

D2.2.1 Quality Manual for the implementation of EUROSION Database



**European Commission Contract nr. B4-
3301/2001/329175/MAR/B3**

IGN France International
Paris, 31st January 2002

KEYWORDS	Quality, Quality Insurance Plan, EUROSION database, Updating, Production, Metadata documenting, subcontracting, ISO Standards
SUMMARY	This document states the quality procedures to be applied within work package 2 by all members of the Consortium and their subcontractors involved in the Work Package 2

Version	Date		Title	Name
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V1.0	10/10/02	Written by	WP2 Leader	PICHON Hervé
V1.0	15/10/02	Checked by	WP2 Quality Assistant	ORLOVA Nadejda
V2.0	25/01/03	Written by	WP2 Quality Assistant	ORLOVA Nadejda
V2.0	31/01/03	Checked by	WP2 Leader	PICHON Hervé

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1. INTRODUCTION

The aim of this document is to monitor the quality of the “Eurosion database” implementation and to announce the rules of internal management within the EUROSION consortium.

1.1. PROJECT FRAMEWORK

The project “EUROSION” launched by the European Commission consists in creating the Coastal Erosion Database to provide the information background for European Parliament’s decisions for coastal zone management.

The contract was awarded in December 2001 to a project consortium under the lead of the National Institute for Coastal and Marine Management (RIKZ) of the Dutch Ministry of Transport, Public Works and Water Management. The other partners are:

- EUCC - The Coastal Union
- The international branch of the French Geographic Institute (IGN FI)
- The French Environment Institute (IFEN)
- The Autonomous University of Barcelona (UAB)
- The European Information Technology EADS SD&E (ex-MATRA S&I)
- The French Institute for Geological and Mining Research (BRGM).

The project will implement seven (7) work packages:

- WP1 – Project Management
- WP2 – European Level Data Base
- WP3 – Guidelines for Developing Local Information Systems
- WP4 – Review of Experience in Erosion Management
- WP5 – Formulation of Policy Recommendations
- WP6 – Dissemination and Networking
- WP7 – Defining User Requirements and Feedback

The project will provide a data base (WP 2) encompassing existing information, which will complement and be compatible with related information systems developed or under construction. It will feature:

Administrative information: terrestrial and marine administrative units.

Physical information: infrastructure, hydrographic features, elevation and bathymetry, land cover, coastal erosion, hydrodynamics and sea level, sediment flows from river basins

Socio-economic information: population, economics, driving forces, legal status and coastal reporting.

This manual supplies the quality assurance requirements in terms of:

- Global description of quality organization within consortium

ABSTRACT

This document is the second draft of Quality manual for implementation of EUROSION database (D2.2.1). It describes global quality management approach within consortium assuming compliance of the EUROSION database with its terms of reference defined in the Inception report. Quality procedures presented in this document concern

- Respect of the technical specifications of EUROSION database and of the data involved in the database
- The production process (organization, stages, methods, means) and associated quality controls
- Interaction between the partners within consortium
- Relations between partners and their Subcontractors

Internal quality procedures chapters have been completed by all EUROSION consortium members involved in Work Package 2.

- Procedures of the interaction between the partners within consortium
- Procedures between partners and their Subcontractors
- Respect of product specifications
- Respect of the technical specifications of the data involved in the database
- The production process (organization, stages, methods, means) and associated controls
- Documentation in use

1.2. DOMAIN OF APPLICATION

The quality control has to be performed in all stages of the project and at all levels. Common quality procedures have been defined for the work within the consortium to regulate the everyday activity as well as exchanges between the partners. Thus every consortium member has been involved to communicate within this document its proper internal quality procedures to be applied in its domain of competencies.

NORMATIVE BACKGROUND

Within the EUROSION framework, EADS S&DE is in charge of designing the European Level Database for coastal erosion. In order to prepare this task, an analysis of the existing metadata standards recommended by the European Commission, in particular the Dublin Core Metadata Initiative and the ISO/DIS 19115 has been undertaken. The results of this study have been described in the D2.3.2 deliverable: *Metadata Standards Analysis and Catalogue Interoperability Study*.

Based on this approach the datasets quality will be evaluated using the ISO 19115 standard characteristics and evaluation procedures.

The International Standard can be used when

- Identifying and reporting quality information,
- Evaluating the quality of a dataset,
- Developing product specifications and user requirements,
- Specifying application schemas.

ISO 19114 and 19115 describe schemas for reporting quality information.

ISO 19114 provides the framework for evaluating the quality of a dataset.

ISO 19113 provides principles for describing the quality for geographic data and concepts for handling quality information for geographic data.

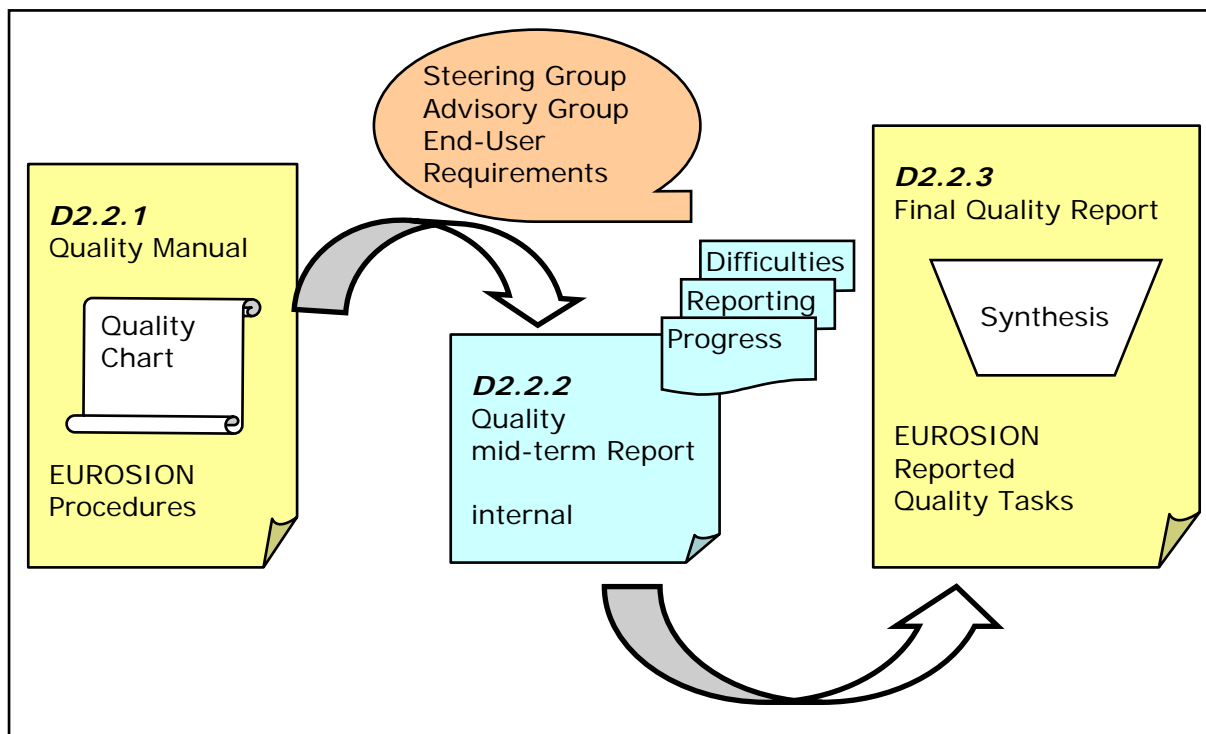
Part of these references will be applied as for quality purposes and put in annex of this document in an advisory capacity.

