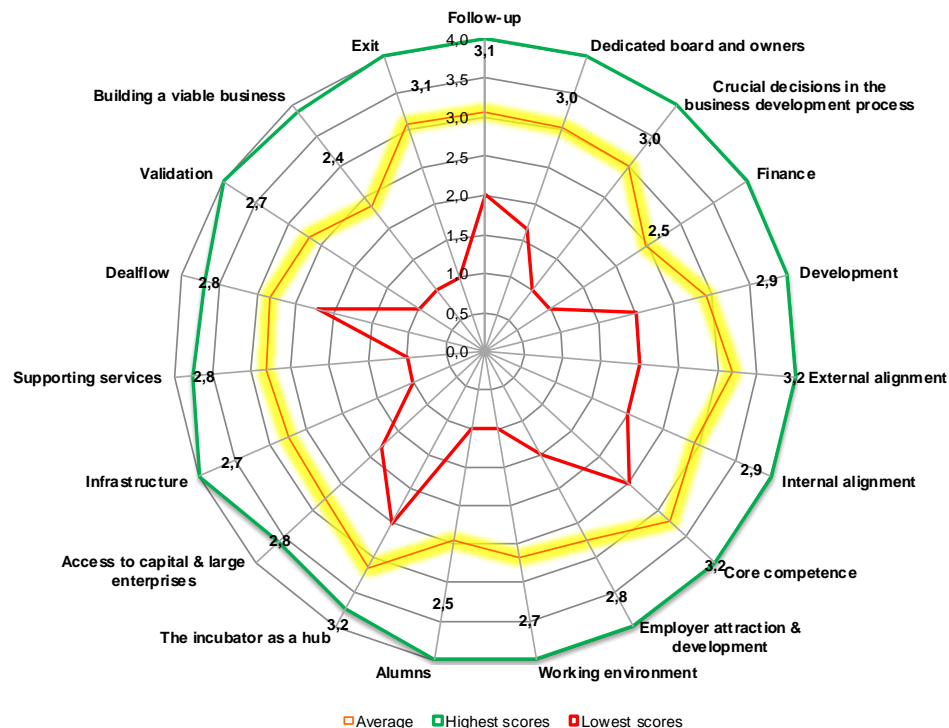
Aggregated areas of excellence among the participants according to given feedback:

- Participating partners are well integrated with their local and regional ecosystem of universities, municipality and industry.
- They all have a multitude of international collaborations, enabling start-ups to connect with foreign markets.

Aggregated areas of improvement among the participants according to feedback:

- Many participants need to improve their marketing and communication to reach out and build up a deal flow of new start-ups.
- Some participants had undefined incubation- or business development processes for start-ups or lacked relevant criteria for entry or exit.
- Common feedback was that participants were lacking supporting methods and tools that tackle sustainability issues (environmental, social and economic sustainability) as a tool for growth in start-ups and SMEs.

Aggregated self-assessment results:



Some common challenges derived from the aggregated data are:

- Access to capital**
 A bottleneck for start-ups is lack of seed- and venture capital. The peer reviews show that provide access to early-stage capital for start-ups and SMEs is a challenge for incubators.
- Access to market and large enterprises**
 It is proven that access to customers in the early stages, as well as new markets in later growth stages, is a critical success factor for start-ups. Market access is one of the areas where incubators may develop and continuously improve their capabilities and thus enhance the value of their services to start-ups. Also, this creates value for established buyers who can gain access to new innovative solutions. It was a common conclusion that the IRIS network is a valuable asset for creating access to new markets.
- Process support to build a viable business**
 The participating incubators have during the project demonstrated the importance of providing business support in addition to more general administrative services. However, according to self-evaluation and feedback there is room for improvement in this area, both concerning development and implementation of new services, as well as quality assurance of the services.

- **Strong and consistent deal-flow**
A common need among the incubators is to build up and sustain a deal-flow of start-ups to the incubators. Deal-flow is correlated to marketing and communication and is also an area of cooperation together with local organisations and higher education.
- **Sustainable funding**
Last but not least, a common challenge for participating incubators is to find sustainable funding for their operation. Most incubators rely on temporary project funding, which tends to hamper the opportunities to create a long-term sustainable organisation.

