

# Deliverable FI 3-D1.6.1

## Report of Continuance of the Network and Services

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## Executive summary

Title: Report of Continuance of the Network and Services

Content: The Future Internet SHOK testbed network and its services were built in phases 1 and 2 of the research programme. This deliverable describes the current state of the testbed network and its services, and how the testbed will continue to operate after the research programme ends.

Impact: The Future Internet SHOK testbed and its services are maintained in the future by Internet Testbed Finland consortium founded by ICT SHOK FI WP4 participants.

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Link: <http://www.futureinternet.fi/publications/ict-shok-fi-testbed-continuance-report-2012-04-30.pdf>

## 1 Introduction

ICT SHOK FI programme was started in 2008. The third phase of the programme was during period 1.4.2011-30.4.2012.

For the ICT SHOK FI testbed activities, the main purpose of phase 3 was to merge the testbed activities of WP4 to WP1, and transition the testbed and its services to maintenance phase as a part of service palettes of CSC/Funet and other WP4 participants.

The testbed itself and its services were ready and in operation before phase 3 [WP4Results].

## 2 Current status of the testbed network and its services

The Future Internet testbed service portfolio has been developed and operated in collaboration with Future Internet SHOK WP4 participants [Services].

The planned tasks in developing the Funet backbone network to support the testbed topology were completed in phase 2 [WP4Results]. Before phase 3 started, the testbed services were available in all major towns in Finland.

In phase 3 the service architecture developed in WP4 [Architecture] has been preserved. The service palette has evolved, some testbed services have been discontinued and new services have been introduced. The service categorization described in the testbed service document [Services] has been incorporated to the CSC/Funet service portfolio.

During phase 3 the available transmission capacity of Funet network has been increased. In January 2012 the Funet connection to Tampere Region Exchange (TREX) and its testbed services was upgraded to 10-Gigabit Ethernet. Also the Helsinki metropolitan area received improved connectivity options, as additional Funet DWDM network sites were deployed.

In January 2012 DNSSEC validation was enabled in the recursive DNS service available in the testbed. CSC/Funet launched also new DNS64 and NAT64 services, which are available to all connected organizations.

## 3 Continuity plan

To ensure continuity of the created testbed and its services, a consortium called Internet Testbed Finland has been founded. A memorandum of understanding regarding testbed collaboration was signed in June 2011 by the following parties:

- Aalto University
- CSC - IT Center for Science Ltd (CSC/Funet)
- Tampere Region Exchange (TREX)
- Tampere University of Technology

The signing parties have agreed to maintain and develop the Internet testbed, its services, processes, coordination and organizational structure. Each signing party has agreed to provide testbed services and support to other parties with fair and reasonable conditions, costs and efforts.

The consortium is open to new members. Organizations can join the consortium to benefit from the testbed and its services, and to offer their own services inside the testbed.

The continued availability of the testbed network and its services will benefit the Finnish research community and its international partners. Internet researchers will be able to build on the existing testbed infrastructure and services developed in the ICT SHOK FI research programme. The opportunity to leverage the existing testbed reduces the costs and efforts of Internet research.

## 4 References

[WP4Results] Pekka Savola, Work Package 4 results and achievements, ICT SHOK Future Internet Deliverable D4.2.8, (2011), <http://www.futureinternet.fi/publications/fi-wp4-phase2-results.pdf>

[Architecture] Karri Huhtanen et al, ICT SHOK Future Internet Testbed Architecture v.2.0, ICT SHOK Future Internet Deliverable 4.1.1, Tampere University of Technology, Department of Communications Engineering (2010), ISBN 978-952-15-2387-8, ISSN 1459-4617, <http://www.futureinternet.fi/publications/ict-shok-future-internet-testbed-architecture-v20-web-version.pdf>

[Services] Karri Huhtanen (ed.), ICT SHOK Future Internet Testbed Services 26.11.2009, ICT SHOK Future Internet Deliverable 4.2.3, (2009), <http://www.futureinternet.fi/publications/ict-shok-fi-testbed-services-2010-01-07.pdf>