1.3. QUALITY DELIVERABLES' SCHEDULE

The present *Quality Manual for Implementation of EUROSION level database* represents the first deliverable regarding the quality management (D2.2.1), mainly initiating the quality process, describing common or specific procedures, relations between partners involved in the project.

It will be followed by an internal *Quality mid-term report* (D.2.2.2) stating progresses, reportings and difficulties, closely to the advices and remarks issued from the Steering Group and the Advisory Group, taking into account identified end-users requirements and finally mentioning new improvements.

This internal document will be a basis for the completion of the expected *Final Quality Report* synthesizing quality policy, tasks led and results gathered throughout the project.



Global Quality Management schema

2. GLOBAL QUALITY APPROACH

Global quality approach of the EUROSION project consists in a constant follow-up through all the stages of the project implementation. All participants have to elaborate and follow their own internal Quality Insurance/Management Plan to provide coherent work process and document base to possible appraisal or audit.

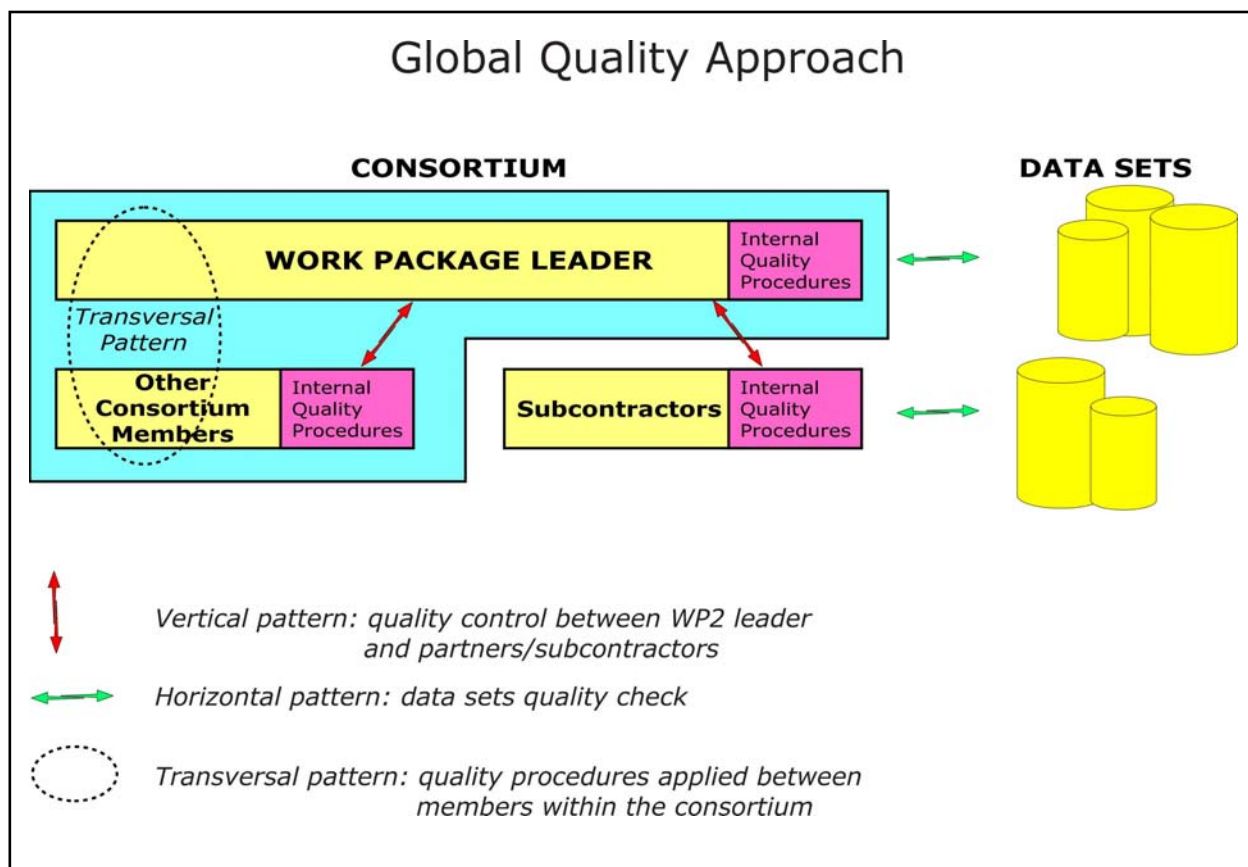
Quality controls for databases or products to be integrated into the EUROSION database is to be performed with respect to the terms of reference. Relations between various participants are clearly regulated in terms of contracts and relations through elaboration of common quality parameters on the foreseen and final results. Global procedures on consortium members collaborations are represented on quality control schemes.

2.1. TERMS OF REFERENCE

The EUROSION database will be consistent with the following specifications:

- Data type: Geo-coded vector data (GIS)
- Delivery format: ArcInfo export (.e00)
- Expected accuracy: max. 20 meters (RMSE)/ max. 15 meters for heights; compatible with scale 1:100.000
- Horizontal Reference system: European Terrestrial Reference System 89 (ETRS89)
- Vertical Reference System: European Vertical Reference System (EVRF2000)
- Metadata standards: ISO 19115 for metadata description

2.2. EUROSION QUALITY CONTROL SCHEME



2.2.1 Horizontal pattern

Horizontal pattern is a set, which encompasses all the mechanisms to control the quality of internal activities of each consortium member involved in WP2. As a major part of WP2 concerns - working with geographic datasets taken as such or improved by

EUROSION consortium - quality management has to be considered carefully since the project cannot be responsible for the poor, or wrong quality parameters of data sets furnished by external providers. To prevent this risk, EUROSION consortium proposes a "Quality Chart", based on the proposals of the Inception Report, which would operate at three levels:

Level 1: The project will only guarantee the quality of data the consortium will produce (e.g. extension of LaCoast and CORINE Coastal Erosion to applicant countries).

Level 2: For datasets the project will acquire from external sources, consortium members will carry out quality tests and will document discrepancies between quality parameters as published by the data provider and the results of their quality tests. But EUROSION goal is not to improve the quality of these data.

Level 3: The project will not guarantee at all the quality of data sets for which the project will mention only metadata. The consortium will nevertheless state very clearly that quality parameters as published in the metadata are those given by the data provider but were not been controlled by EuroSION.

from Inception Report

This horizontal pattern concerns all consortium members dealing with data sets, as well as to create/update/extent data or to design data/metadata structure. They will use defined methods to control the quality of the existing data and compliance of the new data produced by other partners or Subcontractors. The Subcontractors are also concerned by this pattern because they have to produce the data in respect with the norms imposed by the quality chart hereto.

