Mikael K. Elbæk

Technical University of Denmark, Technical Information Center of Denmark

OpenAIRE Supporting Open Science in Europe - a Nordic point of view

Nordic Perspectives on Open Access and Open Science - Seminar in Helsinki, October 15, 2013











Outline

- Background to the project
- Services OpenAIRE offers
- Who are OpenAIRE target users and why should you get involved
- A Nordic point of view





"Open access

IS A MUST

For the competitiveness of Europe"

Neelie Kroes, the EU Commissioner for Digital Agenda



European OA Mandate

At funding level

Europe's Open Access Pilot ,Special Clause 39

- FP7 Funding scheme
- Seven thematic Areas (20%)
- Open access to publications
- **Deposit in a repostitory**
- ..or pay Gold OA charges and deposit







OpenAIRE

Building an Infrastructure to support a policy



- Cross-discipline/Horizontal infrastructure
- Measuring impact

OpenAIRE 2009 – 2012

Implementing the FP7 OA pilot (links to EC funding). Supporting SC39 Mandate





OpenAIRE =

OPEN ACCESS

Publications/projects

OA to 'results of publicly funded research' 100%

Horizon 2020

EC's Communication & Recommendation, July 2012

It is not IF Open Access

It is HOW Open
Access



OpenAIRE

Building an Infrastructure to support a policy



- Cross-discipline/Horizontal infrastructure
- Measuring impact

OpenAIRE 2009 – 2012

Implementing the FP7 OA pilot (links to EC funding). Supporting SC39 Mandate

OpenAIREplus 2011 - 2014

- Supporting OA in <u>all</u> Europe (links to all European funding)
- Providing links to research data
- Working with 3 scientific communities





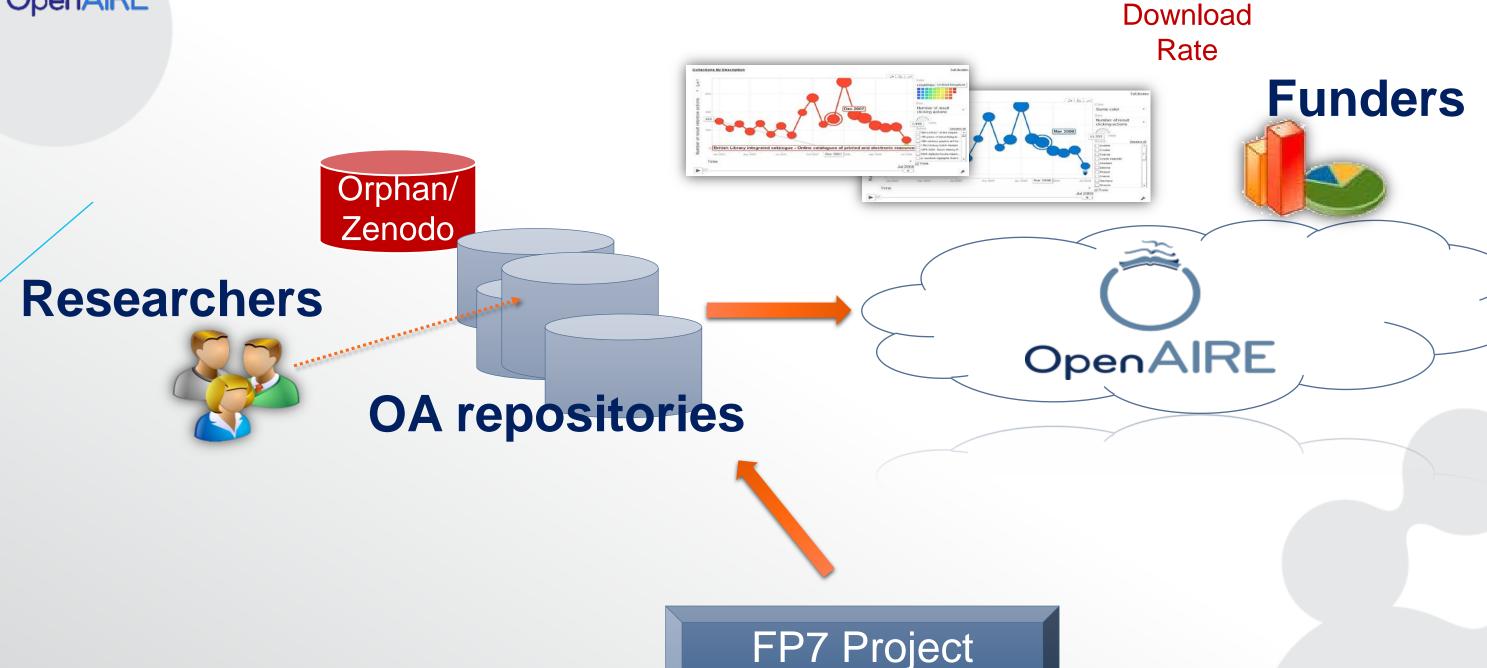
OpenAIRE =

OPEN SCIENCE

Publications/projects + data



Research Impact



Information







Human infrastructure

Research is globalizing, policy implementation is at the local level



All EU member states

Challenge - Aggregate at a global level this local information

- 32 National Open Access Desks
- OA advocacy through targeted activities
- European network of people sharing experiences & best practices







