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| **Consortium Members** |
| Logo of the consortium members |

ESA CLIMATE CHANGE INITIATIVE – PHASE 2

ECV Sea Level- Technical proposal

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| [Reference] |
| **Technical proposal** |
| 1. 0 |
| 07/06/2013 |

**Executive Summary**

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| **Validation of the proposal.** |
|  | Written by | Checked by | Approved by | Application authorized by |
| Name | *M. Ablain G. Larnicol* | *G. Larnicol* | *S. Limouzin* | *Christophe Vassal* |
| Photo (option) |  |  |  |  |
| Visa |  | [Checker] | [Approver] |  |

NB : Merci de veiller à l’application de la décision CLS sur la délégation de signature.

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# Introduction (resp CLS)

# Understanding of the requirements (resp CLS)

The Tenderer shall demonstrate their understanding of the requirements. They shall provide a thorough analysis

of the GMECV/CCI Programme Objectives (Section 2.2 of the Statement of Work), of the GMECV/CCI

Programme Outputs (Section 2.12 of the Statement of Work) and of the Cardinal Requirements (Section 2.4) and

describe what they plan to achieve on a three-year timescale.

Each Proposal shall include a critical review of all Statement of Work requirements:

a) from the relevant scientific user communities’ and climate research programmes’ perspective

b) from the perspective of system sustainability and operability.

# The Sea Level ECV: Status from phase 1 and Phase 2 rationale (resp CLS)

## The sea level ECV in the context of the Climate change

Resp: LEGOS/CLS

## Evolution of the Phase 1 system and ECV production strategy

Resp: CLS

Answer to §3.2.1 (Improving on the results of phase 1), §3.2.2 (evolution to a sustainable system), §3.2.3 (cyclic annual workflow) of SoW

## Coordination with ongoing and complementary activities

Resp: CLS

Answer to §3.2.8 (coordination with on going and complementary activities)

Only concern EO activities

## Product validation and user Assessment strategy

Resp: UoH/LEGOS

Answer to §3.2.6 (validation and user assessment)

## Links with the International Climate community

Resp: UoH/LEGOS

Answer to §3.2.4 (links to international climate research community)

# Detailed Technical Proposal

## Task 1000: User uptake and international coorperation (resp NERSC)

### Task 1100: URD, PSD, CECR, DARD review and update (resp NERSC/CLS)

### Task 1200: Define an International scientific intercomparison exercice (resp LEGOS)

### Task 1300: Participation to CMUG meeting (resp NERSC/CLS)

## Task 2000: Thematic investigations (resp CLS)

### Task 2100 : Integration and development of new corrections (resp CLS)

####  Task 2110: New orbits solution for T/P, Jason1/2 (resp GFZ)

#### Task 2120: xxxx (resp IsardSat)

####  task 2130: External contributions (resp CLS)

### Task 2200: Improvement of data quality and observability in Arctic (resp DTU)

#### task 2210: xxx (resp DTU)

#### task 2220: xxx (resp CLS/PML)

### Task 2300: Improvement of the sea level in coastal area (Resp NOC)

#### Task 2310: Xxx (resp NOC)

#### Task 2320: xxx (resp UoP)

### Task 2400: Impact and sensitivity to atmospheric fields (Resp UoP)

#### Task 2410: Wet tropo corrections (resp UoP)

#### Task 2420: Dynamique atmospheric correction (resp CLS)

### Task 2500: Impact of loss of ENVISAT and S3 preparation (Resp CLS)

### Task 2600: Round-Robin exercise (Resp CLS)

## Task 3000: System Evolution (Resp CGI)

### Task 3100: Review of Phase 1 and development plan for phase 2 (resp CGI)

### Task 3200: System evolution (CLS)

### Task 3300: Participation to System Engineering and Data Standards working group (CGI)

#### Task 3310: System Engineering working group (resp CGI)

#### Task 3310: Data standards working group (CLS)

## Task 4000: Operational production generation (Resp CLS)

### Task 4100: Complement the sea level ECV (CLS)

#### Task 4110: First extension [2011-2012]

#### Task 4120: Second extension [2013]

### Task 4200: Sea Level ECV product generation [193-2014] (CLS)

### Task 4300: Sea Level ECV product internal validation (CLS)

## Task 5000: Assessment of output products by Climate users (Resp LEGOS)

### Task 5100: Assessment by CRG (resp UoH)

#### Task 5110: Assessment of SL ECV quality jointly with other ECVs via global assimilation (resp UoH)

#### Task 5120: Assessment via multi-model approach with focus on tropics (ECMWF)

#### Task 5130: Assessment in Arctic using a multi-ECV approach (NERSC)

### Task 5200: Error characterization (Resp LEGOS)

#### Task 5210: Sea Level Closure Budget (resp LEGOS)

#### Task 5220: Sensitivity studies (Resp CLS)

### Task 5300: Intercomparison exercice (Resp LEGOS)

# Data procurement plan

Resp: CLS

# Compliance Matrix

Resp: CLS

1. Issues

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|  **Chronology Issues:** |
| Issue: | Date: | Reason for change: | Author: |
| 1-0 | 05/11/2010 | Initial Issue | M. Ablain G. Larnicol |
| 2-0 | 07/08/2010 | Revised by the GAC | DT/AQM |
| 3-0 | 19/12/2012 | Adding ok custom properties | DT/AQM |

1. List of applicable and reference documents

AD Plan d’assurance produit de CLS
CLS-ED-NT-03-394

AD Applicable Document title
Document reference

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| --- |
|  |

RD 1 Manuel du processus Documentation
CLS-DOC

RD Referenced Document title
Document reference

|  |
| --- |
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1. List of items to be confirmed or to be defined

Lists of TBC:

Example of text to be confirmed 2

Lists of TBD:

Example of text to be defined 2

1. List of tables and figures

List of tables:

Table 1= table xxxx for example 2

List of figures:

Figure 1= figure xxxx for example 2

1. List of acronyms

|  |  |
| --- | --- |
| TBC | To be confirmed |
| TBD | To be defined |
| AD | Applicable Document |
| RD | Reference Document |