

Feasibility study for the Design and Implementation of Demand-side Innovation Policy Instruments in Estonia

Case study: NESTA Public Services Innovation Laboratory and ICT, Case study

1. Introduction

Nesta, which was founded as the National Endowment for Science, Technology and the Arts (NESTA) in 1998 offers an interesting case with its Public Services Lab on how to initiate, manage and lead demand-side public sector innovation projects. Throughout its existence since 2009, the Public Sector Services Lab has a portfolio on notable projects, which has evolved together with the organization and changes in the market. The focus and name of The Lab has gone along with the change, being now part of Innovation Lab, which now also tackles challenges beyond public sector.

In recent years, a more comprehensive approach towards issues of digitization has been adopted by Nesta, taking into account the challenges UK is currently facing on the field. The projects include those of digital education, open data and collaborative technologies.

Nesta's case study is an exemplary of clever approach to solving public sector challenges via digital solutions, and at the same time using research results, cross-sectoral networking and experimental methods, as well as ways of spreading the knowledge and experiences in wider public.

2. NESTA's Public Services Lab and UK's ICT sector

The UK's Innovation Nation white paper¹, published in 2008, gave The National Endowment for Science, Technology and the Arts (renamed to Nesta in 2010) a task to establish a public services laboratory which would create environment of experimenting with radical public services innovations through uncovering, stimulating and incubating the new methods. The National Endowment for Science, Technology and the Arts was to partner with Young Foundation, The Innovation Unit, IDeA, Design Council and Innovation Exchange in the establishment of the laboratory.

The Public Services Laboratory (The Lab) started its activities in 10. March 2009 and used The Health Innovation Laboratory, which was already functioning at a time, as a prototype of the idea.

In essence, the Public Services Laboratory was not created as a separate institution or a physical space, but rather a series of projects completed in strong partnership with representatives of public services and backed by research.

The creation of The Lab happened to take place at a time, when stronger focus of innovation policy was put on demand-side activities in UK. Innovation Nation white paper also emphasized the importance of more active and systematic approach towards demand-side policies in UK, drawing attention to various potential instruments of supporting innovation via demand: using procurement, regulation and standardization, information disclosure and awareness building, and support for private demand.

ICT sector measures in UK

Nesta's projects on public services innovation enhanced by digitization are complemented by other actors in UK that target ICT innovation. The UK's Technology Strategy Boards has taken a proactive approach towards

¹ http://www.bis.gov.uk/assets/biscore/corporate/migratedD/ec_group/18-o8-C_b

Amsterdam |NL|

Brighton |UK|

Brussels |BE|

Frankfurt/Main |DE|

Paris |FR|

Stockholm |SE|

Tallinn |EE|

Vienna |AT|

innovation in companies and with its support measures covers ICT sector in UK in general including the strategic planning for the sector². UK's latest Government ICT strategy (2011) outlined the potential of ICT to be the enabler of change. This is coherent with Nesta's current approach of using ICT and digital solutions horizontally as facilitators of tackling public services challenges.

3. The rationale of The Lab/Innovation Lab

The motivation for the creation of an innovation laboratory for public sector lied in³:

- lack of suitable funding opportunities for public sector in testing their ideas
- unfavorable attitude towards pioneers in social innovation
- a structured way of finding partners, networking opportunities and collaboration

Nesta's idea was to solve these issues via providing support and networking opportunities for promising public services projects. The idea was based on the understanding that a safe development and testing ground is needed, before scaling ideas up.

Relying on the classification of rationales of demand-side instruments compiled by Edler (2013)⁴, market and system failures can be seen as the main rationale of Nesta's activities. It lies on the assumption that public sector actors do not possess sufficient information, connections and implementation capabilities to undertake the desired actions. Nesta helps to overcome the adoption externalities of public services innovation by offering a safe testing and developing environment for bright public sector ideas and therefore identifies which of the ideas could be scaled up and used by others. This way, the early adopters of innovative solutions in public sectors do not have to bear a disproportionate cost when compared to those that follow their lead. Furthermore, by bringing together actors of public services with digital sector service providers, Nesta helps both parties in overcoming information asymmetries and poor interaction and communication issues.