Deposit
Publications
& data

Visualize - Manage Enhanced Publications

Curate & collaborate

Research impact Citations, usage statistics

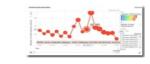
Get support (NOADs)



Search & Browse



Linked Content Statistics



+++

help desk



Link Classify

Text Mine

De-duplicate Cite



APIs

OpenAIRE HUB

Metadata

Usage data

on publications

6,500,000 OA publications 345 validated repositories

Guidelines for Publications



Publication repositories

Institutional & Thematic

Open Access Journals

Guidelines for Funding Info

CRIS Systems



IS

ResearchID (ORCID, ..)

OpenDOAR

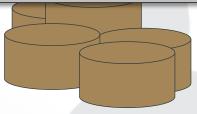
...

Metadata on data





Guidelines for Data Providers



Data repositories
Data Journals



OpenAIRE Guidelines

Guidelines for
Literature Repository
managers version 3.0

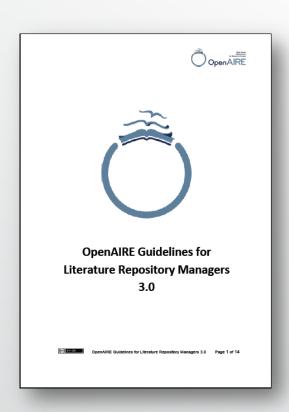
2

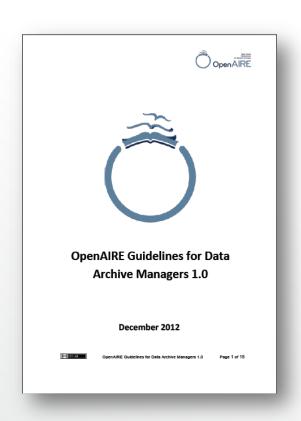
Guidelines for Data Archive Managers

3

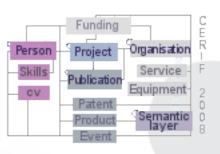
Guidelines for CRIS

- CERIF-XML









https://guidelines.openaire.eu





Our

USERS

Who are they?



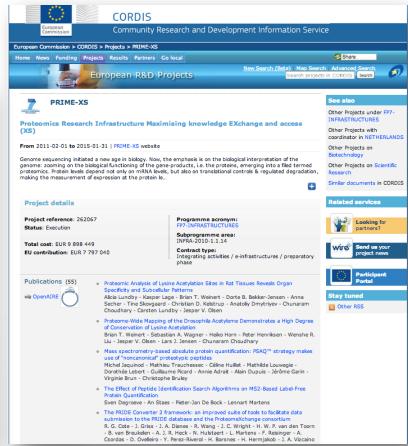
Project Coordinators

Tools to ease some workflows



- Dissemination of research output
- Reporting to the EC
- Embedding publications in CORDIS

















PARTICIPATE DEPOSIT, JOIN

SEARCH PUBLICATIONS, DATA, PROJECTS

STATISTICS
OA. PROJECTS, TOPICS

SC39

SUPPORT FAQ, HELPDESK, GUIDES

OPEN ACCESS

Home



TITLE

NEXPRES

NEXPReS- Novel Explorations Pushing Robust e-VLBI Services

FUNDER

FUNDING STREAM SP4

SCIENTIFIC AREA INFRA

CALL FP7-INFRASTRUCTURES-2010-2

FP7

CONTRACT (GA) NUMBER 261525

START DATE 01/07/2010

END DATE 30/06/2013

SPECIAL CLAUSE 39 yes

ORGANIZATIONS CSIRO, JO

CSIRO, JOINT INSTITUTE FOR V.L.B.I. IN EUROPE (J.I.V.E.), INSTYTUT CHEMII BIOORGANICZNEJ PAN, CHALMERS TEKNISKA HOEGSKOLA AB, VENTSPILS

App Box



Q Publication details



Dynamically incorporate publications in your site (HTML)



View EC progress report (HTML)



Download EC progress report (CSV)

