





Project no. 265863

ACCESS

Arctic Climate Change, Economy and Society

Instrument: Collaborative Project

Thematic Priority: Ocean.2010-1 "Quantification of climate change impacts on economic sectors in the Arctic"

D6.14 – Annual dissemination and exploitation report and plan

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Organisation name of lead contractor for this deliverable: UPMC

P	Project co-funded by the European Commission within the Seventh Framework Programme (2007-2013)				
	Dissemination Level				
PU	PU Public				
PP	Restricted to other programme participants (including the Commission Services)				
RE	Restricted to a group specified by the consortium (including the Commission Services)	Х			
0.0	Confidential only for members of the consortium (including the Commission Services)				

CO Confidential, only for members of the consortium (including the Commission Services)

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1. INTRODUCTION

During the fourth year, the project results were disseminated between partners, stakeholders, policy makers and up to a large public through ACCESS website, newsletters, Policy briefs. In addition, specific dissemination activities were led by partners such as presentations to a public or scientific events, organisation of workshops and summer schools, publications, productions of videos.

Among a total of 136 deliverables, ACCESS provided half of them during the fourth year of the ACCESS project and as many as those delivered during the first 3 years of the ACCESS project. Some of these deliverables are temporarily restricted but most of them are accessible from the public.

The exhaustive list of dissemination activities can be found in section 4.2 "use of dissemination and foreground" of the final report and in Annex 2 of this deliverable.

2. ACCESS WEBSITE

The **ACCESS website** (<u>www.access-eu.org</u>) is the main dissemination tools to present and circulate the information to the widest possible audience.

During the 4th year, the website has been updated regularly with the announcement of workshops, conferences, meetings internal and/or related to ACCESS topics, the deliverables and the peer-reviewed publications list were also regularly published.

On the 86 deliverables submitted in the 4th year, 56 were public and made available to the public at large on the ACCESS website.

3. NEWSLETTERS

In the fourth year (March 2014-February 2015), three electronic **ACCESS newsletters** were produced:

• Newsletter n°9 in October 2014

Main content:

 Report on results discussed at the workshop organised by Work Package 1 (Climate Change and the Arctic Environment) at the Laboratoire d'Océanographie in Villefranche-sur-Mer (LOV), France: the Arctic outlook for the Next 30 Year: Synthesis of Work Package 1 work and predictions.

• Newsletter n°10 in November 2014.

Main content :

 This newsletter is entirely dedicated to the workshop organized on 9-10 July 2014 in Paris in the framework of Workpackage 5 (Governance, Sustainable Development and Synthesis) between ACCESS researchers and representatives of the Indigenous peoples' organizations of the Arctic Council.

• Newsletter n°11 February 2015.

Main content :

- Synthesis workshop and 2nd ACCESS Summer School at the Royal Swedish Academy of Sciences in Stockholm on 22 26 September 2014.
- Presentation of various issues related to Arctic transportation and oil and gas extraction.

The Newsletters were sent to a list of interested parties and submitted to the European Commission as part of the deliverable D6.219, D6.220 and D6.221. All ACCESS Newsletters are available on a dedicated page of the ACCESS website (<u>http://www.access-eu.org/en/publications/access_newsletter.html</u>).

4. ACCESS POLICY BRIEFS

During the 4th year, 3 ACCESS Policy briefs were released:

- Policy Brief n°2: « Shipping in the Arctic: links to Air Pollution and climate change » in January 2015
- Policy Brief n°3 « Seafood production in a changing Arctic » in February 2015
- Policy Brief n°4 "International Maritime Organization's International Code for Ships Operating in Polar Waters (Polar Code)" in April 2015

They are available on a dedicated page of the ACCESS website (<u>http://www.access-eu.org/en/publications/access_brief.html</u>) and sent to the list of ACCESS interested parties.