TEST OF RECOMMENDATIONS IN IRIS

From the management improvement plan, each partner selected recommendations in consultation with the peer review team and the facilitator, to test in the organisation. Relevant, adequate and within project lifetime feasible test actions were then conducted. As a spin-off from testing activities, development was also achieved in other areas of the participants' operations.

The test results and experiences were reported on a template provided by IRIS. The reporting activity paid special attention to the proportion between the effort to implement and the results achieved. By doing so, the partnership got an overview of the most cost-efficient improvement activities.

Overall findings and conclusions from performed peer reviews, with results and experiences from the tests, are covered in this report.

RESULTS AND EFFECTS

To conduct peer reviews in a trusted network such as IRIS was evidently of benefit for all participating individual incubators, as well as for the collective.

The methodology and the network resulted in participating incubators having the opportunity to get insight and learnings from colleagues, allowing them to evolve as an incubator. Connecting with other incubators, learning best practices and share innovations, has thus been demonstrated to be a powerful way to develop their capabilities to support start-ups and SMEs.

All participating incubators demonstrate a significantly higher management capacity at the end of the project as a result of knowledge being formulated and accessible during the process. Institutionalised knowledge and competence enhancement will lead to more efficient utilisation of resources and through this an advancement of incubator performance in the BSR.

The incubators have increased their capability to work and cooperate in a transnational environment and consequently be better prepared for future networking and collaboration. Furthermore, the project approach and structure have contributed to more efficient use of human and technical solutions by developing new and better incubator management tools and practices.

All in all, this has resulted in a substantial contribution to the development of the Baltic Sea Region.

METHODOLOGY AND LEARNINGS

THE PEER REVIEW METHODOLOGY

Peer review is defined as an evaluation of work by professionals of similar competence and organisations. Peer review methods are used to enhance standards of quality, improve performance, and provide credibility.

The original peer-review process for incubators was developed during 2016 and 2017 by the organisation Swedish Incubators & Science Parks (SISP) and was carried out among 31 Swedish incubators. The peer-review process was at the time a real success.

The peer review process starts with a self-assessment performed by each partner which are distributed to the peer review team before the team visiting the host partner. The self-assessment follows a predesigned template. The host organisation provides relevant documentation to describe its situation (history, context, stakeholders, customers, vision, mission). During the visit, the host partner present challenges for the organisation from a management viewpoint. Selected stakeholders are given the opportunity to attend the review and provide relevant input.

The team, host organisation excluded, analyse, and evaluate the information provided and give its recommendation for development and improvement. Findings are presented on-site during a closure meeting to the host organisation and participating stakeholders.

The given recommendations consist of suggestions for improvement and development of management capacity. Examples of recommendations could be to create more efficient synchronisation and cooperation with regional clusters or to develop an ability to manage innovation projects.

The host organisation receives the findings compiled in a peer review report designed as a management improvement plan, which also allows for monitoring of progress and improvements.