Link Research Results

Deposit Publications

Joomla SEF URLs by Artio

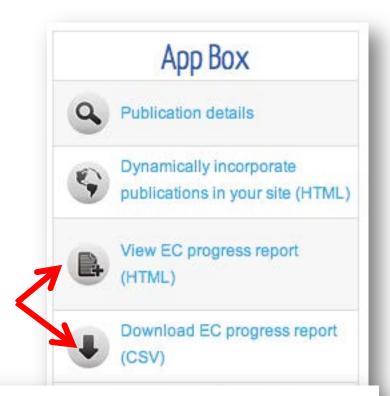






OpenAIRE Project apps

Get all project publication in HTML or CSV to use in EC reporting



Publications of Project ELISA

445 publications

Title	Author	Publisher	Publication Date	Permanent Identifier	Access Mode	Embargo End Date
Low-temperature fabrication of layered self organized ge clusters by RF-sputtering	Pinto, S. R. C.	Springer Verlag	2011-04-14	http://hdl.handle.net/1822/15689	OPEN	
The high-resolution structure of the extracellular domain of human CD69 using a novel polymer	Kolenko, Petr	WILEY-BLACKWELL PUBLISHING, INC	2009-01-01	http://dx.doi.org/10.1107/S1744309109043152	CLOSED	
Structural and magnetic study of the annealing of Fe-Co nanoparticles	Desvaux, Celine	ROYAL SOC CHEMISTRY	2010-01-01	http://dx.doi.org/10.1039/b916294a	CLOSED	
Neuroprotective action of FK-506 (tacrolimus) after seizures induced with pilocarpine: quantitative and topographic elemental analysis of brain tissue	Chwiej, Joanna	SPRINGER	2010-01-01	http://dx.doi.org/10.1007/s00775-009-0597-2	CLOSED	
Energy band structure and optical response function of	Bekeleye C	AMED DUVSICAL SOC	2010 01 01	http://dy.doi.org/10.1102/DhysDayD.91.075114	CLOSED	

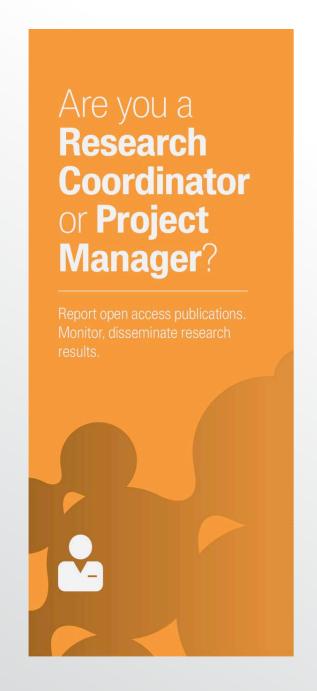






Research Administrators

Measure OA compliance and Impact; Aggregated statistics for research admins



- National funders/infras
 - What is the output/impact of your country
- Institutional research admins
 - Link to CRIS systems
 - Output and impact of institution
- Open Access measurement
- Advanced tools for science trends







Funders

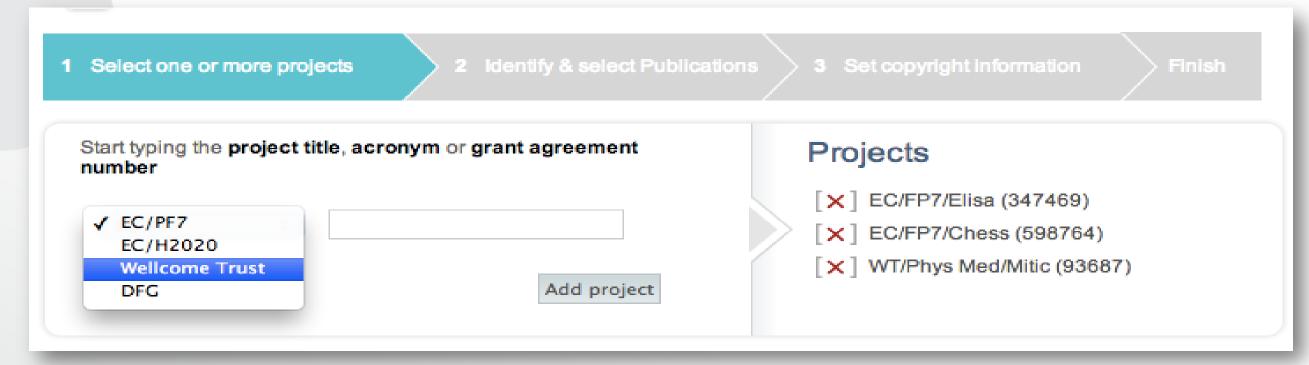
Monitoring the compliance and Impact



- Return on Investment
 - The money invested can be measured with output
- Tracking what they fund
 - How is this output used?
- Strengths in research areas
 - What is used and how often?
- Support for policies