5. PRODUCTION OF ACCESS MOVIES AND VIDEOS

Short videos illustrating the field work progress have been produced . after each new field work has been completed in order to provide information to decision makers, researchers, industries and the general public and to enhance their understanding of what is going on in the Arctic regarding climate change and its various impacts on transport, tourism, oil and gas extraction as well as governance.

Two videos were produced by Michael Field (UPMC) and released on Youtube:

• August 2014: testing of an ACSA SeaExplorer glider in Tromsø, Norway. Youtube link: <u>https://www.youtube.com/watch?v=Xra3wMdYPbl</u>

• September 2014: deployment of a SeaExplorer glider for a 3-week mission in the central Barents Sea, covering 388km and providing high-resolution physical and biological data. Youtube link: <u>http://youtu.be/Xra3wMdYPbl</u>

One film producted by Anna Stammler-Grossman was presented at the final ACCESS General Assembly and released on DVD

• "Domesticated fish: Farmed and monitored"

6. ACTIVITIES WITH STAKEHOLDERS

Between June 2014 and February 2015, ACCESS partners attended 3 meetings and organized 4 workshops dedicated to stakeholder's consultations.

Meeting attented:

• Seminar The EU in The Arctic, The Arctic in The EU organized by the European Commission and the Arctic Info Center of the University of Lapland in Brussels, Belgium on 11 September 2014.

• Arctic Futures Symposium, organized by the International Polar Foundation in Brussels, Belgium on 14-15 October 2014. The focus was on the peoples of the Arctic and the economies of different regions of the Circumpolar North.

• Arctic Frontiers 9th Annual Conference, « Climate and Energy », organized by Akvaplan-niva in Tromsø, Norway on 18 – 23 January 2015.

Workshops organized:

Five workshops were organized by ACCESS partners during the project's fourth year.

1- Climate Change: The Arctic Outlook for the Next 30 Years: Synthesis of WP1 Work and Predictions organised by Martin Doble (LOV) and led by Peter Wadhams (University of Cambridge) at Villefranche Oceanographic Laboratory (LOV, France) in June 2014. The workshop featured reports on the state of research in ACCESS WP 1 and was enhanced by additional presentations and discussions of the implications of climate changerelated results for other areas of research and sectors.

2- Arctic Indigenous peoples and results of the ACCESS project Paris (France), organized in the framework of WP5 and coordinated by ACCESS partner UPMC (P01) on July 9-10, 2014. The workshop details and results have been reported in ACCESS newsletter n°10, in the workshop's report and will be included in ACCESS synthesis report. Lead researchers from the ACCESS project and representatives of Arctic indigenous peoples organisations joined for an interactive and informative workshop. The collaboration was sponsored by the ACCESS programme and ICE-ARC programme (Ice, Climate, Economics – Arctic Research on Change, coordinated by the British Antarctic Survey,

3- **Cross-sectoral synthesis workshop** (organized by the Beijer Institute at the Royal Swedish Academy of Science) and *second ACCESS summer school* (jointly organised by The Beijer Institute of Ecological Economics and the Stockholm Resilience Centre) in Stockholm on 22-26 September 2014.

The **workshop** was focused on cross-sectoral and synthesis issues.

The main purpose of the **Summer school** was to provide a learning opportunity concerning the various aspects of ongoing changes in the Arctic and its resilience : climate change, the economic sectors of shipping, tourism, fisheries and aquaculture, oil and gas exploitation, as well as governance. The event also provided an important dissemination mechanism for the results and insights from ACCESS research. Seven experts from ACCESS and four experts from the Arctic Resilience Report provided participants with insights into recent developments and presented their views on the emerging opportunities and risks. The summer school was attended by 15 participants from a variety of academic backgrounds and nationalities, mainly Masters' and Doctoral candidates.

4- **Puzzling about sustainability: Coastal economies – sea water interaction,** organized by ACCESS partner University of Lapland (UoL, P21) at the Arctic Centre, Rovaniemi, Finland on 11 November 2014.

5- **Stakeholders workshop on Arctic fisheries** organized by ACCESS partner University of Lapland (UoL, P21) on February 16-17 2015.