Every consortium member involved in data sets update, extension, harmonization, documentation or integration has detailed its own quality checking method in chapter 3.

2.2.2 Vertical pattern

Vertical pattern contains:

- The relations between the Work Package 2 leader (IGN FI) and the members of the consortium involved in WP2.
- The relations between a consortium member and its Subcontractors.
- The reporting to the Team Leader for the Payment (RIKZ to Consortium Member) within the WP2.

2.2.3 Transversal pattern

Transversal Pattern describes methods of working within the consortium.

3. HORIZONTAL PATTERN - INTERNAL QUALITY

PROCEDURES

Different quality control methods corresponding to activities effectuated within WP2 are described in this chapter. Essentially these quality controls are divided into three categories:

- Data quality controls
- Metadata quality controls
- Database structure quality controls

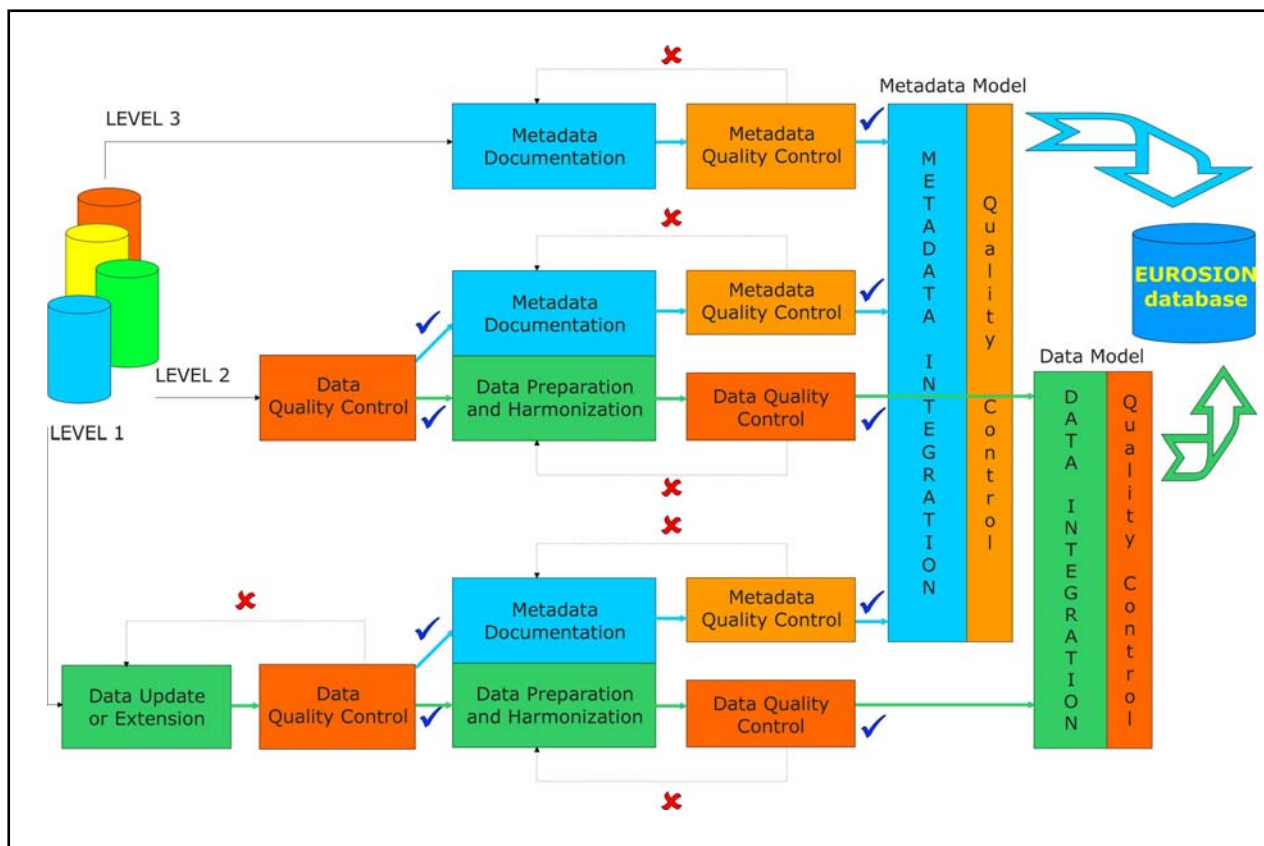
3.1. DATA AND METADATA QUALITY CONTROLS

In this chapter a brief description of the different standard quality tests procedures are presented.

Quality management is based on the proposals of the Inception report to distinguish different types of data (different levels). According to the horizontal pattern structure scheme the operations with the data will be corresponding to their level. Some fundamental principles can be postulated:

- Systematic control of the new internally/externally produced data
- Systematic check of quality parameters announced by the data provider
- Indication and explanation of the quality test principles applied to the data/metadata
- Reporting of found errors + suggestion of solution and/or correction.
- Complete quality related fields inside metadata scheme for each data/metadata set

The schema below indicates different operations and quality controls to perform with data and metadata in the scope of the horizontal pattern:



LEVEL 1 corresponds to the update or extent of data sets (new data).

LEVEL 2 is relative to the acquired data to be integrated without any modifications.

LEVEL 3 corresponds to metadata on existing data, to which only metadata questionnaire will be filled.

All operations applied to the data will be subject of the different kinds of quality controls depending on the nature of the data.

Metadata Quality Controls

- are to be performed after Metadata Documentation to check the quality of this procedure and to verify if the coherence of the announced metadata quality parameters are compliant with the Terms of Reference.

Data Quality Controls

- are to be performed in the stocktaking phase for level 2 and after update/extension for level 1. Later data quality controls are performed after each manipulation of data, *i.e.* *Data Preparation and Harmonization* and *Data integration* phases. The quality controls are different for each data type.

Quality Controls

- are to be performed after integration of the data and metadata into the EUROSION database to verify their completeness and coherence.

Detailed quality control methods description is given in the chapter corresponding to each product.

The controls of the data sets will cover the fields of:

- Completeness
 - Commission
 - Omission
- Logical Consistency
 - Conceptual consistency
 - Domain consistency
 - Format consistency
 - Topological consistency
- Positional Accuracy
 - Absolute or external accuracy
 - Relative or internal accuracy
 - Gridded data position accuracy (Geometric fidelity)
- Temporal accuracy
 - Accuracy of a time measurement
 - Temporal consistency
 - Temporal validity
- Thematic accuracy
 - Classification correctness
 - Non-quantitative attribute correctness
 - Quantitative attribute accuracy

These data quality elements are present in the EUROSION metadata questionnaire (D2.3.1) and will be filled as completely as possible to each product to be integrated into the EUROSION database.

