

# The Public Sector ICT Lab



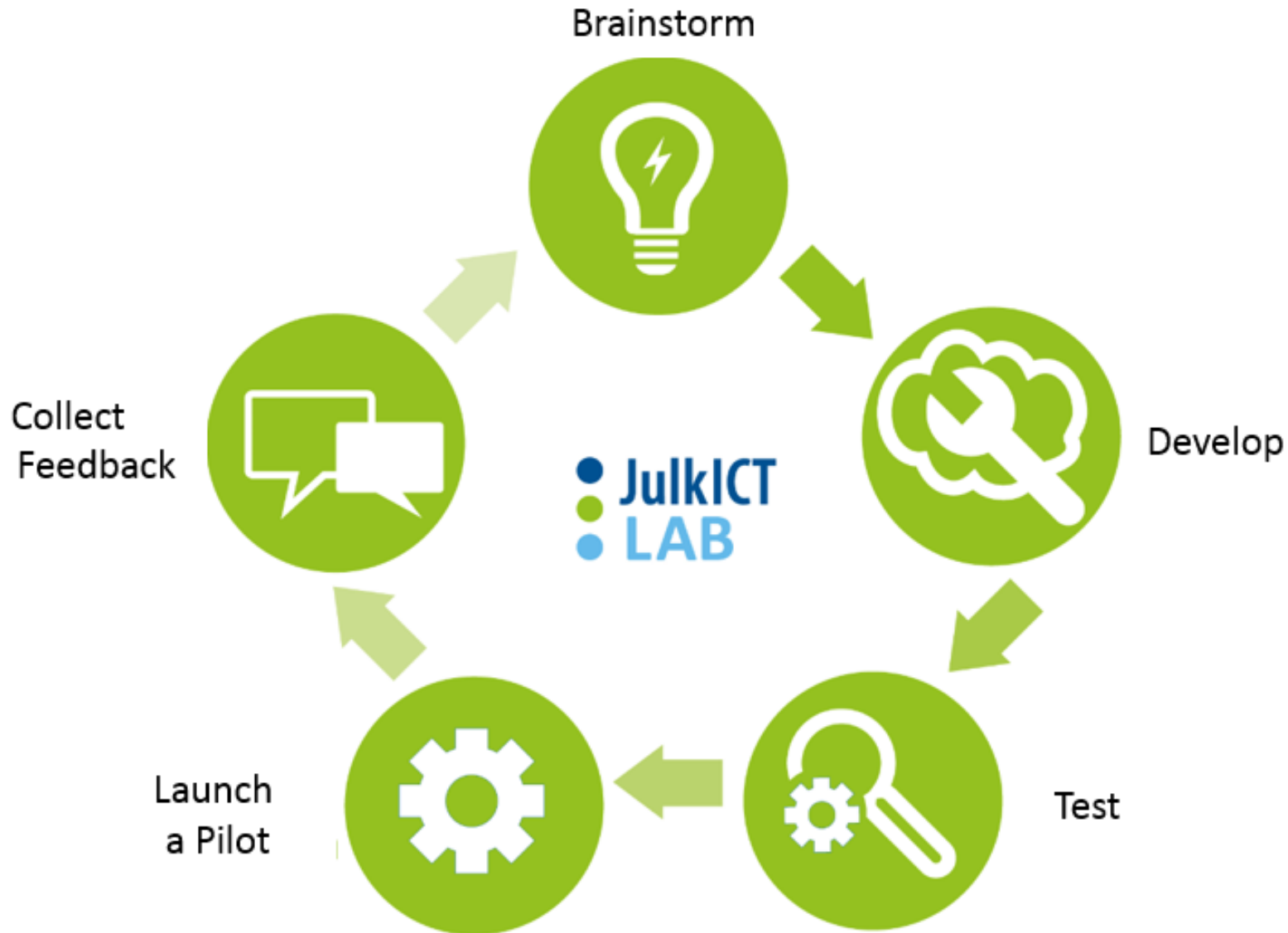
A DEVELOPMENT ENVIRONMENT  
FOR PUBLIC ADMINISTRATION'S  
DIGITAL SERVICES

**Open Data WG**  
**5.11.2015**

[www.julkictlab.fi](http://www.julkictlab.fi)

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# Public Sector ICT Lab (FI: JulkICT Lab) – A Concept Overview



# Public Sector ICT Lab (FI: JulkICT Lab) – Project overview 2013 – 2014

## General overview of the Public Sector Service Development Laboratory :

- Provides an environment and methodology for fast testing and implementation of service development ideas and supports the formulation of new services from ideas and concepts to a product / service – *'open-minded experimentation'*
- Offers service developers a fast and easy way to try out new ideas and concepts with less risk through piloting and provides various tools and support for the development process – *'failure is ok, provided you learn from it'*
- Free of charge for public sector service developers and promotes the use of Open Source, Open Standards and open architecture in order to guarantee the re-use and distribution of developed solutions to the public administration
- The JulkICT Lab capitalises on the results of the National Open Data Programme and takes advantage of the open information resources (Open Data) of the Finnish public sector in the service development process