Going beyond FP7 and EC

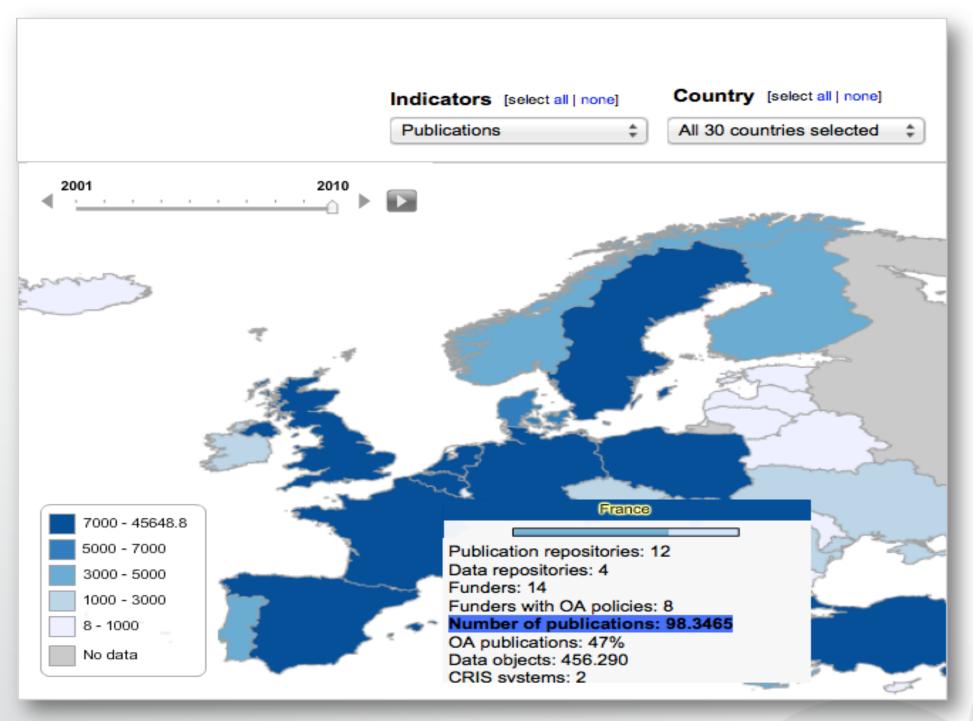


Browse Funder Document Language Project FP7 (43154) English (507823) UNKNOWN (4072) Wellcome Trust (4012) Undetermined (372027) HADRONPHYSICS2 (538) French (106177) ELISA (435) UNILHC (416) Spanish (62690) Italian (41170) MASSTEV (302)





Aggregated, visual OpenAIRE Statistics









Researchers

...affected by Open Access policies



- Benefits of Open Access
- One stop-shop for deposition publications & data
- Alerts and Notifications
- Online curation
- They have little time!
- Maybe less attention!





zenodo

Research. Shared.

Search Communities Browse - Upload Get started - Liver@aqua.dtu.dk -

Home / Publications / Pelagic community production and carbon-nutrient stoichiometry under variable ocean acidification in an Arctic fjord

Pelagic community production and carbonnutrient stoichiometry under variable ocean

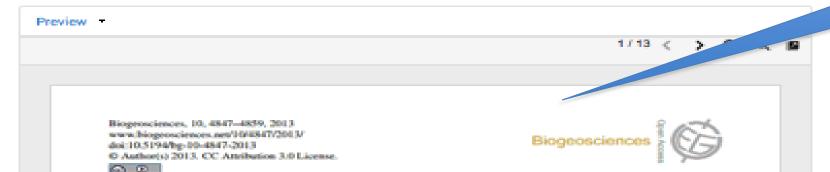
acidification in an Arctic fjord

Silyakova, A.; Bellerby, R. G. J.; Schulz, K. G.; Czerny, J.; Tanaka, T.; Nondal, G.; Riebesell, U.; Engel, A.; De Lange, T.; Ludvig, A.