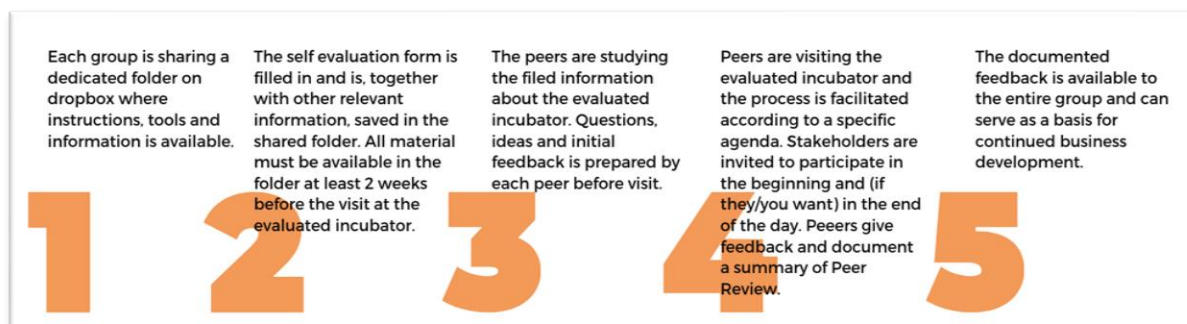


Figure 1: The peer review process in IRIS

TEST OF RECOMMENDATIONS

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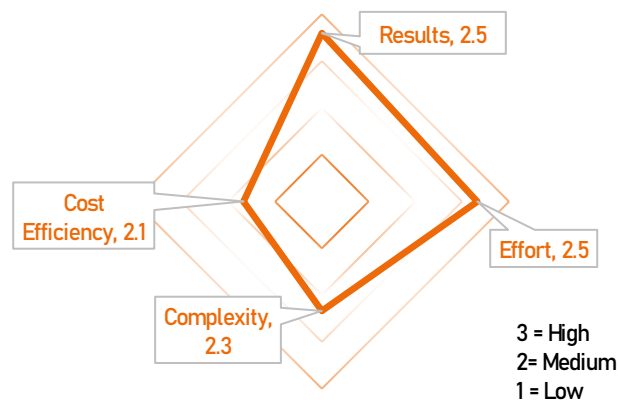
The partners were encouraged to use tests as an excellent opportunity to explore and experiment with new approaches and solutions based on the chosen peer review recommendations.

The test results and experiences were reported on a template provided by IRIS. The reporting activity paid special attention to the proportion between the effort to implement and the results achieved. By doing so, the partnership got an overview of the most cost-efficient improvement activities.

After the implementation and validation of the chosen recommendation, the incubators were asked to rate the test by grading four questions from 1 (low) to 3 (high):

- 1) Rate the effort to implement the recommendation.
- 2) Rate the complexity to implement the recommendation.
- 3) On an overall level, how do you estimate the results achieved during this test?
- 4) In your opinion, what is the cost-efficiency of the recommendation?

Test of recommendation Aggregated result



Overall findings and conclusions on an aggregated level indicate that most of the tests gave good or very good results. However, the results are in parity with the effort needed.

Nuances regarding results of the tests tend to get lost when aggregated. Thus, we recommend focusing on individual tests rather than aggregated results.

ADAPTATION OF THE PEER REVIEW PROCESS

As IRIS project started up in 2017 and planning of the process started, some considerations and customisations of the process were made:

- All material was translated into English, which was a challenge to grasp the correct dimensions of the model used.
- The self-assessment form was simplified to be applied on a broader span of organisations (from tech-transfer offices to technology parks – all with an incubation process integrated in their business.)
- During the preparation phase, the material was adapted to a transnational environment and distributed. Project partners were invited to contact the peer review team whenever they needed to, to secure the quality in the process.

After the two first peer reviews, it was evident that the process and method worked in the international context. As the peer reviews progressed, a high willingness to share challenges and to give and receive frank feedback was observed. After finalising all peer reviews, the conclusion could be made – the process and method worked and delivered value to the participating organisations (in the perspective of reaching the objectives of the project).

LEARNINGS AND EFFECTS REGARDING THE PEER REVIEW PROCESS

There are several learnings regarding the peer review process.

Due to the standardised templates for self-assessment and test reporting, a large number of data could be collected and aggregated.

The self-assessment requires a substantial effort from each partner. Joint feedback from the partners was that this provided an excellent opportunity to discuss strategic issues, within the organisation as well as with their stakeholders.

Due to the number of peer reviews to be performed, two facilitators were needed. Alignment between the facilitators in the preparation phase was a necessity to ensure consistency. The facilitators also conducted the first peer review together and collectively finetuned the process based on the feedback.

The various conditions and needs of each partner required a certain degree of agility and flexibility. The peer review methodology was proven to be robust and adaptable to different structures. However, high-quality peer reviews depend on facilitators with vast experience and domain expertise.

One learning from the test activities is that results can be of higher value if they are shared and followed up by all peer review partners. By doing so, the learning effect will be enhanced and disseminated for the benefit of all participating organisations.

All in all, a mutual experience is that the peer review process is a valuable tool for bench-learning among Innovation Infrastructure Organisations in an international context.

Voices from the participants

What was good with the peer review process?

"The peers constituted an immense source of experience."

"Feedback from outside the organisation is very valuable."

"The moderation of the peer review was professional."

"The self-assessment form forced us to reflect over ourselves, the question led us there. Pushed us to do reflections."