## Timetable and funding:

- Development, piloting and implementation 9/2013 – 12/2014
- Budget max 400,000 € (300,000 € used at 12/2014), funded by the Ministry of Finance

## Key goals:

- T1: Requirement specification, piloting and implementation of the Public Sector ICT Lab development platform
- T2: Experimentation and adaptation of new service development methods (lifecycle management, API management etc.) and active utilisation of Open Source and Open Data in the service development process
- T3: Development and implementation of work processes for the JulkICT Lab through piloting and formalising a common iterative service development process based on testing, experimentation and controlled risk-taking
- T4: Formulating a co-operation between public sector service developers and fostering a community for the stakeholders
- T5: Linking the operations of the Lab with other ongoing projects and facilitating co-operation between projects

# Project results 2014 – based on independent evaluation

Goal	Result 	Notes
Timetable 09/2013 -12/2014		<ul style="list-style-type: none"> <li>Steering group kick-off 11/2013</li> <li>Piloting during Q1-2, Q3 onwards environment in production</li> </ul>
Budget 400 000 €		<ul style="list-style-type: none"> <li>Implementation completed with 25% budget savings</li> </ul>
T1: Development, piloting and implementation of the platfor and environment		<ul style="list-style-type: none"> <li>First pilots began 01/2014. Pilots also tested the FORGE technical environment</li> <li>JulkICTLab terms and conditions ready on 3/2014; updated 09/2014 (and 08/2015)</li> </ul>
T2: Experimentation and adaptation of new service development methods and the utilisation of Open Data & Open Source		<ul style="list-style-type: none"> <li>JulkICT Lab's methods seen as quick, agile and flexible, compared to the 'traditional' methods of the public administration ICT -projects</li> <li>Developed, piloted and implemented a model and processes for Open Source software lifecycle management</li> <li>Insufficient amounts of Open APIs and Open Data available; Lab should make an effort to support the opening of information resources (create pressure and identify key resources)</li> </ul>
T3: Development and implementation of work processes for the JulkICT Lab including development of new common service development methods for the public administration		<ul style="list-style-type: none"> <li>Development of common processes still in progress</li> <li>Methods for evaluating the impacts of service pilots not yet implemented</li> <li>Some goals of the project will be fully achieved during the National Architecture for Digital Services programme due to much wider than anticipated objectives which were deemed unrealistic to achieve in one year</li> </ul>
T4: Formulating co-operation between dervice developers and creating a community for the stakeholders		<ul style="list-style-type: none"> <li>7 pilot proposals out of 15 started as Lab projects during 2014</li> <li>No additional funding or own environment needed for piloting and testing in new projects</li> <li>Joint service development projects have been facilitated with 'fast' starts</li> </ul>
T5: Linking the operations with ongoing projects and facilitating co-operation		<ul style="list-style-type: none"> <li>The roles and responsibilities of JulkICTLab and projects should be clearly defined &amp; clarified</li> <li>More promotion and co-operation between projects and different sectors needed</li> </ul>

# Results of the 2014 pilot projects – some examples

(more info on pilots, new JulkICT Lab projects and methodology & support: [www.julkictlab.fi/en/](http://www.julkictlab.fi/en/))

- **Geospatial ecosystem development**

- 05/2014 published [Governmental map service](#) – National Land Survey (NLS) in Finland provides a free service for municipalities and government. Piloted map service requires no technical skills from users to create map-based service views. First users: 7 cities/municipalities/governmental organizations
- 06/2014 published [Geospatial information service platform](#)– New API services by the NLS
- 09/2014 [Map service for knowledge management](#) – a service development experiment in co-operation with NLS, City of Helsinki, THL and Statistics Finland

- **National Service Bus (X-Road) pilot**

- 01/2014 piloting and testing of the National Service Bus components, environment for rapid customer integration test; results available at [www.palveluvayla.fi](http://www.palveluvayla.fi). In co-operation with the Ministry of Finance, Center for Scientific Computing (CSC) and Population Register Centre (VRK)
- 07/2014 Authentication pilot – resulted a technical concept that is used at the National Authentication Solution proof-of-concept –project. In co-operation with, CSC, VRK, Valtori, Tax Administration, Ministry of Employment and Economy, KEHA-center, Kela.
- 10/2014 [Education Cloud -pilot \(EduCloud\)](#) is released. The pilot developed a government level model of an ecosystem utilising the National Service Bus which brings together the users, purchasers and developers of educational services. Pilot was funded by the Ministry of Education and Culture with several schools, businesses and education materials producers. The Finnish Centre for Open Systems and Solutions (COSS) is responsible for the building of the consortium.