(show affliations)

30 July 2013

Net community production (NCP) and carbon to nutrient uptake ratios were studied during a large-scale mesocosm experiment on ocean acidification in Kongsfjorden, western Svalbard, during June-July 2010. Nutrient depleted fjord water with natural plankton assemblages, enclosed in nine mesocosms of 50m3 in volume, was exposed to pCO2 levels ranging initially from 185 to 1420 µatm. NCP estimations are the cumulative change in dissolved inorganic carbon concentrations after accounting for gas exchange and total alkalinity variations. Stoichiometric coupling between inorganic carbon and nutrient net uptake is shown as a ratio of NCP to a cumulative change in inorganic nutrients. Phytoplankton growth was stimulated by nutrient addition half way through the experiment and three distinct peaks in chlorophyll a concentration were observed during the experiment. Accordingly, the experiment was divided in three phases. Cumulative NCP was similar in all mesocosms over the duration of the experiment. However, in phases I and II, NCP was higher and in phase III lower at elevated pCO2. Due to relatively low inorganic nutrient concentration in phase I, C :N and C : P uptake ratios were calculated only for the period after nutrient addition (phase II and phase III). For the total post-nutrient period (phase II+phase III) ratios were close to Redfield, however they were lower in phase II and higher in phase III. Variability of NCP.C:N and C: P uptake ratios in different phases reflects the effect of increasing CO2 on phytoplankton community composition and succession. The phytoplankton community was composed predominantly of haptophytes in phase I, prasinophytes, dinoflagellates, and cryptophytes in phase II, and haptophytes, rasinophytes, dinoflagellates and chlorophytes in phase III (Schulz et al., 2013). Increasing ambient inorganic carbon concentrations have also been shown to promote primary production and carbon assimilation. For this study, it is clear that the pelagic ecosystem response to increasing CO2 is more complex than that represented in previous work, e.g. Bellerby et al. (2008). Carbon and nutrient uptake representation in models should, where possible, be more focused on individual plankton functional types as applying a single stoichiometry to a biogeochemical model with regard to the effect of increasing pCO2 may not always be optimal. The phase variability in NCP and stoichiometry may be better understood if CO2. sensitivities of the plankton's functional type biogeochemical uptake kinetics and trophic interactions are better constrained.







Publication date:

30 July 2013

10.5194/bg-10-4847-2013

Report number(s):

OpenAIRE-EPOCA-2013-001 OpenAIRE-EURO_BASIN-2013-010 OpenAIRE-MEECE-2013-004

Keyword(s):

Const to Histories | andres outdoor excisting

Published in:

Biogeosciences (Online): 10 (2013) pp. 65

EPOCA - European Project

(211384)

EURO-BASIN agsin-scale

Analysi Integration (EURO-BASIN)

Changing Environment (212085)

Collections

Communities > EURO-BASIN, North Atlantic

Marine Ecosystem Research

Communities > European Commission Funded

Research (OpenAIRE)

Publications > Journal articles

Open Access

Uploaded by:

Ivo Grigorov (on 03 September 2013)

SOCIAL MEDIA ATTENTION

THE MANUSCRIPT and DATA,
FREE & NOW



Data Providers

Be part of a community



- Increase your visibility
 - To funders and research administrators
- Interoperate through guidelines
 - Publication, funding, research data
 - Usage statistics (impact)
- Get back enriched information
 - Links to funding and research data
 - Aggregated statistics
- Notifications about publications in other repositories

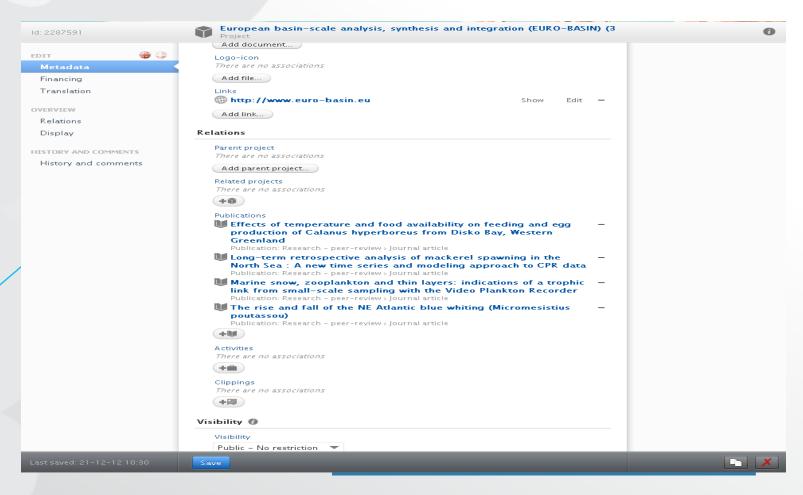






Adopting CERIF

PUBLICATIONS – PROJECT – FUNDING - DATASETS



- Aligning data model
- Retrieving publication-project information
- PURE compliant v. 4.15
- Boost repository engagement







