FINNOA 10 YEARS OF OPEN ACCESS WORK AND A ROAD MAP FOR THE FUTURE
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Introduction
The Finnish Open Access working group (FinnOA), founded in April 2003 is celebrating ten years of active work promoting open access to scientific research in Finland. The working principles of the group have from its start been inclusive and open to new ideas and new members. Through the years many persons have contributed to the activities and initiatives taken by FinnOA. In most cases important activities have been reported in articles in ScieCom Info (Hedlund & Montonen 2008; Hedlund 2011; Salokannel 2012; ). The role of the two persons that have been chairing the working group during the years, first Bo-Christer Björk and later Marjut Salokannel has been central in developing strategies for the work and in coordinating the activities. In 2013, Annikki Roos was elected as new chair of FinnOA.

From the start FinnOA has had three focus areas regarding open access, open access journals, publication archives and policy issues. In the following section of this article we will analyze the progress in Finland in each of these areas thus taking a national perspective on OA. However, Finland is a part of Europe and thus reacting to trends and initiatives in the Nordic countries as well as European Union initiatives. Due to this, influences to the activities and progress made in Finland is due to national stakeholders as well as Nordic and international developments. The role of FinnOA in the development process has mainly been in advocating for open access solutions. This has been done by arranging seminars and by participating in projects that inform about open access to relevant stakeholders.

In the third section of this article we will focus on the future and what kind of road map would be suitable for the next five years for FinnOA.

Open access progress in Finland 2003 – 2013
Generally article publishing in Finland is done in international journals. This trend has been continuing according to statistics from the Ministry of Education and Culture (http://vipunen.csc.fi/) on scientific publications from universities (Table 1). There were a total of 14373 scientific referee articles published in 2011. Of these about 8% were published in domestic journals and 92% in foreign journals. Compared to statistics from 2003 there is an increase in total number of articles from 11754 to 14373 (22%). In 2005 about 17% of the articles were in domestic journals and 83% in foreign journals.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of domestic referee articles</th>
<th>Number of foreign referee articles</th>
<th>Total of scientific articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1965</td>
<td>9789</td>
<td>11754</td>
</tr>
<tr>
<td>2011</td>
<td>1184</td>
<td>13189</td>
<td>14373</td>
</tr>
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Table 1. Statistics on published articles in Universities in Finland (source: Ministry of Education and Culture http://vipunen.csc.fi/)

The open access share of published articles in the year 2008 by Finnish authors was approximately 21%. Of the open access articles half was gold open access and half green (Hedlund 2010).

In the following we will analyse the situation in particular regarding open access publishing in domestic journals.

As can be seen from Table 1, a majority of articles by Finnish researchers are published in international journals. However, the number of peer reviewed journals published in Finland is also rising. The journal publishing is gradually turning to online publishing and also to open access availability. In Table 2 containing data from two sources on journal publishing in Finland we can see that the number of journals is rising and also the number of those publishing open access. As a note to Table 2 the number of OA journals in Finland registered in DOAJ is considerably higher than in Ulrich’s Periodicals Directory. This is an indication of the fact that small
Many publishers are learned societies publishing mainly one journal. The subscription base is mainly formed of members, who get the subscription as part of the membership fee. The transformation to online publishing is developing and also open access versions of the articles are offered. One important support in the transition process is the publishing platform offered by the Federation of Finnish Learned Societies. The Federation also coordinates the financial support to the individual learned societies for their journal publishing (see also the report by Hedlund and Rabow from 2007).

The DOAR register on open repositories lists 12 repositories in Finland. However, the numbers of institutions involved is higher since for example the repository of the University of Helsinki contains sub.repositories from 7 partners (see also the report by Rabow from 2009). The repositories contain many types of material, such as articles, thesis, research reports etc. In 2013 about 140 000 records are stored in open repositories and according to the National Library of Finland ⅔ of these are thesis (Ilva 2013).