Other methods to be finalized:

- Define specific quality tests corresponding to different products, e.g. DTM sampling, Hausdorff distance for raster data sets (in Elevation)
- Define corrections procedures to solve problems encountered (to be reported in the mid-term quality report – Chapter Problems encountered, Solutions found)

3.2. IGN FI

3.2.1 Depending sub-workpackages description

3.2.1.1 WP2.1 Inventory of existing datasets

Description of Activity/Product

Identification and description of the existing datasets relevant for the EU level database.

Result Expected

Diffusible Deliverable "D2.1.1 Inventory report"

Human resources involved

Executor

WP2 leader

Review

WP2 quality assistant, Team leader

Remarks

Release date

Planned

31 may 2002

Effective

First Version – 31/07/02

3.2.1.2 WP2.2 Quality control

Description of Activity/Product

The objective is to define the rules of work organisation between consortium members and with sub-contractors within Work Package 2 as well as to monitor the quality of the EUROSION database implementation and keep it consistent with the defined technical specifications.

Result Expected

Diffusible Deliverables:

"D2.2.1. Quality Manual for Implementation of EUROSION level database"

"D2.2.2. Mid-term Quality Manual"

"D2.2.3. Final Quality Manual"

Human resources involved

Executor

WP2 Quality assistant, WP2 leader, all WP2 consortium partners, Team leader

Review

WP2 leader, WP2 Technical Coordinator

Remarks

Release date

Planned

D2.2.1 initially planned in August 2002

Effective

Requalified for 31/01/03

3.2.1.3 WP2.4.1 Elevation

Description of Activity/Product

European Digital Elevation Models (DEM), with their respective metadata; completed with metadata for non existing DEM or not ToR compliant DEM.

Result Expected

Internal Deliverable(s):

"D2.4.1. Acquisition of relevant Licenses for Elevation Models"

Diffusible Deliverable(s):

"D2.4.3. Elevation and Bathymetric Metadata Layer"

"D2.4.5. Elevation Data Layer"

Human resources involved

Executor

WP2 Leader, WP2 Technical Coordinator

Auditor

WP2 Quality Assistant

Remarks

Data Quality Parameters Control

Data Cross-Checking on samples

Metadata creation

Release date

Planned

cf. Inception Report

Effective

3.2.1.4 WP2.4.2 Bathymetry

Description of Activity/Product

Creation of a bathymetric geographic layer coming from various relevant sources of informations and depending of the existing bathymetrical data related to european seas.

Result Expected

Bathymetric Informative GIS Layer.

Internal Deliverable(s):

"D2.4.2. Acquisition of relevant Licenses for Bathymetric Models "

Diffusible Deliverable(s):

"D2.4.3. Elevation and Bathymetric Metadata Layer"

"D2.4.6. Bathymetric Data Layer"

Human resources involved

[Executor](#)

WP2 Leader, WP2 Technical Coordinator

[Auditor](#)

WP2 Quality Assistant

Remarks

Release date

[Planned](#)

cf. Inception Report

[Effective](#)

3.2.1.5 WP2.5 Administrative boundaries and Shoreline

Description of Activity/Product

WP2.5.1 Terrestrial Administrative Boundaries

Integration of the Seamless Administrative Boundaries of Europe (SABE97) v2.1 up to the communal level when exists.

WP2.5.2 Maritime Administrative Boundaries

Creation of a Geographic layer from official maritime delimitations texts, completed with a database on legal conventions and treaties defining those limits: baselines, terrestrial waters, EEZ outer limits...

WP2.5.3 Shoreline

Extracted from CORINE Coastal Erosion existing coastline, a completed coastline has been rebuilt with various sources, updated with SCOLE (sub-product with coastline of SABE97), adjusted with SABE geometry, completed with World Vector Shoreline extracts when missing.

This new coastline was considered as a priority task in order to provide the BRGM with an input to update and extent the new CORINE Coastal Erosion database.

Quality control happened on three levels:

- Comparison with satellite images¹ to choose the right data set when overlap exists, to complete or correct data set, when error or doubt exists.
- The final coastline has been scanned to check every polyline connection, holes, isolated segments, and topology...

As for visualization, the GISCO shoreline has been kept as the official coastline.

Result Expected

Internal Deliverable(s):

"D2.5.1. Acquisition of SABE 97 v2.1 for EUROSION"

Diffusible Deliverable(s):

"D2.5.4. Administrative Boundaries, Hydrography and Infrastructure Metadata Layer"

"D2.5.5. Administrative Data Layer"

¹ Mr. SID images were used to control the quality of the shoreline between WVS, SABE and CORINE Coastal erosion data sets. These images are available at the following URL: <http://www.zulu.nasa.gov/mrsid/mrsid.pl>.

Human resources involved

Executor

WP2 Leader, WP2 Technical Coordinator

Auditor

WP2 Quality Assistant

BRGM and their main sub-contractor for Shoreline theme

Remarks

Release date

Planned

cf. Inception Report

Effective

3.2.1.6 WP2.5.4 Hydrography and Infrastructure

Description of Activity/Product

Provision and Integration of a Geographic Layer with informations on Hydrography (Rivers, Watersheds...) and Infrastructure (Roads, Harbours, Industries, Airports, ...)

Result Expected

Two geographic layers coming out from GISCO service, with respectively Infrastructure and Hydrography informations. Provision of corresponding metadata.

Provision of Metadata on two on going projects led by Eurogeographics, whose topic concerns the harmonized cartographic data and metadata from European National Mapping Agencies, members of Eurogeographics:

- EuroGlobalMap at 1 to 1 Million scale
- EuroRegioMap at 1 to 250.000 scale

Internal Deliverable(s):

"D2.5.2. GISCO Access Conditions for EUROSION"

Diffusible Deliverable(s):

"D2.5.4. Administrative Boundaries, Hydrography and Infrastructure Metadata Layer"

"D2.5.6. Hydrography and Infrastructure Layer"

Human resources involved

[Executor](#)

WP2 Leader, WP2 Technical Coordinator

[Auditor](#)

WP2 Quality Assistant

Remarks

Release date

[Planned](#)

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3.2.1.7 WP2.9.1 Land cover

Description of Activity/Product

Integration of CORINE Land Cover 1990 vector data on european littoral defined in the ToR. Preparation of the Metadata associated to CLC90 data.

Result Expected

Internal Deliverable(s):

"D2.9.1. CLC90 Access Conditions for EUROSION"

Diffusible Deliverable(s):

"D2.9.4. Land Cover Metadata Layer"

"D2.9.5. Land Cover Layer"

Human resources involved

Executor

WP2 Leader, WP2 Technical Coordinator

Auditor

WP2 Quality Assistant

Remarks

Release date

Planned

cf. Inception Report

Effective

3.2.1.8 WP2.9.2 Land Cover changes since 1975

Description of Activity/Product

Provision of LaCoast database (Land Cover changes since 1975 for some EU countries) from the JRC and extension of this database to the coastal accessing countries: Poland, Latvia, Lithuania, Estonia, Slovenia, Romania and Bulgaria.