4. Design of the instruments

Initially, the Public Services Lab was established as a series of programmes run by Nesta in cooperation with team of Cabinet's Office. Specific design of programmes, however, varies depending on its aims and characteristics.

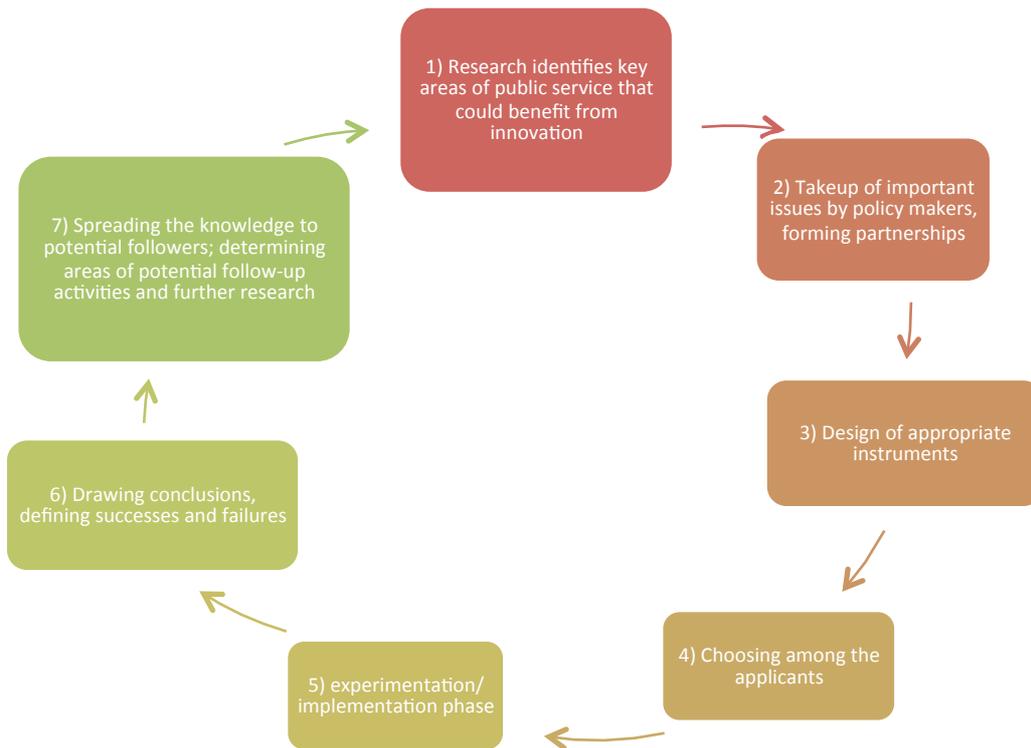
To support its chosen projects, Nesta uses different instruments which suit best the needs of individual projects. The specific support mechanisms include: funding the chosen ideas, using data and web technologies, prizes, accelerators, impact investment, using experimental approaches to government and policy, spreading skills and innovation, and research.

Currently, Nesta has continued to provide this function in area of public services. At the same time, the area of focus has been strongly predefined by previous research results, combining thus evidence and experimenting.

² <https://www.innovateuk.org/information-communication-technology>

³ <http://www.nesta.org.uk/blog/why-we-set-lab>

⁴ Jakob Edler, „Review of Policy Measures to Stimulate Private Demand for Innovation. Concepts and Effects“, 2013, Nesta Working Papers



Graph 1 Nesta's programme process generalized

Although Nesta has a tailor-made approach to each of their programmes, the support cycle can be generalized in 7 steps (see Graph 1). Programmes are strongly intertwined with Nesta’s research activities and new topics of interest often arise from previous experiences. Research forms an essential part of the cycle, as it forms both the basis of the actions taken and also helps to formulate and distribute the experiences and know-how generated from programmes. In case of successful projects, the results are made as replicable as possible, so that good ideas could be scaled up (such as sharing the generated code in Open Data projects).