7. OTHER DISSEMINATION ACTIVITIES

ACCESS partner UPMC organized at Sophie Barat high school (France) on 6 February 2015 a presentation on the topic: perception of climate change by Indigenous Peoples of Arctic regions and the interactions with scientific research, in particular ACCESS. The presentation also included an overview of the different work profiles in ACCESS (researchers, engineers...) and possible studies and training to work in the field of scientific research in France.

This event was organized in concordance with ACCESS dissemination objectives formulated p204 of the DoW:« (...) for large public outreach activities (exhibitions, conferences, etc.), schools' pupils will be considerably involved, because of a. the importance to motivate these fellows to scientific research, girls in particular (see "gender issues" chapter), showing also other aspects of research and b. realise a more efficient communication, the large public approaching more easily school pupils than professors ».

8. PUBLICATIONS

15 scientific (peer-reviewed) publications have been released during the 4th year (Annex 1).

Annex 1 – List of peer reviewed publication published for the 4th year

Title	Authors	Title of the periodical or the series	Number, date or frequency	Publisher	Place of publication	Date of publication
Quantifying emerging local anthropogenic emissions in the Arctic region: the ACCESS aircraft campaign experiment	Roiger, A., Thomas, JL., Schlager, H., Law, K. ,Kim,J, Schäfler,J, Weinzierl,B, Dahlkötter,F, Krisch,I, Marelle,L, Minikin,A, Raut,JC, Reiter,A, Rose,M, Scheibe,M, Stock,P, Baumann,R, Bouarar,I, Clerbaux,C, George,M, Onishi,T, Flemming,J.	Bulletin of the American Meteorological Society	-	American Meteorological Society	_	01/09/2014
Autonomous observations of solar energy partitioning in first-year sea ice in the Arctic Basin	Caixin Wang , Mats A. Granskog , Sebastian Gerland , Stephen R. Hudson , Donald K. Perovich , Marcel Nicolaus , Tor Ivan Karlsen , Kristen Fossan , Marius Bratrein	Journal of Geophysical Research Oceans	Vol. 119/Issue 3	American Geophysical Union	Washington D.C.	21/03/2014
Regional melt-pond fraction and albedo of thin Arctic first-year drift ice in late summer	D.V. Divine, M.A. Granskog, S.R. Hudson, C.A. Pedersen, T.I. Karlsen, S.A. Divina, A.H.H. Renner, S. Gerland	The Cryosphere	Vol. 9/Issue 2	European Geosciences Union	Web	09/02/2015
Collective action and the risk of ecosystem regime shifts: insights from a laboratory experiment	Caroline Schill, Therese Lindahl and Anne-Sophie Crépin	Ecology and Society	20(1) 48	The Resilience Alliance	Online http://www.ecologyandsociety.org/	01/01/2015
Stubborn fuel tax concessions: The case of fisheries in Norway	John R. Isaksen, Øystein Hermansen and Ola Flåten	Marine Policy	Vol 52 (Feb)	Elsevier	WEB	01/02/2015
Heat loss from the Atlantic water layer in the northern Kara Sea: causes and consequences	Dmitrenko I.A., S. A. Kirillov, N. Serra, N. V. Koldunov, V. V. Ivanov, U. Schauer, I. V. Polyakov, D. Barber, M. Janout, V. S. Lien, M. Makhotin, and Y. Aksenov	Ocean Sciences	Vol. 10	European Geosciences Union	Germany	15/08/2014