Result Expected

Internal Deliverable(s):

"D2.9.2. Land Cover changes Access Conditions for EUROSION"

"D2.9.3. Methodology for Land Cover changes since 1975 extension to coastal Accessing Countries"

Diffusible Deliverable(s):

"D2.9.6. Land Cover changes Metadata and Data Layer"

Human resources involved

[Executor](#)

WP2 Sub-Contactor, Coordinated by WP2 Leade and WP2 Technical Coordinator

[Auditor](#)

WP2 Quality Assistant

Remarks

Release date

[Planned](#)

cf. Inception Report

[Effective](#)

3.2.1.9 WP2.10 Legal status & Regulatory Texts

Description of Activity/Product

Research and Inventory of legal and regulatory information relative resources up to regional level.

Conception of a new georeferenced texts database within SABE, in line with Dublin Core metadata standard.

Data and Metadata-base filling with regulatory texts and associated metadata.

Conversion of completed database info XML format for the integration into the EUROSION database.

Result Expected

European-level database with legal and regulatory information- including laws and decrees at the European, national, and regional level. Communication to WP3 of informations at lower (communal) level for pilot sites.

Human resources involved

Executor

WP2 Technical Coordinator,
GIS engineer, legal expert

Auditor

WP2 Quality assistant, WP2 leader

Remarks

Release date

Planned

01/11/2003

Effective

3.2.1.10 WP2.11 High ecological value areas

Description of Activity/Product

Integration of European existing initiatives or pre-results, such as CDDA or Natura 2000 within current status.

Result Expected

Minimum Metadata.

Depending on the status of the data provided by the contacted European institutions.

Human resources involved

Executor

WP2 Technical Coordinator

Auditor

WP2 Leader, WP2 Quality Assistant

Remarks

Release date

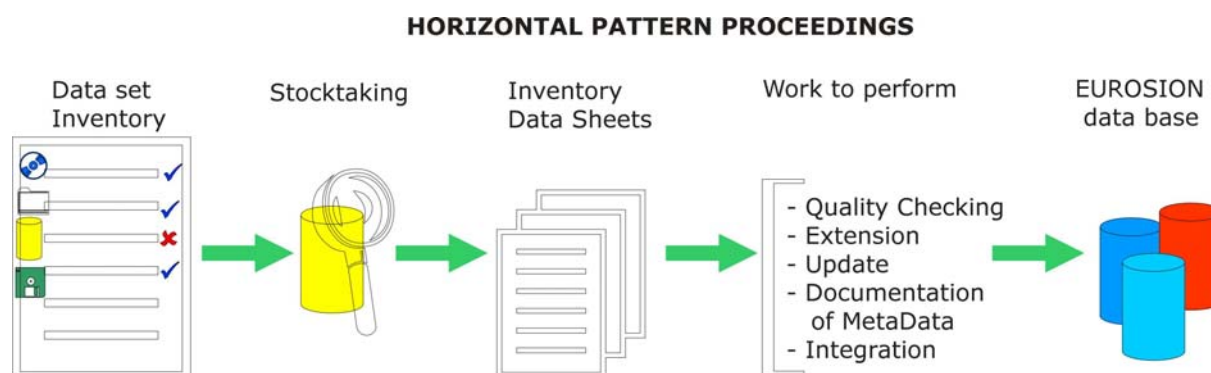
Planned

cf. Inception Report

Effective

3.2.2 Activity key steps review

The schema below indicates that the stocktaking phase consists in producing Inventory Data Sheets for all the data sets inventoried, and therefore preparing the implementation either of the metadata on data or the data themselves.



From the Data set Inventory to the Implementation: Global Scheme

IGN FI has the following effective activity key steps:

1. Data reception and inventorying.
2. Evaluation and filling of the metadata draft questionnaire.
3. Stocktaking of data sets and quality parameters assessment.
4. Metadata creation, import and integration. Quality checking.
5. Data update, extension or harmonization according to the methodology and the specifications. Quality check (through audits and/or internal quality procedures follow-up)
6. Integration, Data Formatting. Quality assessment.
7. Quality validation and delivery

3.2.3 Principal quality evaluation steps

3.2.3.1 Data reception and inventorying

For each data set furnished by data provider or European institution, an *Inventory Dataset Sheet (IDS)* is initiated so as to document the *D2.1.1 Inventory Report*, stating the main characteristics of products received, its restrictions, access conditions in terms of price or availability, its contacts and delivery format specificities.

filled with essential informations which will be complementary to the Metadata questionnaire (draft by EADS S&DE as a basis of the Metadata Model Scheme implementation)

Inventory DataSet Sheet for Name_of_the_data_set						
Terms of use						
Price	License Attribution Restrictions			Distribution restrictions		
Format						
Data set Import format	Possibility to integrate data directly into ArcXXX			Other software able to work with	Evaluation	
User Guide/ Technical Guide						
Data Base Manual	Content					Evaluation
	Database Structure	Format	Point contact	Description of the tables		
				Y/N		
Update frequency			Geographic Extension		Scale	
Date of the actual version	Next update	States covered		Scale	Resolution	
Database Tables						
Name of the column	Described in manual	Presents in the Dataset	in real	Announced signification	Real signification	Announced format
						Real format
Checking of the announced quality parameters						
Quality method Name	Announced results			Real results		Evaluation

Inventory Dataset Sheet (IDS)

3.2.3.2 Evaluation and Filling of Metadata Questionnaire

3.2.3.3 Stocktaking of data sets and quality parameters assessment

3.2.3.4 Metadata creation, import and integration

3.2.3.5 Data update, extension, or harmonization

3.2.3.6 Integration, Formatting quality validation and delivery

The data sets that are fit for integration will have to go through certain procedures to make them coherent with EUROSION database standards. Integration will deal with the following topics:

- File format integration – conversion
- Data projection – reprojection (raster – vector superposition) Coordinate Referencing System
- Scale compatibility
- Geographic extent-continuity. Strictly identical geographical extent for all themes cannot be guaranteed.
- Non-geographic data integration

At the end of each of these procedures, the quality control has to be performed to insure the compliance of the resulting product with the Terms of References.

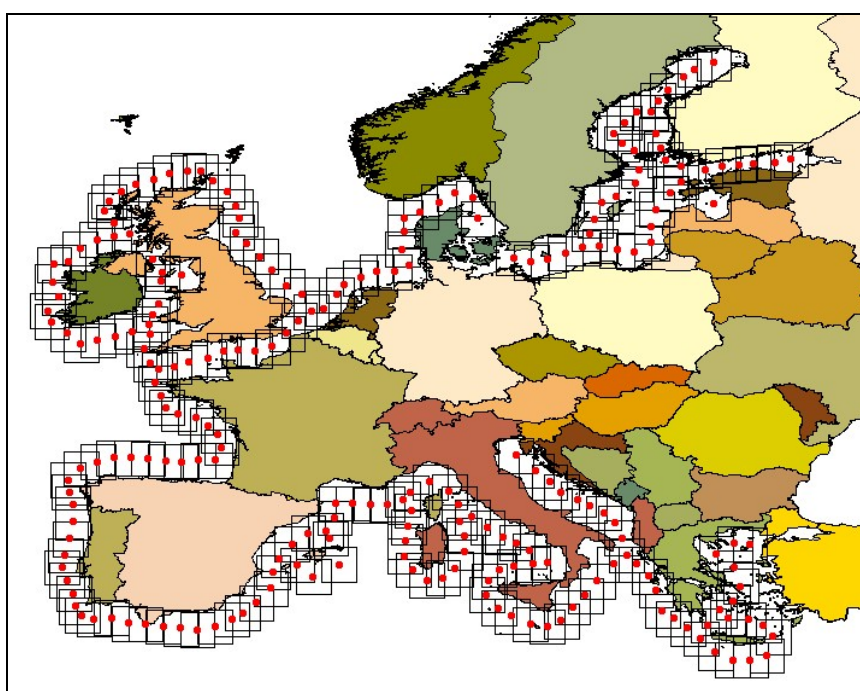
After all transformations with the data the modifications have to be inserted to the metadata of the corresponding products, so quality control has to be performed also at this stage.