Another noteworthy aspect is that Nesta mostly uses different instruments to achieve its aims. For example, 3 programmes cover the digital education issues and 3 programmes focus on open data.

Nesta consciously approaches its challenges via bringing together different sectors and areas. This is what they call “cross-pollinating” and it also differentiates them from other organizations that often concentrate on innovation issues within specific sectors.

5. Implementation of instruments

The responsibility of governing the Nesta Operating Company (Nesta) lies with the Board of Trustees which consists of 12 people. The board has appointed different committees to oversee various aspects of Nesta: Finance and Audit committee, Remuneration Committee, Trust Investment Committee, Venture Investment Committee, Nominations Committee, and Advisory Committees.

Given the wide scope of Nesta’s activities and a variety of support instruments used, there is no common approach of how and when the instruments are used or a specific yearly budget allocated to each of the goals or instruments. A specific approach, combination of support instruments and allocated budget are determined at the beginning of each programme separately.

5.1 Beginning of The Lab 2009-2011

At its inception The Lab’s process was divided in Challenge Lab, Methods Lab and Learning Lab. Each of these contributed to the development of various public services improvement ideas in their different stages, helping

to form ideas, finding best ways to test the innovation and finding ways to learn from the experience. Projects moved from one Lab to the other, depending on their stage of maturity. The primary sectors of action identified were climate change, health and ageing⁵. While there were some projects with major impact for public services delivery undertaken at this phase (such as Big Green Challenge, Age Unlimited etc.) there were no projects that focused on the role of ICT in facilitating public services.

5.2 Innovation Lab and Focus on Digitization

Since its change to a charity status, Nesta has taken a more general approach towards innovative activities and has changed the name of its Public Services Lab to an Innovation Lab. Currently, Innovation Lab has a team of 70 people and it includes a joint team with the UK Cabinet Office and has programmes in cooperation with local governments, the health services and civil society⁶.

When compared to the initial projects of The Lab, a stronger focus has been set by Innovation Lab on the issues of digitization and ICT-related projects. This is in coherence with Nesta's newly set aims, which include deepening their engagement with digital technologies. When compared to previous clear-cut focus of projects, the new approach combines different instruments and target groups. This way, the ICT-related innovation projects in cooperation with public services might also be undertaken in other divisions of Nesta, while still contributing to the general aims of the charity.

The direction of action is strongly based on the findings of different research projects, such as:

- Next Gen. (2011) – a study on how UK's high-tech and knowledge-intensive (more specifically video games and visual effects sectors) could continue to succeed in future. Findings on the digitization of UK's education system have encouraged various activities to encourage teachers and students use and develop more technology⁷.
- Plan I – Discussed the connections of long-term economic issues and encouraging innovation in UK and proposed 12-point plan for kick-starting innovation led sustainable growth. One of the key points towards growth was the digital fluency of people⁸
- Decoding Learning - a paper exploring the use of digital technologies in education⁹ and weighing the success factors of using digital learning materials and approaches in schools.

As a result of research findings, Nesta currently runs a set of programmes in predefined key areas, listed below.

5.3 Under focus: Digital Education

A set of activities undertaken by Nesta on the subject of digitization in UK's education programme can serve as a good example of how various programmes and financing schemes work to serve a common goal. The activities are geographically widespread, cooperate with numerous partners and contribute each to the increase of the uptake of technological solutions among UK's young and in schools via different target groups.

Make Things Do Stuff is a platform that aims to mobilize young generation in creating digital content. A combination of campaign and website is used to reach the next generation. Do Stuff section of the website encourages the target group to participate in clubs, communities, competitions and events while Make Things part provides information on how to create digital content (such as animation, apps, games, physical computing, websites etc). All the created content can be uploaded to the website and shared with others. See more at: makethingsdostuff.co.uk

Digital Makers Fund provides funding for projects aiming at the increase of technology use among young people. Fourteen organizations receiving up to £50,000 (out of project's total budget of £520,000) are being supported by NESTA. In addition, non-monetary support is given to organizations.