External challenges

to overcome



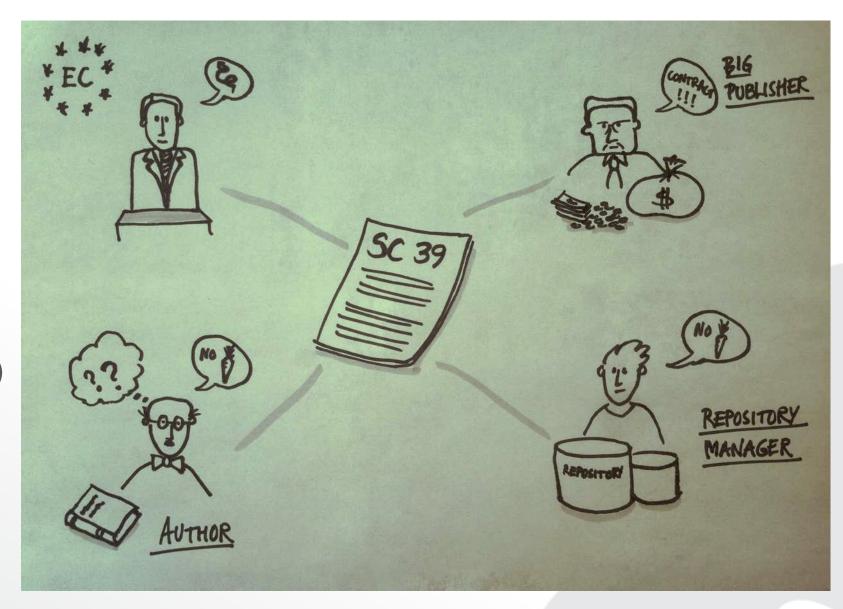




To overcome..

A number of hurdles

- Misinformation from EC
- Publishers making life hard for researchers
- Researchers that couldn't care less
- Lack of urgency (soft mandate)
- Repository Managers having incentives to invest in development









Understanding our Users

A Challenge not to be underestimated



- The ,ethics' of OA isn't enough
- We must be aware of shift to a service environment –user oriented
- Time-saving and Easy to Use
- Agreements with providers
- We have engaged user communities in our project to know how, science works'







OpenAIRE

A Nordic point of view

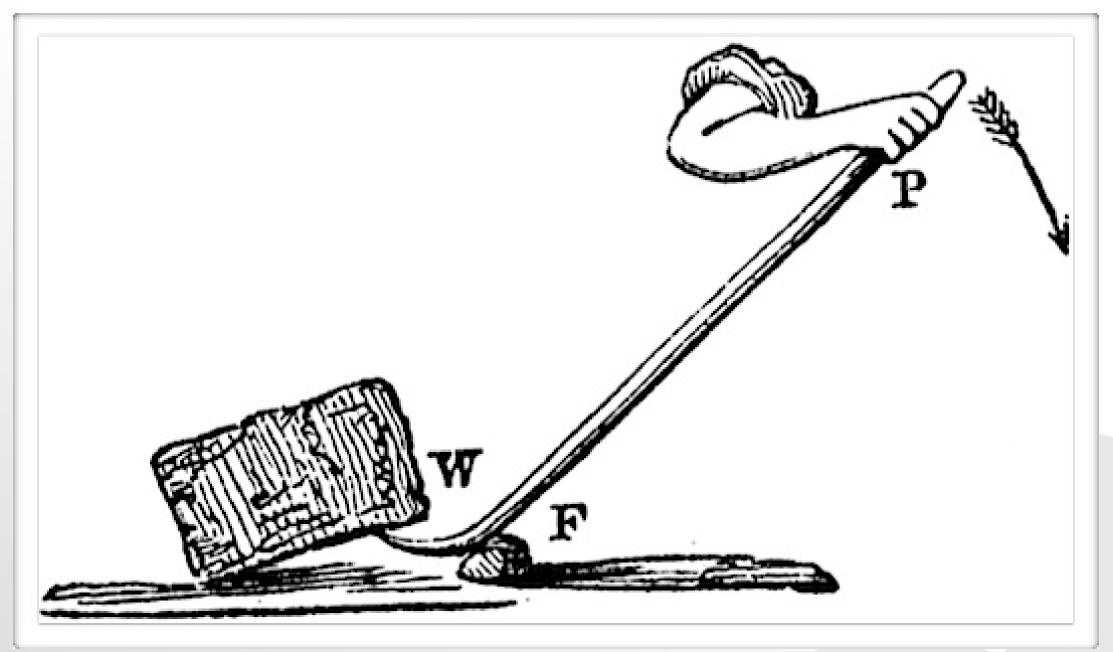






Leverage

The potential of OpenAIRE









What we got in common

We have many commonalities

- Relatively small and homogenous nations
- Financial well-founded compared to eastern and southern europe
- A history of following recommendations and policy work from the European Commission
- At the start of OpenAIRE a mature repository infrastructure
- A longer history of discussing Open Access





