The Research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 262584, JERICO

TNA PROJECT REPORT

2nd Call of Proposals
14 January – 27 March, 2013

A) General Information

Proposal reference number(1)	CALL_2_3
Project Acronym (ID) (2)	RAD
Title of the project(3)	Radiometry Assessment of optical Data for ocean color applications
Host Research Infrastructure(4)	CNR MPL – ACQUA ALTA
Remote access **Starting date - End date**(5)	 12/03/2014 – 27/06/2014
In situ visits **Starting date - End date**	(duplicate for each in situ stay of the user group) 12/03/2014 – 14/03/2014 21/06/2014 – 27/06/2017
Name of Principal Investigator(6) **Home Laboratory** **E-mail address** **Telephone**	Dr. Kai Sørensen Norsk Institutt for Vannforskning – NIVA, Department of Oceanography and Remote sensing, Gaustadalleen 21, NO-0329 Oslo, Norway kai.sorensen@niva.no + 47 90732129
Additional users (7)	Pierre.Jaccard, Emanuele Reggiani (NIVA) Giuseppe Zibordi (JRC)

B) Project objectives (max. 250 words) (8)

The proposed activity is intended to support the assessment of optical radiometric in situ measurement commonly applied to support satellite ocean color multi-mission programs. Primary objective of the proposed activity is the inter-comparison of manned (micrPRO), semiautomatic (TriOS-RAMSES) and autonomous (CIMEL) radiometric instrumentation measurements to generate methods and protocols for the generation of high quality in situ radiometric data products. This will improve the measurement protocols for optical above water radiometric measurements on ships of opportunity to be used in satellite data product validation, and development of bio-optical algorithms for preparation for the new Sentinel satellite validation programs.

C) Main achievements and difficulties encountered (max. 250 words) (9)

The project was carried out according to the plan without any major problem except for a few-day data handling issue at the beginning of operations. Calibration of TriOS sensors was performed at JRC before and after the period of measurements.The experiment was ended during an extended field inter-comparison of optical radiometers with additional international teams from different research institutions (i.e., Institute of Oceanology of the Polish Academy of Science, University of Massachusetts Boston and Royal Belgian Institute of Natural Sciences). This is expected to further extend the project visibility and scientific return.

D) Dissemination of the results [10]

The data analysis is likely to be completed during the forthcoming 6-12 months. It is expected that results may lead to production of at least one main paper in a peer-review journal.

E) Use of the Infrastructure/Installation [11]

	In situ	By remote
Nr. of Users involved	5	2
Access units (days/months/etc)	8	107
In situ stay day / Remote Access duration	8	107

F) User project scientific field

Main field [12]	Earth Sciences & Environment
Scientific description [13]	Marine Science/Oceanography

H) Technical and Scientific preliminary Outcomes (max. 2 pages) [14]

The project ensured the inter-comparison of different optical radiometer systems and methods. The inter-comparison activities were performed using autonomous systems during the whole project duration (March 12-June 27) while the manned inter-comparisons extended to a number of additional instruments and methods were restricted to the final stage of the project from June 21 through 27.

The field activities were followed by a laboratory inter-calibration of the field radiometers at the JRC from June 30 through July 4. This latter part of the project has seen the active participation of the National Physical Laboratory with the objective of contributing to the determination of calibration uncertainties.

The completion of the data analysis and actual start of data inter-comparison is planned for the end 2014. This does not allow to presently illustrating any result. Still, measurements from the autonomous (CIMEL-CE318) radiometer system are accessible at the AERONET Ocean Color Web page (**http://aeronet.gsfc.nasa.gov/cgi-bin/type_one_station_seaprism_new?site=Venise&nachal=0&year=22&aero_water=0&level=2&if_day=0&if_err=0&year_or_month=1**)

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Guidelines for the TNA Project Report

This report is due within one month after the completion of the JERICO TNA project by the User Group Leader (P.I.) and should be submitted to the **JERICO TNA Office** (**jerico.tna@ismar.cnr.it**) and the **Scientific Site Coordinator** at the hosting facility with a copy to the **JERICO Coordinator** (**jerico@ifremer.fr**).

An online "user group questionnaire" has also to be completed by each **Group Leader** of a user-project supported under JERICO as soon as an experiment has come to an end - you will find it here: **http://cordis.europa.eu/fp7/capacities/questionnaire_en.html#fnote**.

NOTES:

Refunding of the TA reimbursement will be processed as soon as the JERICO TNA Office, the Scientific Site Coordinator and the JERICO Coordinator will received this report.

Part of the information collected with this report will be used to fill in the European Commission MS Access database. Following article 4.4.2, the User Group PI will be asked by the JERICO Coordinator to update it at the reporting deadlines.

Notes for the compilation

(1) It is the reference number assigned to the proposal by the TNA-Office.
(2) It is the user-project identifier and must be unique under the grant agreement and for its lifetime. The length cannot exceed 20 characters.
(3) Title for the approved proposal. The length cannot exceed 255 characters.
(4) Name of the installation/infrastructure accessed with this project. If more than one installations/infrastructures are used by the same project, please list them in the box.
(5) Specify starting and end date of the project (including eventual preparatory phase before the access).
(6) Fill with the full contact of the Principal Investigator (user group leader).
(7) List the full users team (name and affiliation) that made direct use (physically or remotely - please specify) of the installation/infrastructure under the direction of the group leader.
(8) Write the short-term, medium and long-term objectives of project. Use no more than 250 words.
(9) Describe briefly the main achievements obtained and possible impacts, as well as possible difficulties encountered during the execution of the project. Use no more than 250 words.
(10) Describe any plan you have to disseminate and publish the results resulting from work carried out under the Transnational Access activity in JERICO: scientific articles, books - or part of them -, patents, as well as reports and communication to scientific conferences, meetings and workshops. Highlight peer-reviewed publications. Users supported under the transnational access activity are encouraged, as far as possible, to make available on open repositories their publications. Acknowledgement to EC and JERICO is requested following article 4.5 of the “End-User“ Agreement.
(11) Indicate the number of users involved in the activity (the P.I. plus the users described at point 6), the amount of access to the installation/infrastructure and the length of in-person stay at the installation or the operator laboratory (e.g. for preparing the experiment).
(12) See Annex, First column.
(13) See Annex, Second column.
(14) Describe in detail results and main findings of your experiment at the present stage.

Annex of the TNA Project Preliminary Report - User-Project Scientific fields

Main field	Scientific description
Physics	Astronomy/Astrophysics/Astroparticles Atomic & molecular physics Condensed matter physics High energy and particle physics Nuclear physics Plasma physics Quantum electronics & optics Other - Physics
Chemistry	Chemistry
Life Sciences & Biotech	Food quality & safety Agriculture & Fisheries Medicine Veterinary sciences Molecular & cellular biology Other - Life Sciences & Biotech
Earth Sciences & Environment	Global Change & Climate Observation Ecosystems & Biodiversity Natural Disaster & Desertification Marine Science/Oceanography Water Science Hydrology Other – Earth Science Other – Environment
Engineering & Technology	Aeronautics Space New production processes Nanotechnology & Nanosciences Transport Other - Engineering & Technology
Mathematics	Mathematics
Information & Communication Technologies	IST for citizens, businesses & organizations Trust & Security Communication & Networks Computing & software technologies Components & Micro-systems Knowledge & interface technologies Other - ICT
Material Sciences	Knowledge based multifunctional materials Other - Material Sciences
Energy	Sustainable energy systems Fusion Other - Energy
Social Sciences	Economics Political Sciences Educational sciences Law Demography Other - Social Sciences
Humanities	Arts Hystory Languages Other - Humanities