⁵ <http://webarchive.nationalarchives.gov.uk/20090511134926/http://www.nesta.org.uk/the-lab-innovating-public-services/>

⁶ „The radical's dilemma: an overview of the practice and prospects of Social and Public Labs“, Geoff Mulgan (2014) – www.nesta.org.uk

⁷ <http://www.nesta.org.uk/publications/next-gen>

⁸ <http://www.nesta.org.uk/project/plan-i>

⁹ <http://www.nesta.org.uk/publications/decoding-learning>

Schools in Scotland is a series of projects taking place in Scotland that aim at the increase of digitization in Scottish schools. Activities include One Day Digital events, designing digital future plans for teachers and Digital Creativity support networks¹⁰.

5.4 Under focus: Open data

Make It Local ran in England from 2010-2011. The programme encouraged local authorities to create digital media services for their communities and work in partnership with digital media agencies¹¹. Four municipalities took part of the programme and as a result, a toolkit on using open data for local government was published¹².

Open data Scotland: A project that aims to increase collaboration between local authorities and digital media developers to provide better digital services. Based on the experience of Make It Local Scotland project,

Make It Local Scotland showed how local authorities could better cooperate with digital media developers in providing more useful digital services to their citizens. Five Scottish councils were selected and received £25,000 budget to complete their projects. As a result, the data from the content has been uploaded and the code of digital services is Open Source and can be used by other local governments.

5.5 Under focus: Collaborative technologies

Reboot Britain started in July 2009 with ten practical projects that worked in partnership with public service providers and offered a solution to public service delivery based on collaborative technology¹³. Various solutions, such as online networks to prevent bullying, safeguard app for care professionals, using text messages to communicate with local service providers etc. were supported. A set of essays on how digital technology can be used to solve UK's economic and social challenges were published¹⁴

Digital Arts R&D is a project completed in collaboration between Nesta, the Arts Council England and the Arts and Humanities Research Council and it aims at finding new business models for arts organisations which use digital technology. A budget of £8 million has been distributed between prospective ideas.

5.6 Other mention worthy initiatives

Other important public services projects by Nesta where digital innovation happens as a horizontal and not main theme include: Cities of Service UK, i-teams, Innovation in Jobs, Rethinking of Parks, Centre for Social Action Innovation Fund, Ageing and Innovation, Learning from Global Innovation, The Alliance for Useful Evidence, Creative Councils, (for more information visit nesta.org.uk).

Nesta also runs or participates in numerous projects that concentrate on digital technologies but are not specifically aimed at public sector. Apps for Europe, Futurefest, Technology Futures, Hot Topics (see more at nesta.org.uk)

6. Monitoring, evaluation and impact

Nesta has established its success criteria based on its areas of activity – investment, innovation programmes, policy and research, skills, and communications. Innovation Lab is evaluated on the criteria of reach and depth of the backed projects, via direct impact and how it influences public policy. Usually the projects undertaken by Nesta do not aim at digitization *per se*, but rather view it as a way to achieve societal goals. Therefore only one of the long term aims of Nesta's innovation programmes is focused directly on digitization: "In a time of reduced public funding for the arts we want to demonstrate the value of digital R&D by encouraging arts and cultural organisations to share their experiences of what works and what doesn't."¹⁵

Investment activities are judged by their social impact, capital value and pioneering new types of finance. The research activities are assessed by their quality and influence of the analysis and ideas.

