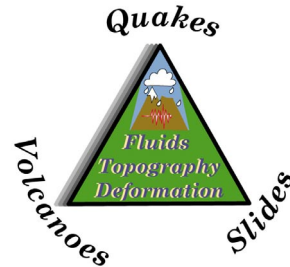


RETINA

Realistic Evaluation of Temporal Interaction of Natural hazards



6-Month Management Progress Report

Version 1.2

30 September 2002

	Name	Institution	Signature	Date
Prepared by	BARDEY Philippe FEIGL, Kurt	ACRI CNRS		17/09/02
Verified by	Olivia Lesne	ACRI-ST		30/09/02
Distributed to: (mark all applicable boxes)				
		<input checked="" type="checkbox"/>	RETINA Coordinator	
		<input checked="" type="checkbox"/>	RETINA Consortium Suppliers	
		<input checked="" type="checkbox"/>	RETINA Consortium End Users	
		<input checked="" type="checkbox"/>	European Commission	
			External, for publication	

 <p>RETINA</p>	<p>6-Month Management Progress Report</p>	<p>Date: 30/09/2002 Page: 2/8 Contract: EVG1-CT-2001-00046</p>
--	--	--

TABLE OF CONTENTS

1 INTRODUCTION 4

2 DESCRIPTION OF THE ACTIVITIES CARRIED OUT IN THE PERFORMANCE OF THE PROJECT 4

3 PROGRESS ACHIEVED ON THE MANAGEMENT SIDE..... 4

4 DEVIATIONS FROM THE WORKPROGRAMME 5

5 DELIVERABLES 5

6 PROJECT MEETINGS AND TRIPS 6

7 PLANNED PUBLICATIONS ON RETINA THEMES: 7

 <p>RETINA</p>	<p>6-Month Management Progress Report</p>	<p>Date: 30/09/2002 Page: 3/8 Contract: EVG1-CT-2001-00046</p>
--	--	--

 <p>RETINA</p>	<p>6-Month Management Progress Report</p>	<p>Date: 30/09/2002 Page: 4/8 Contract: EVG1-CT-2001-00046</p>
--	--	--

1 Introduction

This document reports on the activities which were performed from the 1st February 2002 to 26 July 2002, i.e. the six first months of the project. This report has been written in a clear and concise style to provide full visibility on the progress of the RETINA project for the technical and managerial aspects.

2 Description of the activities carried out in the performance of the project

Six months after kick-off, the RETINA project is basically on track, despite several significant personnel modifications since submitting the proposal. We have completed the kick-off and 6-month meetings as planned.

The 6-month meeting to review the User Requirements Document was particularly fruitful in that it brought together decision-making “users” responsible for civil defence in Iceland, the Azores and the Alps. Despite wide differences in types of risk, administrative “culture” and public perception of both, the users communicated well, shared experiences, and achieved consensus in the form of the User Requirements Document, delivered as D13 at this 6-month milestone.

All the other deliverables due at M6 have been delivered, with two exceptions (D15 and D16).

In addition, the RETINA project has established “clustering” working collaborations with the following European and national research programmes:

- SARAÇORES (POCTI/CTA/36281/99) coordinated by Prof. Luis Mendes Victor (Lisbon) concerning WP4320.
- SAMOA - Surveillance et Auscultation de MOuvements gravitaires Alpains (French A.C.I. CATNAT) coordinated by C. Delacourt (Lyon) concerning WP 4220.
- PREPARED (Approved 5th framework project in final phase of contract signing) coordinated by Ragnar Stefansson concerning the Iceland lab.

3 Progress achieved on the management side

- The advance payment has been distributed to each partner on 18/03/2002.
- Items placed on the RETINA web site:
 - Description of work
 - Project flow
 - Minutes of meetings
 - Participants of meetings
- Modifications to personnel:
 - Y. Gugliemi joined GEOSCIENCES.AZUR to lead the effort on La Clapière landslide.
 - Rita Rodrigues joined CVUA for GPS.
 - Amy Clifton and T. Arnadottir joins NVI

 <p>RETINA</p>	<p>6-Month Management Progress Report</p>	<p>Date: 30/09/2002 Page: 5/8 Contract: EVG1-CT-2001-00046</p>
--	--	--

- Post-doctoral position for TOUL is currently being advertised.
- O. Lesne joined ACRI-ST, replacing J. Haase for GPS.
- E. Calais left GEOSCIENCES.AZUR. He was temporarily replaced for 6 months in early 2002 by P. Tregoning.

4 Deviations from the Work Programme

- **WP 4340:** The cruise proposal submitted in January 2002 for ship time aboard the N/O Suroit from IFREMER was rejected in June, 2002. Discussions are underway concerning revisions prior to submitting the proposal again in 2003.
- **WP 4310:** Due to reductions that were introduced into the budget during the contract negotiation, but never into the Description of Work, CVUA will install and operate only 2 permanent GPS sites on San Miguel. Similarly, the NRT CGPS will be developed and tested in the Alps rather than deployed in the Azores.

5 Deliverables

D 1 Project web site (ACRI-ST) Re CO

The RETINA project maintains a web site at <http://www.acri.fr/retina/retina.html>. It consists of two parts: public and private. The latter is accessible by password to project participants and CE project managers only.

D 2 KO meeting minutes (ACRI-ST) Re CO

<http://www.acri.fr/retina/retina.html>

D 3 6 month progress report (ACRI-ST) Re CO

This document. <http://www.acri.fr/retina/retina.html>

D 11 project internal web site (ACRI-ST) Re CO

<http://www.acri.fr/retina/retina.html>. This part of the web site is accessible by password to project participants and CE project managers only.