### Policy issues on open access

As early as in 2005 the Ministry of Education appointed a committee to put forward recommendations for the promotion of open access to scientific and scholarly publications in Finland.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total number</th>
<th>online OA</th>
<th>JCR</th>
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<tbody>
<tr>
<td>2007</td>
<td>98</td>
<td>39</td>
<td>6</td>
</tr>
<tr>
<td>2013</td>
<td>154</td>
<td>71</td>
<td>24</td>
</tr>
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Table 2. Number of scientific peer reviewed journals published in Finland, classified according to type (Source: Ulrich's Periodicals Directory and DOAJ)

Rectors of the Finnish Universities (UNIFI) signed Berlin declaration in 2006. However, in 2013 only three of the universities have an established policy concerning the OA. The University of Helsinki mandates, The University of Tampere urges and encourages, and the University of Jyväskylä urges researchers either to archive duplicates or final drafts of their research articles to repositories, or to publish in an OA forum. Finnish Universities of Applied Sciences have made a statement in 2009, which requires all teachers and researchers to save a copy of their published scientific articles in a common electronic library.

It seems quite evident that pure mandates or requirements of the research organizations have not resulted in extensive open access in Finland. The policy of the research financing bodies might turn out to be more effective.

The Academy of Finland (AF) is one of the main financing bodies of research in Finland. It is obvious, that the AF has chosen a rather cautious course of action in mandating OA. However, just recently the board of AF has changed the OA policy of the institution to a more OA demanding direction. Previously the Academy of Finland recommended, now it urges that results of the studies, which receive funding from the AF, should be published on OA forums or archived in OA repositories.

### The road map for FinnOA - focusing on open data and open science

The debate around openness of research data has been quite lively during the last years also in Finland. There have been several development programs in the governmental and public sector, which have been emphasizing the importance of open data. The Finnish Government made in 2011 a principal decision that public, governmental information and data should be open to use. While the public data as for example maps can be utilised for business, the Ministry of Education and Culture has focused on e-science with open data and publications. The ministry started a project called TTA - National Research Data -project in 2011. The TTA project has quite a broad agenda including the construction of the technical infrastructure, long term preservation and for example establishing a national data catalog. The policy issues, including access to research data and publications are also included. FinnOA as well as the Finnish university libraries are included in this work, university
libraries by requiring a national OA policy for research publications.

Finnish universities have not been very actively involved in discussions about open research data, whereas some research institutes have clearly declared their policy. One significant pioneer has been the consortium for natural resources and environmental research, Lynet (http://www.lynet.fi), which has announced an open data policy to certain parts of the research data. Recently the Open Knowledge Foundation (OKF) in Finland has formed an Open Science section also in Finland. This section involves very active and enthusiastic scientists. FinnOA has started to collaborate with the OKF Open Science section in 2013 and it is evident that the cooperation will be a new opening for the OA movement in Finland.

The importance of open information environment to scientific work and the research community cannot be overestimated. Publications are one, but not the only important part of this environment and the nature of publications is also changing. Publications and data are increasingly integrated, and if not integrated, at least linked together. The importance of data is increasing. The most important question now and in the near future is how to promote the reuse of openly available scientific material. The barriers to text and data mining of publications should be removed. This is not an easy task nationally or on an international level but there is a clear strive to make it possible.

Conclusions
In this article our aim has been to provide a picture of the development of open access in Finland regarding mostly journal articles. We have discussed the growth of journal articles and the relatively slow development of OA journals and repositories. During the ten years the concept open access has become rather well known to researchers and librarians and funding bodies even though there still appears to remain much to be done. The infrastructure for developing OA is in place. Now the next challenge is to proceed with access to research data and the linking between the data and the research articles. FinnOA will continue its work promoting the growth and sustainability of open access in Finland.

References:
Hedlund, T. and Rabow, I.: Open access in the Nordic countries. Nordbib Programme 2007
http://www.doria.fi/handle/10024/88701
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