3.3. RIKZ - WP2.7 HYDRODYNAMICS & SEA LEVEL RISE

3.3.1 Depending sub-workpackages description

Description of Activity/Product

This activity consists in building the hydrodynamic layer of the EUROSION database. It will more precisely provide a set of hydrodynamic parameters (see below) calculated on 237 points distributed all along the European coastline with a pace of 100 km (see map).



from Inception Report

Result Expected

For the every for each red point (see above) and each directional sector (8 sectors will be considered: N, NE, E, SE, S, SW, W, NW), the project will calculate statistical values of :

- mean significant wave height
- wave height that is exceeded 10% of the time
- wave height that is exceeded 1% of the time
- mean wave period
- mean wave period that is exceeded 10% of the time
- mean wave period that is exceeded 1% of the time
- average wind speed at 10 m height
- wind speed that is exceeded 10% of the time
- wind speed that is exceeded 1% of the time

Calculation will be derived from altimeter and scatterometer measurements, as well as from ERS SAR images acquired over the past 18 years. To provide the most statistically representative values, processing operations will be carried out over 200kmx200km "windows". Each window overlaps with the adjacent ones with an approx. 50% rate, and statistical parameters will be "attached" to the centre of the window.

In addition to the above mentioned parameters, the project will also provide for each red point the average tidal range and the average sea level rise based on a combination of satellite measurements with harmonic components from tidal stations around the world.

Results delivered will consist of a MS Word Report and 11 Data files in Excel format.

Human resources involved

Executor

ARGOSS, Dutch consulting company specialised in hydrodynamic modelling

Auditor

John de Ronde, expert in hydrodynamics at RIKZ

Remarks

Release date

Planned

February 2003

Effective

3.3.2 Activity key steps review

Within WP2.7, RIKZ has the following effective activity key steps:

1. Identification of relevant parameters to be provided as a database layer
2. Inventory of hydrodynamic datasets
3. Definition of a methodology to fill hydrodynamic data gaps
4. Subcontracting procedure for outsourcing the production of missing hydrodynamic data
5. Delivery of the data files

3.3.3 Quality Assurance Plan management

The overall responsibility for implementing RIKZ contribution within WP2 is assumed by John de Ronde, expert in hydrodynamics (RIKZ).

3.3.4 Principal quality evaluation steps

3.3.4.1 *Identification of relevant parameters to be provided as a database layer*

This action is carried out by an expert in hydrodynamics within RIKZ and a draft document is made available internally. An internal meeting with key RIKZ staff assesses

the relevance of the draft document. The draft paper is to be presented during a consortium meeting for final adoption.

3.3.4.2 Inventory of hydrodynamic datasets

This action is carried out by RIKZ staff. Results are forwarded to WP2 leader for approval and integration in the Inventory Report.

3.3.4.3 Definition of a methodology to fill hydrodynamic data gaps

This action is carried out by an expert in hydrodynamics within RIKZ and a draft document is made available internally. An internal meeting with key RIKZ staff assesses the relevance of the draft document.

3.3.4.4 Subcontracting procedure for outsourcing the production of missing hydrodynamic data

The subcontracting procedure will follow RIKZ internal rules. This procedure aims at submitting the methodology established (= terms of references) to at least three different companies. An evaluation committee made of 2 to 4 persons within RIKZ analyses and scores the different offers both in terms of technical references and financial aspects. The offer with the best ratio is selected. Regular contacts with the subcontractors aims at making sure that the deliverables meet the original terms of references.

3.3.4.5 Delivery of the data files

To verify that the results comply with their specifications, two checks will be performed:

- Extreme value statistics calculated for a location in the North Sea will be compared to statistics based on actual measurements. Wind and wave data for the period 1979-1998 for the sector K13 (53.06 N 3.43 E) will be downloaded from www.golfklimaat.nl maintained by RIKZ and extreme value characteristics will be calculated similar to those estimated in the project. Finally the characteristics calculated from this two different processes will be compared and are expected not to differ significantly.
- the wind-sea and swell parameters from the 400kmx400km SAR data will be merged and the merged result will be compared with the parameters of the total spectrum. This comparison provides a means to validate the merging process and the underlying assumption of independence of wind-sea and swell.

3.4. BRGM

3.4.1 Depending sub-workpackages description

3.4.2 Activity key steps review

3.4.3 Quality Assurance Plan management

3.4.4 Principal quality evaluation steps

BRGM has proposed to produce a 'manual of quality for the update and extension of the New CORINE Coastal Erosion database'. This will contain a first list of quality which will be discussed and completed by their sub-contractors and partners as it works, during the project.

3.5. EADS

3.5.1 Depending sub-workpackages description

3.5.1.1 *Design of the EUROSION metadata questionnaire (D2.3.1)*

Description of Activity/Product

- Questionnaire design in order to collect the metadata on the datasets to be integrated into the EUROSION database.
- Review of ISO metadata documentation, in particular ISO/DIS 19115 norm, Dublin Core Metadata Initiative and GELOS.
- Identification of the significant metadata elements to integrate into the EUROSION questionnaire (deliverable D2.3.1). This identification is based on the description of the core metadata elements of ISO/DIS 19115, plus additional metadata elements from the Dublin Core Metadata Initiative and the GELOS standard.

Result Expected

- EUROSION questionnaire in Excel format, which contains significant metadata elements taken from the ISO/DIS 19115 core metadata elements, Dublin Core Metadata Initiative and GELOS.

Human resources involved

Executor

Project manager at EADS for WP2

Auditor

WP2 leader, EUROSION Team Leader, GIS expert in EADS

Remarks

Metadata elements coming from GELOS and COASTBASE were added upon the request of the EUROSION deputy team leader in RIKZ.