Density Stratifi ca tion Effects on the Ice Lead Heat Balance and Perennial Ice Melting in the Central Arctic	Golovin P.N., Ivanov V.V.	Russian Meteorology and Hydrology	Vol. 40/Issue 1	Allerton Press	USA	15/01/2015
Governing complex commons: the role of communication for experimental learning and coordinated management	Lindahl T., Bodin Ö. And Tengö M.	Ecological Economics	vol 111	Elsevier	WEB	01/03/2015
Exploring the utility of quantitative network design in evaluating Arctic sea-ice thickness sampling strategies (This discussion paper is under review for the journal The Cryosphere (TC))	T. Kaminski, F. Kauker, H. Eicken, and M. Karcher	The Cryosphere			http://www.the-cryosphere- discuss.net/9/1735/2015/tcd-9- 1735-2015.html	19/03/2015
The Barents Sea polar front and water masses variability (1980-2011)	L. O. Oziel, J. S. Sirven, and JC. G. Gascard	Ocean Sci. Discuss.	12		www.ocean-sci- discuss.net/12/449/2015/	01/01/2015
Policy instruments and regime shifts	AS. Crépin	Environmental and Resource Economics	submitted	Springer		28/11/2014
Potential disasters can turn the tragedy into success	Therese Lindahl, Anne-Sophie Crépin and Caroline Schill	Environmental and Resource Economics	submitted	Springer		28/11/2014
Remote sensing of aerosols in the Arctic for an evaluation of global climate model simulations, J. Geophys. Res. Atmos., 119, 8169-8188,	Glantz, P., A. E. Bourassa, A. Herber, T. Iversen, J. Karlsson, A. Kirkevåg, M. Maturilli, Ø. Seland, K. Stebel, H. Struthers, M. Tesche, L. Thomason:					16/07/2014

A Standardized Global Climate Model Study Showing Unique Properties for the Climate Response to Black Carbon Aerosols, Journal of Climate Vol. 28/Issue 6 2512-2526, 2015	Sand M. , Iversen T., Bohlinger P. Kirkevåg A. , Seierstad I. , Seland Ø. and Sorteberg A. :					01/03/2015
Small-scale deformation of an Arctic sea ice floe detected by GPS Small-scale deformation of an Arctic sea ice floe detected by GPS and satellite imagery	Byongjun Hwang, Pedro Elosegui, Jeremy Wilkinson	Deep-Sea Research II	In Press (Avaliable Online)	Elsevier	-	01/01/2015

Annex 2 – List of dissemination activities for the 4th year

Type of activities	Main leader	Title	Date	Place
Oral presentation to a scientific event	P21 - UoL	Aliens of the Barents Sea: Social life of climate change models	3-7.3.2014	Cambridge, UK, ACCESS GA
Oral presentation to a wider public	CO01 - UPMC	Adapting to climate change in the Arctic: economic opportunities and governance options Presentation of ACCESS project	26/03/2014	European Commission, Brussels
Oral presentation to a scientific event	P10-NPI	Regional scale albedo of first year Arctic drift ice during summer melt estimated from synthesis of in situ measurements and airborne imagery	28/04/2014	EGU General Assembly 2014 http://meetingorganizer.copernic us.org/EGU2014/EGU2014- 1847.pdf
Flyers	CO01 - UPMC	ACCESS Newsletter No. 8	30/04/2014	Web
Oral presentation to a scientific event	P21 - UoL	Session: Multiple meaning of sea water; presentation: Changin Barents Sea	23/05/2014	ICASS 8, Prince George, Canada
Oral presentation to a scientific event	P08 - NOFIMA	"Fiskerinæringa og klimaendringer - noen funn fra EU- prosjektet ACCESS" (in Norwegian) (The fisheries industry and climate change - some findings from the EU-project ACCESS)	04/06/2014	Trondheim
Oral presentation to a scientific event	P16 - IMPaC	Backbone for Escape, Evacuation and Rescue from Arctic Facilities - a Systematic Approach (OMAE2014- 23085)	10/06/2014	OMAE conference - San Francisco
Oral presentation to a scientific event	P21 - UoL	Cultural sea scape.	20/06/2014	University of Durham, UK, Ice law conference