"The team diversity is valuable to the quality."

"Keeping the same groups throughout the process is building mutual trust, step by step."

"The approach with a focus on strengths and improvements."

"Openness and no fears of being transparent created a small community."

"Lunch to lunch with social arrangements in the evening really brought us together, increased the quality of feedback day 2."

EFFECTS ON PARTNER LEVEL

On an aggregated level, several effects have been observed:

- The possibility to showcase the own organisation as well as take part of other organisations to learn, discover and elaborate on strategic matters has led to a substantial increase of both individual and collective competence. The experience has also led to a higher degree of self-confidence.
- Due to the highly practical approach (i.e. non-theoretical) in the process, each peer review has resulted in concrete and feasible recommendations based on insights from the peers and within the actual context for the host. This has led to substantial development of the participating organisations and thus resulting in practical change.
- Since stakeholder perspective is an integrated part of the methodology, the process in many cases has led to clarification of vision, mission, strategies and offerings.
- All participating partners testify that the project and the peer review process has strengthened their professional network as well as their competence.
- The condensed format of the recommendations and the tests have led to many actions that have been appropriately implemented, evaluated and documented.
- The transnational composition of the project has led to new access routes to international markets for the participants and their tenants.

LEARNINGS AND EFFECTS ON SYSTEM LEVEL

The peer review method has proven to be an excellent tool for international benchmarking between incubators and innovation organisations.

The maturity of the participating organisations varied, as well as their set-up with business development processes. The differences were highly beneficial for the participants since it led to a deeper understanding of contextual and cultural pre-requisites, and comprehension of incubator fundamentals.

Voices from the participants

How have peer reviews contributed to your management capacity?

"International participants were an eyeopener and gave us an outside perspective with a non-competitive approach."

"Learning from each other through both peer review and workshops."

"Has made us more open, both internally and to other organisations."

"The more open we were, the more relevant feedback we got."

"Gave us the ability to do a more competent implementation, since others already have done it and proved the concept."

"What's obvious for us may not be obvious to others."

"Increased our ability to measure progress."

"Initiated a renewal of our management organisation."

"More market-oriented product development."

"Better relations with stakeholders."

"Increased the quality in our way of working."

"Change takes time: results are there, effects are coming."

"The tests are possible to copy and paste in other places."

"Rebranding and improved communication."

"Increased openness among us."

"Has increased the self-esteem among participants and connected the team."

At the beginning of the project, IRIS project management made a substantial effort to create a positive and open culture, to promote trust, sharing and cooperation. This turned out to be a success factor for the peer review process. The cornerstones below were communicated to the partners at the project kick-off.

The approach to be used in the peer review process is:

- Non-normative – capturing each organization in its context
- Focusing on strengths, and “opportunities for improvements”
- Openness – Share
- Openness – Empathise

The learning perspectives to be applied in the peer review process are:

- Self-reflection and dialogue in the self-assessment phase
- Inspiration by insight into other organisations
- Blind-spot discovery by receiving feedback and ideas from colleagues
- System insights by collective learnings from several peer reviews

Voices from the participants

What could be improved in the peer review process?

“Help to choose the relevant stakeholders.”

“Preparation of the stakeholder’s participation.”

“More explanations of the self-assessment form, why the questions.”

“Some questions did not apply to us without incubation process in place. “

“Instructions about how to choose crucial questions.”

“A second peer review would be valuable.”

“Stakeholders meeting other stakeholders from other countries would be good.”

“The use of Excel for self-evaluation was not so user friendly.”

FACILITATOR LEARNINGS

Some common critical success factors were confirmed during the project:

- Proper preparations to ensure efficiency during the peer review. It is advisable to team up internally and co-create the self-assessment.
- Management commitment
- Resources for proper self-evaluation and preparation.
- Resources and commitment to act on the recommendations.
- Engaged stakeholders and customers to increase alignment and to validate need and expectations.

Voices from the participants

What have we learned from the peer review process?

"That the process forced us to sit down with the team + boss and discuss our process: creating productive teamwork."

"We are more alike than we thought."

"Curing home blindness."

"Was given us a standardised way of looking at our institution."

"The importance of WORDS: "good can be better"."

"Case studies and resource requires success stories and showing the value."