D 12 User working group meeting minutes (ACRI-ST) Re PU

<http://www.acri.fr/retina/retina.html>

D 13 User requirements document (ACRI-ST) Re CO

Version 1.2 has been reviewed by all participants and placed at <http://www.acri.fr/retina/retina.html>. We have chosen to leave open the possibility of minor modifications prior to M12.

D 14 Iceland geothermal users requirements report. (NEA) Re CO

<http://www.acri.fr/retina/retina.html>.

D 15 Internal databases on topography, inhabited areas and basic infrastructures (CVUA) Db CO

The following data bases for the Azores have been entered into the ArcInfo Geographic Information System for San Miguel Island (Azores), maintained at CVUA:

- Topography: X meter posting, UTM projection, Z meter precision.
- Inhabited areas
- ???

 <p>RETINA</p>	<p>6-Month Management Progress Report</p>	<p>Date: 30/09/2002 Page: 6/8 Contract: EVG1-CT-2001-00046</p>
--	--	--

D 17 Methodology for combining INSAR and CGPS for maximum benefits (TOUL) Me RE

An algorithm for estimating fault slip at depth from joint inversion of INSAR and GPS measurements has been validated on an earthquake in Turkey. Using Singular Value Decomposition, it is published as:

- Feigl, K.L., F. Sarti, H. Vadon, P. Durand, S. McClusky, S. Ergintav, R. Bürgmann, A. Rigo, D. Massonnet, and R. Reilinger, Estimating slip distribution for the Izmit mainshock from coseismic GPS, ERS-1, RADARSAT and SPOT measurements, Bull. Seism. Soc. Amer., 92 (1), 138-160, 2002.

A similar approach has been applied to an earthquake in Iceland. Using simulated annealing, it will be submitted as:

- Rikke Pedersen, Sigurjon Jonsson, T. Árnadóttir, Freysteinn Sigmundsson, and K.L. Feigl, Fault slip distribution of two June 2000 MS6.6 earthquakes in South Iceland, from joint inversion of InSAR and GPS, Earth, Plan. Sci. Lett., to be submitted, 2002.

D 16 Internal databases on Civil Protection facilities (SRPCBA) Re CO

The following data bases for the Azores have been entered into the ArcInfo Geographic Information System for San Miguel Island (Azores), maintained at CVUA:

- ?

6 Project meetings and trips

- The kick-off meeting has been held in Ponta Delgada (Azores) on 3 February 2002. It was preceded by a one-day field trip to RETINA study areas on San Miguel for all attendees. The minutes are available as part of the public part of the RETINA web site <http://www.acri.fr/retina/retina/KickoffAgenda.htm>
- A Users' meeting on 15 March 2002 at ACRI-ST company (Sophia-Antipolis, France), was attended by the French partners (Alps group) and one member of the Cambridge University, John Haines.
- The three working groups have met separately in their respective natural laboratories: the Iceland group on June 8, the Alps group on September 16-17, and the Azores group on **XXX**.
- The user working group meeting has been held in Reykjavik (Iceland) 6-9 June 2002. As planned, this meeting brought together users from the civil defence community with scientists from the geophysical community. This meeting also included a brainstorming session about and field trip to, RETINA study areas near Hengill volcanic area. The minutes are available as part of the public part of the RETINA web site <http://www.acri.fr/retina/retina/KickoffAgenda.htm>
- Further to the request of EC, a RETINA representative attended a meeting gathering all natural hazard European projects occurred in Brussels on 8 and 9 July 2002.
- A special session on RETINA themes has been scheduled at the joint assembly of EGS-EUG-AGU. Entitled "G13 Stress Transfer Between Earthquakes, Volcanos, and Landslides", it will be convened by RETINA participants K. Feigl and F. Sigmundsson. It is sponsored by the Geodesy section and co-sponsored by SM, GD, NH, VGP & TS. It will take place in Nice, France 7-11 April, 2003. This session is open to all. Abstracts are due January 15, 2003.
- The first annual (M12) RETINA meeting for "supplier" participants has been scheduled for the following weekend (12-13 April, 2003) in Nice, France. It will include a one-day field trip to the RETINA study landslide at La Clapière, France.

 <p>RETINA</p>	<p>6-Month Management Progress Report</p>	<p>Date: 30/09/2002 Page: 7/8 Contract: EVG1-CT-2001-00046</p>
--	--	--

- The second annual (M24) RETINA meeting for “supplier” participants has been scheduled in Cambridge 16-17 January, 2004.

7 Planned publications on RETINA themes:

- Feigl, K.L., F. Sarti, H. Vadon, P. Durand, S. Mclusky, S. Ergintav, R. Bürgmann, A. Rigo, D. Massonnet, and R. Reilinger, Estimating slip distribution for the Izmit mainshock from coseismic GPS, ERS-1, RADARSAT and SPOT measurements, *Bull. Seism. Soc. Amer.*, 92 (1), 138-160, 2002.
- Rikke Pedersen, Sigurjon Jonsson, T. Árnadóttir, Freysteinn Sigmundsson, and K.L. Feigl, Fault slip distribution of two June 2000 MS6.6 earthquakes in South Iceland, from joint inversion of InSAR and GPS, *Earth, Plan. Sci. Lett.*, to be submitted, 2002.
- Freysteinn Sigmundsson, Rikke Pedersen, Carolina Pagli, Kurt Feigl, Erik Sturkell, Styles of Volcano Deformation in Iceland Mapped by InSAR, abstract submitted for Fall Meeting of American Geophysical Union.
- Freysteinn Sigmundsson, Rikke Pedersen, Thora Arnadottir, Pall Einarsson, Erik Sturkell, Halldor Geirsson, and Kurt Feigl, Inferring Volcano Dynamics and Magma Budget from Crustal Deformation Studies at Icelandic Volcanoes, abstract submitted for Fall Meeting of American Geophysical Union.