Oral presentation to a scientific event	P21 - UoL	Barents and Bering Seas indigenous fisheries	23/08/2014	Kamchatka University, Petropavlovsk, Russia
Flyers	P08 - NOFIMA	Indicators for sustainable seafood production	01/09/2014	
Oral presentation to a scientific event	P21 - UoL	Climate change: Translating vulnerability at the community level	02/09/2014	workshop with Antioch University, USA 'Arctic knowledge and experience', Rovaniemi, Finland
Oral presentation to a wider public	P04 - Kiel IfW	Energy Production in the Arctic Ocean-Status Quo and Prospects under Climate Change	15/09/2014	Stockholm
Oral presentation to a scientific event	P21 - UoL	future of the Arctic fisheries	18-19.9.2014	Harward Law School, Harward University, USA
Oral presentation to a scientific event	P21 - UoL	Climate change and Arctic fisheries	25/09/2014	University of Reykjavik, Iceland, IV International workshop on circumpolarity
Oral presentation to a scientific event	P21 - UoL	Vulnerability and adaptation in context: local relevance of climate change in the Barents region	28/10/2014	Sapporo, Japan, Sustainability weel
Oral presentation to a scientific event	P21 - UoL	Arctic fisheries: social and legal concern of climate change	29/10/2014	Hobard, Australia, Polar Law symposium
Oral presentation to a scientific event	P20 - ESRI	Cutting Corners with Distance: Potential for Arctic Shipping	07/11/2014	Galway, Ireland
Organisation of Workshops	P21 - UoL	Arctic capture fisheries and aquaculture: Challenges of sustainability concept	12/11/2014	Rovaniemi, Finland, stakeholder workshop 'Puzzling sustainability'
Oral presentation to a scientific event	P21 - UoL	Arctic fisheries: Climate, change and sustainability	18/11/2014	Arctic Centre, Rovaniemi, Finland, Climate change, adaptation and sustainability in the Arctic: Assessir alternatives towards and beyond Paris 2015
Oral presentation to a scientific event	P21 - UoL	Sea scape and Arctic tourism	30/11/2014	University of Versailles, France

Vidéo	P21 - UoL	Domesticated fish: Farmed and monitored	01/12/2014	documentary film, final version
Flyers	CO01 - UPMC	ACCESS Newsletter No. 9	05/12/2014	Web
Flyers	CO01 - UPMC	ACCESS Newsletter No. 10	05/01/2015	Web
Flyers	CO01 - UPMC	ACCESS Policy Brief n°2	08/01/2015	Web
Oral presentation to a scientific event	P21 - UoL	Changing sea ice characteristics and land use among reindeer herders	12/01/2015	Franco-German Seminar: "Gateway to the Arctic", Potsdam, Germany
Organisation of Workshops	P21 - UoL	Presentation of ACCESS results, WP3 and stakeholder contribution (book preparation)	05/02/2015	Bugoynes, Finnmark
Oral presentation to a wider public	CO01 - UPMC	Presentation in high school	06/02/2015	Paris
Flyers	CO01 - UPMC	ACCESS Newsletter No. 11	10/02/2015	Web
Organisation of Workshops	P21 - UoL	Fishers movement	16-17.02.2015	Rovaniemi, Finland, stakeholder workshop Fish-fishers- fisheries:scientific and local knowledge convergence'
Flyers	CO01 - UPMC	ACCESS Policy Brief n°3	20/02/2015	Web
Media briefings	CO01 - UPMC	Press conference during the ACCESS final General Assembly	26/02/2015	Vilanova i la Geltru
Oral presentation to a scientific event	P21 - UoL	Domesticated fish:Farmed and monitored' documentary; How do we see the sea? Poster exhibition; 'Impact of climate change and coastal communities'-WP session	26/02/2015	Vilanova i la Geltru

Oral presentation to a scientific event	P16 - IMPaC	Engagement in the Arctic – the 'MODular ARCtic Hub (MODARC)' Facilitates the 'KICK-OFF' (OMAE2015- 41225)	02/06/2015	OMAE conference - San Francisco
Flyers	CO01 - UPMC	ACCESS Policy Brief n°4	21/04/2015	Web