- **Strong Mobile Authentication in the HAKA Identity Federation**

- 09/2014 solution ready, a new model of the centralised service process was built during the 2014 Autumn – during 2015 piloting. The model will reduce the administrative and technical work load of the members of the HAKA-federation during the deployment of the mobile authentication service. In co-operation with CSC, Elisa Oyj and HAKA –federation

# Phase 2 – development during 2015 and preliminary results I

- 15.12.2014 steering group of the JulkICT Lab recommended extension of the project
- 7.1.2015 The Ministry of Finance opted to extend the project until 12/2015 provided an independent evaluation will be conducted at the end of the 2015 development cycle
  - **Budget unchanged during 2015 (400,000 € in 2015)**
- **The 2015 development goals during 2015**
- Formulation based mainly on user feedback and the conclusions of the independent evaluation of the JulkICT Lab conducted by the Technical Research Centre of Finland (VTT):
  1. Further development of the JulkICT Lab service development methodology and work processes consisting of clear and well defined common model for the Finnish Public Administration
    - ✓ **Completed – Lab now offers support for the whole development process: conceptualise – test – implement – into production**
  2. Specification, development and adaptation of a common process for generating service concepts from ideas and implementing the concepts into solutions through testing and piloting, including guidelines for bringing the piloted concepts into production and evaluating the impacts of the solutions
    - ❑ **In process: implementation and 'move to production' support available, productising not yet fully supported**
    - ❑ **'Digifactory' (an idea hatchery / think tank) will form the 'idea collection' and conceptualisation part of the Lab in 2016**
  3. Active promotion and visibility of the service and communication between stakeholders
    - ✓ **So far seems successful: more projects during 2015 and the public sector developer network has extended considerably**

# Phase 2 – development during 2015 and preliminary results II

- Engaging the actors and stakeholders and fostering closer co-operation and dialog between various service development projects and connecting the projects
  - ✓ **The network has grown and the public sector awareness of the Lab significantly improved**
  - ✓ **Lab has actively promoted co-operation in the public sector and participated in public sector innovation networks**
  - ☐ **In progress: Connecting projects and demonstrating synergy benefits challenging due to very independent organisations**
- Dissemination and re-use of developed services, components, best practices and methodology
  - ☐ **Starting: Success of the methodology breeds awareness, the Lab will provide a platform for dissemination of results in 2016**
- Further experimentation with new methods and more efficient utilisation of Open Data in the public sector service development
  - ✓ **New methodology already developed: OS lifecycle management model extended to API lifecycle management, what next?**
  - ☐ **The Lab will provide access and information on open information resources for developers as part of the dissemination platform**
- Broaden the scope of operations as the test-bed ecosystem for the National Digital Service Architecture Programme (NDSA)
  - ✓ **Funding switched to the same budget allocation as the NDSA and the Lab will provide piloting platform, testing methodology and support for the national data exchange layer and other products implemented as part of the NDSA**
- Lab is also an ongoing experiment and needs to be evaluated in order to be developed iteratively
  - ☐ **We adhere to our own development methodology: Lab will be evaluated (again) during phase 2**

# Phase 3 – Plans for the future 2016 –

- The new Governmental Programme of PM Sipilä focuses on digitalisation and public sector experimentation and innovations
- The JulkICT Lab seen as a critical component of the public sector services development, digitalisation and innovation process; it provides a 'valve' for open-minded experimentation in the public sector
- Budget and resources for the JulkICTLab service will be doubled, also covering the technical environment
- A second independent evaluation cycle planned for 12/2015 (and 2016?)
- Planned fusion with the 'Digifactory' (an idea hatchery)
  - **More active involvement of users (basically anyone can come up with an idea)**
  - **Provides a methodology and processes for formulating and evaluating development ideas with the eventual goal of conceptualization**
  - **Aim to multiply the amount of new development projects and speed up the lead-time**
- The Lab results and products dissemination platform (an 'API umbrella')
  - **Will provide access to components, APIs, applications, methodology and documentation etc. created in the Lab**
  - **Will provide better access to and information on open public sector information resources available for use in development**
  - **Under development, will be implemented during 2016**
- Continuous development based on customer project's requirements
  - **Will provide DevOps –practices, continuous service integration models, automate and speed up the overall development lifecycle**
  - **Will offer more ready-to-use tools for developers --from single needs to general components and practises**
  - **Will share and use the best practices also from other public sector initiatives**
  - **Will provide hands-on support, thematic hackathons and seminars - from technical support and problem solving to general awareness rising**



# Thank you

- The Finnish Public Sector ICT Lab: [www.julkictlab.fi/en/](http://www.julkictlab.fi/en/)

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