Release date

Planned:

March 2002

Effective:

3.5.1.2 Analyse the existing metadata standards and make recommendations for interoperability with other existing initiatives

Description of Activity/Product

- In-depth review of all the main metadata standards used to describe geographic information and environmental information.
- Identifies the metadata elements necessary to design an EUROSION metadata model compliant with the existing others initiatives such as: current GISCO from EUROSTAT with its evolution towards ISO/DIS 19115 standard (according to the INSPIRE initiative), GELOS, COASTBASE, Dublin Core Metadata Initiative, EDMED, ETC-CDS from EEA.
- Mapping the existing metadata standard/initiatives with the EUROSION metadata elements selected, to know the compliance level of the EUROSION metadata model with the existing standards or others initiatives. This mapping is done by checking if, each metadata element of a standard or Initiative, has an equivalent within the EUROSION metadata model.
- Review the various standards/protocols defined to homogenize data definition or exchange such as CIP, OPENGIS, GIP and CORBA.
- Review the existing application programming interfaces or language to develop interoperable systems such as ODBC, XML, JDBC or COASTBASE to formulate suitable recommendations for the EUROSION consortium and allow metadata and data exchange with other initiatives, in particular EUROSTAT/GISCO.

Result Expected

- D2.3.2: Metadata standards analysis and catalogue interoperability study
- Selection and proposition of the EUROSION metadata elements.
- Recommendations for metadata exchange in XML format.

Human resources involved

Executor

Project manager at EADS for WP2, EADS GIS expert, EUROSION project technical responsible at EADS.

Auditor

WP2 leader, EUROSION Team Leader, other consortium members, GIS expert at EADS

Remarks

Release date

Planned:

May 2002

Effective:

November 2002

3.5.1.3 *Eurosion metadata model design.*

Description of Activity/Product

- Draw the UML diagrams with Rational Rose software to design the EUROSION Metadata model with the support of the EUROSION metadata elements selected.
- Respect the rules imposed by the ISO standard when designing the EUROSION metadata model. For example the attributes defining a "Date", have to follow the ISO 19103 standard description according to the ISO/DIS 19115 standard.
- Implement the EUROSION metadata model into an XML SCHEMA.
- Implementation of an EUROSION Metadata Editor to produce EUROSION metadata files in XML format, containing the completed metadata into the EUROSION questionnaires.
- Internal control of the exhaustivity and the organisation/hierarchy of the EUROSION metadata elements with the support of the EUROSION Metadata Editor. The EUROSION Metadata Editor affords the possibility to check if each EUROSION metadata element is present into the EUROSION XML Schema and if each EUROSION metadata element is compliant with the ISO/DIS 19115 structure and rules. This is an internal procedure used to control the validity of the EUROSION metadata model with the EUROSION metadata elements description.
- Review and exchanges with EUROSTAT/GISCO on the EUROSION XML file deriving from the EUROSION XML SCHEMA.

Result Expected

- D2.3.6: Eurosion Metadata Model Implementation in XSD format
- D2.3.5: Eurosion Metadata Model Design
- Eurosion Metadata Model in UML diagrams.

Human resources involved

Executor

EUROSION project technical responsible at EADS.

Auditor

WP2 leader, Project manager at EADS for WP2, EUROSION Team Leader, other consortium members, GIS expert at EADS, EUROSTAT/GISCO technical team leader, reviewer from FZI.

Remarks

Release date

Planned:

D2.3.6: November 2002

D2.3.5: December 2002

Effective:

D2.3.6: November 2002

D2.3.6: Last version with little names of ISO/DIS 19115 : End January 2003

D2.3.5: 20th December 2002 (first version)

D2.3.5: January 2003 (last version)

3.5.1.4 Analyse the structure of the selected datasets and identify the significant information needed to integrate into the EUROSION database

Description of Activity/Product

- Import the datasets on the ArcEditor software.
- Convert some datasets before importing them into ArcEditor.
- Review the attributes of each Arc/Info coverage.
- Inventory into a report, the type (character, integer, geometry,...) , the name and the description of each attribute of the Arc/Info coverage
- Inventory the tables related to the physical Arc/Info coverages.
- Inventory the type, the name and the description of each attributes of the tables linked to the Arc/Info coverages.
- Present to the consortium members the existing attributes for each Dataset to integrate into the EUROSION database. Identify by having some technical meeting which attributes are thematically significant or which relations are needed to design between some classes in order to determine for example vulnerable areas in term of coastal erosion.
- Produce a report, which presents the selected attributes and the relations to take into account into the EUROSION metadata model, validated by the EUROSION consortium members who can provide a thematic added value in coastal erosion such as EUCCC, UAB, RIKZ, BRGM and IFEN.
- Production of UML diagrams of the EUROSION data model which provide a visibility of the EUROSION Data model design.
- Validation process with GISCO on the proposed EUROSION data model, in particular, validation of the attribute names and coverages names according to the existing EUROSTAT/GISCO rules.

Result Expected

- D2.3.3: Datasets description and analysis report.
- D2.3.4: Data Model validation & requirement from the consortium
- D2.3.7: EuroSION Data Model description

Human resources involved

Executor

Project manager at EADS for WP2, EUROSION project technical responsible at EADS.

Auditor

WP2 leader, EUROSION Team Leader, reviewer from BRGM, reviewer from UAB, reviewer from EUCC, reviewer from IFEN, reviewer from RIKZ, GIS expert at EADS, EUROSTAT/GISCO technical team leader.

Remarks

It is highly important to have an exchange between the parties involved into coastal erosion thematic and the parties involved in the EUROSION data model design. The objective is to provide an EUROSION data model with added value in term of coastal erosion.

Release date

Planned:

December 2002 for D2.3.3 (first version)

March 2003 for D2.3.4

April 2003 for D2.3.7

Effective:

D2.3.3: January 2003 (final version) - Depends of the delivery of still expected datasets.

D2.3.4: Depends of the delivery of still expected datasets and the planning to organize the technical meetings with others partners.

D2.3.7: Depends of the delivery of still expected datasets and the planning to organize the technical meetings with others partners.

3.5.1.5 *Eurosion metadata model and data model implementation*

Description of Activity/Product

- Implementation of the EUROSION metadata XSLT in ArcEditor software in order to import the EUROSION XML files into ArcEditor software.
- Review and exchanges with EUROSTAT/GISCO on the EUROSION XSLT file implemented to allow the importation of the EUROSION metadata, provided in XML file format
- Testing the importation of the completed XML files into ArcEditor Software.
- Implementation of the EUROSION data model in ArcEditor software.
- Testing the conservation of the relations between the classes (defined within the EUROSION data model) when importing the datasets.
- Testing the relation between the EUROSION datasets and their metadata.
- Testing the datasets & metadata export and reimportation
- Review and exchanges with EUROSTAT/GISCO on the EUROSION XSLT file implemented to allow the importation of the EUROSION metadata, provided in XML file format.
- Review and exchanges with EUROSTAT/GISCO on the EUROSION datasets structure implemented.

Result Expected

- D2.3.8: XSLT file to allow the EUROSION XML files importation in ArcEditor software.
- D2.3.8: Tools to facilitate export and import of the XML files and EUROSION datasets with ArcEditor platform with conservation of the relations between some classes.
- D2.3.9: Managements tools & Documentation on the use of the management tools.

Human resources involved

Executor

EUROSION project technical responsible at EADS, WP2 leader, Project manager at EADS for WP2

Auditor

WP2 leader, Project manager at EADS for WP2, EUROSION Team Leader, other consortium members, GIS expert at EADS, EUROSTAT/GISCO technical team leader, reviewer from FZI.