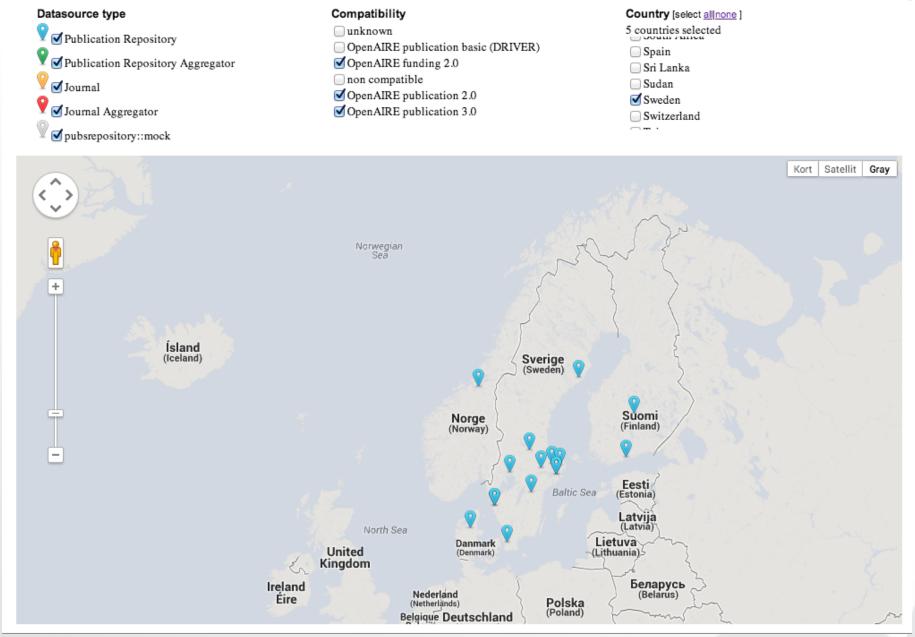
A foundation for instant SUCCESS of OpenAIRE