¹⁰ <http://www.nesta.org.uk/project/digital-makers>

¹¹ <http://www.nesta.org.uk/project/make-it-local>

¹² http://www.nesta.org.uk/sites/default/files/make_it_local_toolkit.pdf

¹³ <http://www.nesta.org.uk/project/reboot-britain>

¹⁴ <http://www.nesta.org.uk/publications/reboot-britain-essays>

¹⁵ Nesta annual review 2012-2013

Table 1 Current impact and long-term aims of Nesta's innovation programmes, source: Nesta's annual review 2012-2013

Current impact	Long-term aims
<ul style="list-style-type: none"> • Financial and non-financial support provided to 146 organisations across the UK in 2012/13, with an average grant of £67k. • Our People Powered Health programme worked with six teams of GPs, hospitals, community organisations and patients to test new approaches for managing long-term health conditions that we have shown could save £4.4 billion annually. • Projects supported through the Innovation in Giving Fund have already engaged over four million people in giving their time, skills, assets, resources and money to causes they care about. • The Digital Arts R&D Funds in England and Scotland have funded more than 25 arts organisations to reach new audiences or find new ways of generating revenues. • The Centre for Challenge Prizes launched six open innovation competitions across Europe that generated over 1,000 solutions to problems from isolation in later life to affordable renewable energy. 	<ul style="list-style-type: none"> • To support the generation, testing and growth of innovations that create public value and solve social problems. • Programmes that have explicit impact objectives, ranging from numbers of people reached and effectiveness of solutions developed, to achieving systemic change. • To build innovation capabilities in public organisations like councils and charities. • In a time of reduced public funding for the arts we want to demonstrate the value of digital R&D by encouraging arts and cultural organisations to share their experiences of what works and what doesn't.

Evaluation of investment and grants to public services and innovation activities in general is one of Nesta's areas of expertise. In addition to monitoring and evaluating their own activities, Nesta has developed common evaluation frameworks to be used by other organizations¹⁶.

Nesta has established an initiative called Making Evidence Useful network¹⁷ which aims to develop methodologies that could be used to identify practices that work.

7. Future plans of Nesta and Innovation Lab

Nesta's strategy for three upcoming years¹⁸ outlines various areas of activity: helping public sector to innovate as one of the main areas of focus, along with innovation policy, more inclusive models of economic growth,

¹⁶ Nesta, "Performance Management and Reporting", 2013

¹⁷ <http://www.nesta.org.uk/publications/making-evidence-useful-case-new-institutions>

¹⁸ Nesta strategy for 2014-2017, www.nesta.org.uk

citizen engagement, digital arts and media, ageing and health, and opportunities for young people. In all these areas, Nesta wishes to pioneer in new methods to tackle economic and societal challenges.

Nesta aims to develop further into a network of linked organizations empowering its sub-entities Centre for Challenge Prizes, Alliance for Useful Evidence, and Impact Investment Fund to develop their own identity.

The digital technology is seen as one of the growth areas for Nesta, with stronger emphasis on digital internet and data analytic technologies, both on the side of businesses and government.

Nesta wishes to increase its role internationally and aims to become a centre that is recognized for its understanding and practice of innovation.

8. Lessons learnt relevant for Estonia

- ICT is seen as means and not as an aim in enhancing public services by Nesta. Bringing together various sectors to serve a common goal is what Nesta calls cross-pollinating
- Even so, digital solutions in public services have been identified as one of the main growth areas within the organization and there are a set of programmes that focus on combining the two areas. As such, the digitization is seen as a systematic horizontal issue in Nesta's programmes
- The success of Nesta's activities and the development of ICT as a horizontal topic lie in defining challenges rather than solutions. Once the issues have been formulated, the solutions can be offered by stakeholders themselves
- Similarly, the specific approach and budget of each of the programmes is determined based on the characteristics of issues in hand, using problem-based approach instead of solution-based approach
- One instrument is often not enough to tackle different aspects of the identified challenge. This can be seen from Nesta's own learning experience – instead of pursuing “one goal – one action” strategy of its beginning years, the activities can be now categorized by various intertwined themes and multiple contributing programmes
- the world is increasingly collaborative and public services form only one side of the activities. Demand-side projects often assume many partners and therefore the new name for the Nesta's laboratory – the Innovation Lab instead of Public Services Lab reflects this realization
- The programme cycle at Nesta does not stop and end with programmes – each of the support decisions start from research evidence and are finalized with developing useful guidelines/toolkits for other potential users of the solution at hand. Furthermore, the actions are persistently accompanied by awareness raising, information campaigns and active stance in public policy field