...this has however NOT been the case



Status OpenAIRE

The uptake of OpenAIRE after almost four years



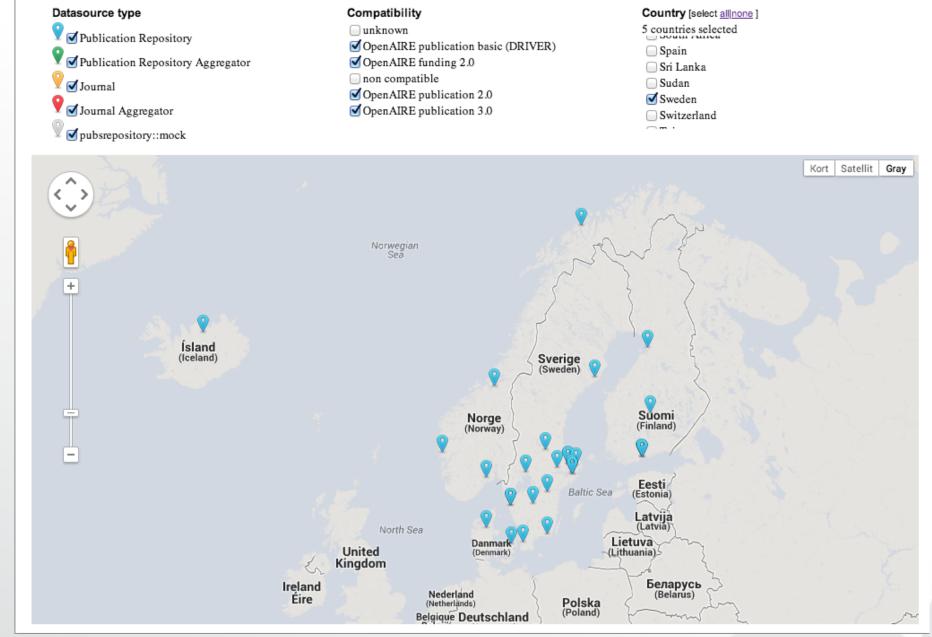






Status OpenAIRE

Now including DRIVER compatible repositories



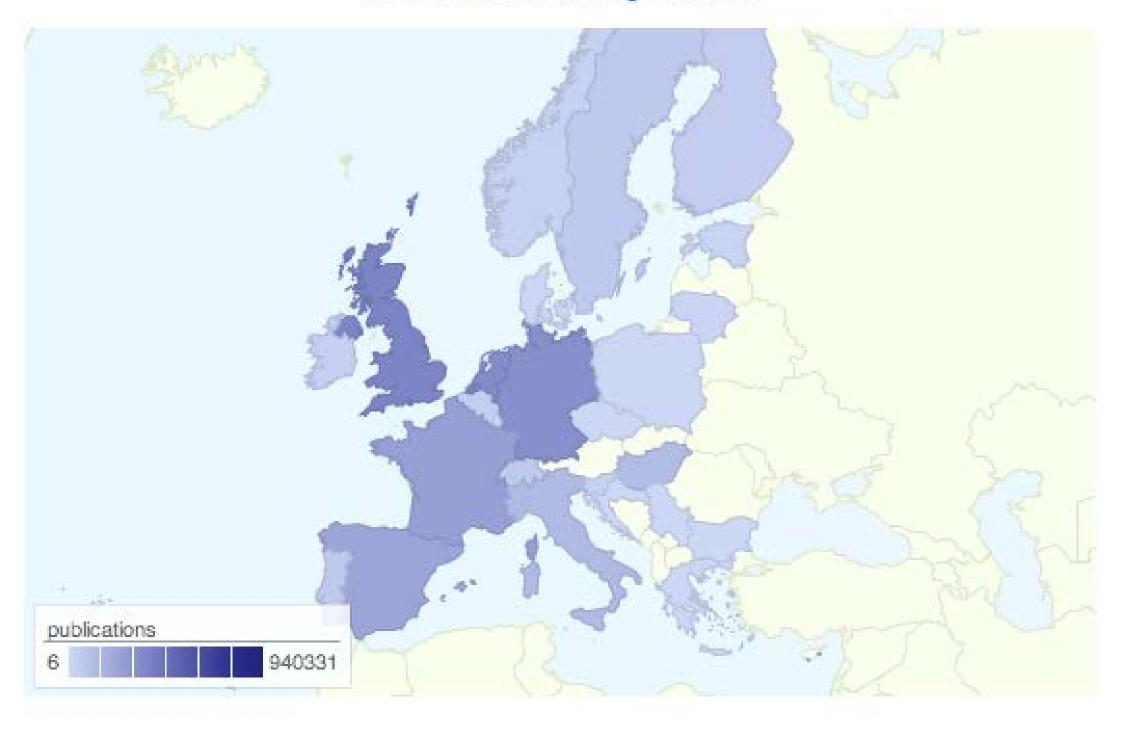






Publications distribution per country

from institutional repositories









Low uptake

Possible reasons?

- Organisational issues
 - Decentralized versus Centralized solutions
 - Number of institutions
- Different political agendas
- The maturity and business criticalness of systems
 - Competing interests
- Low feel of urgency FP7 is less than 10% of funding, and we are talking 20% of FP7
 - Not enough have to look at the amount of Project Coordinators per country as they have the final responsibility
- It seems difficult to become OpenAIRE compatible







A way forward

OpenAIRE is more than a **EC**-funded project

- OpenAIRE is here to stay
- OpenAIRE will support Open Access in Horizon2020
- OpenAIRE will continue to look beyond EC and into servicing other funders, i.e. Welcome Trust
- OpenAIRE will continue to implement mature infrastructures ...
- Open Access is here to stay
- Open Access can and should be monitored







Think bigger

Using OpenAIRE as leverage for needed change

- To engage research administrators
- To talk to funders about the needed infrastructures for implementing Open Access policies
 - Identification of grants
 - Open and structured exchange of funding information and applications
 - Implementation of IDs for researchers, dataset, publications, grants etc.
- Using your repository for research administration
- Using your CRIS as repository







Nordic partners

- University of Helsinki
- University of Tromsø
- Kungliga Biblioteket (National Library of Sweden)
- Landspitali (The National University Hospital of Iceland)
- Technical University of Denmark







Nordic contact points

- Denmark: Mikael K. Elbæk, Jeannette Ekstrøm, DTU
- Finland: Liisa Siipilehto, Helsingin Yliopiston Kirjasto
- Iceland: Solveig Thorsteinsdottir, Landspitali
- Norway: Jan Erik Frantsvåg, Universitet i Tromsø
- Sweden: Ulf Kronman, Kungliga Biblioteket







See you Again!

Vilnius ICT 5th November: Networking Booth

Vilnius 5th November: Workshop on 'Legal and Sustainability' Issues



www.openaire.eu



@openaire_eu



facebook.com/groups/openaire



in linkedin.com/groups/OpenAIRE-3893548



miel@dtic.dtu.dk