Remarks

Release date

Planned:

EUROSION XSLT: January 2003

Others: May 2003

Effective:

EUROSION XSLT: January 2003

Others: may 2003 (depends of the provision of others existing datasets).

3.5.2 Quality Assurance Plan management

Communicated by EADS S&DE and to be inserted

3.5.3 Generic quality procedure at EADS for documentation identification

Every documented produced by EADS within the framework of EUROSION project is identified as follows:

NAME: Identifies the name of the project, here "EUR", like EUROSION.

IDENT: Identifies the Workpackage number (00002 for WP2, 00003 for WP3).

TYPE : identifies the document type

TN : Technical note

UM: User manual

CRp : Minutes meeting with the consortium partners

ST: Technical specifications

CHRONO : identifies the document number per type. For example there are 2 or 3 technical notes in WP2.

3.6. UAB

The aims of this part of the document is to expose how the quality control has to be performed in the UAB participation within the consortium of the EUROSION project. The proper internal quality procedure will be applied in our domain of competencies, coupled with the general consortium ones.

UAB member is mainly involved in providing informations on Pilot Zones Studies (WP3) and less in data sets providing nor implementation.

3.6.1 Activity key steps review

3.6.2 Quality Assurance Plan management

3.6.3 Principal quality evaluation steps

In a complementary way from templates cards, UAB has elaborated its own quality control methodology for each subcontractor work. The advantage for the quality follow-up is that all must follow the same table of contents and method in order to have comparative results.

The procedure consists on the analysis of the assessment levels separately. For this reason, UAB asks to receive work of subcontractors always in the same order and time. At the end, a global evaluation is made of each work and a comparative analysis can highlight gaps and differences. Each one of the steps brings the opportunity of an exchange of the points of view and introduce the requirements engaged in the agreements.

4. VERTICAL PATTERN – PARTNERSHIP AND SUBCONTRACTING RELATIONS

Vertical pattern contains:

- The relations between a consortium member and its Subcontractor(s)
- The relations between the work package 2 leader (IGN FI) and the members of the consortium involved in the implementation of the European Level data base (WP2).
- The reporting within the WP2 to the Team Leader (RIKZ) for the Payment to Consortium Member.

4.1. RELATION CONTRACTOR-SUBCONTRACTOR

Every consortium member has been authorized to subcontract within EUROSION project, provided that a list of foreseen Subcontractors were initially communicated to the Team Leader to contractually inform the Client. Periodically and according to the project evolution, this list can be adapted and thus the Team Leader has to be informed of.

The issues below aim at describing main aspects of subcontracting.

4.1.1 Product specifications definition

Contractor has to initiate contacts and thus take part to all initial discussions with the aim of:

- explaining clearly the terms of reference to the Subcontractor,
- expressing a realistic specifications to the Subcontractor,
- listening and listing all unclear points regarding the understanding from the Subcontractor,
- listing all points feasible and all difficult, tendentious or tremendous points,
- discussing the draft methodology closely with the Subcontractor,
- solving issues and palliating gaps before contracting,
- prevent eventual problems as possible,
- anticipate all points where quality controls shall be executed

4.1.2 Preparation of contract with two-party responsibilities

Upon Subcontractor quotation and after negotiation and further agreement from both parties, the Contractor has to draft a contract in respect with the agreement. This contract must clearly summarize either the terms of reference or the planning, the pricing, the delays, the payment conditions or every other juridical useful mentions.

4.1.3 Definition of Quality Control procedures

Either internal or common procedures have to be set, in close relation to the reporting to be done by the Subcontractor and the quality criteria imposed by the terms of reference and thus the contract.

4.1.3.1 *Subcontractor's quality follow-up*

The Contractor should request the Subcontractor to be as transparent as possible regarding its applied methods and quality procedures for the work to be performed. The clever way to proceed should be that the Subcontractor provide the Contractor all project methodology and quality methods so as the follow-up will remain rather easy for the Contractor. Through this approach the Subcontractor is supposed to be audited at any moment by the Contractor.

4.1.3.2 *Mandatory reporting from the Subcontractor*

This reporting could be done with respect to the Contractor or Subcontractor own method for reporting. In the first case the Contractor has to draft templates to be filled in by the Subcontractor. In the last case the Subcontractor benefits of more freedom to apply its own reporting methods.

Through periodical checking points (weekly, bi-weekly,..) open issues and reporting can be made (phone, e-mail, ...)

4.1.3.3 *Quality criteria*

Quality criteria mainly depend on the Subcontractor's work (reports, prototype, data base completion, ...). These criteria could be based on several approaches:

- qualitative or quantitative for database outputs (e.g. tolerance thresholds or completeness ratios)
- appreciation on veracity and relevancy of the treated subject (e.g. report on particular topic such as mean sea level study...)
- ...

4.1.4 Methodology for work validation

Whatever the Subcontractor's work, methodological aspects shall require from the Contractor a very high care. The set up methodology must keep the Terms of Reference and respect the contract guidelines. After a first critical checking of the methodology, the Contractor assumes the responsibility to perform either periodical or final tests on the work realized by the Subcontractor. Various methods exist.

4.1.4.1 *Audits*

Actually audits are concrete assessments by the Contractor of the work realized by its Subcontractor. It could be performed by the Contractor itself or by a third company or expert involved by the Contractor. The aim of the audit is to feel efforts really made by the Subcontractor and to state at project strategic moments the coherence and compliance with engagements made and expected results.

4.1.4.2 *Controls for intermediate prototype or database*

Controls or audits should be made either when strategic choices are to be made within the project or to check contractual deliverables as for reports, data bases or even prototypes...

Each control or audit implies a report useful to figure clearly the real work progress.

4.1.4.3 *Final checking and reporting*

At the end and through the Subcontractor's final report, the Contractor shall be able to have in mind a clear view of the realization.

4.1.5 **Payment after final validation of the work**

Based on the final reporting the payment will occur after the Contractor assessment phase or validation.

4.2. **RELATIONS BETWEEN CONSORTIUM MEMBERS**

Within EUROSION consortium, a Work Package leader is positioned as a "Contractor" involving other consortium members in technical realizations (reports, indicators, data base updates, ...).

Their final payment from the Consortium Leader (RIKZ) is conditionned by the technical approval and reporting from the Work Package Leader of the realization delivered to the Team Leader.

Inside Work Package 2, the relations between IGN FI and consortium members involved in the implementation of the European Level Database are quite similar to a Contractor-Subcontractor relation (cf. §4.1). Thus detailed procedures follow, stating the relations between the WP2 leader and the various consortium members involved in WP2.

4.2.1 **Between IGN FI & BRGM**

Within the WP2, BRGM is in charge of either the update of the CORINE Coastal Erosion (CCEr) database or the extension to the Accessing Countries.

4.2.1.1 *Agreement on the CCEr update and extent methodology*

The methodology of updating and extent is an EUROSION deliverable, to be delivered by BRGM. IGN FI has to agree on and validate it.

4.2.1.2 *Procedure of verification of the Prototype/Final database*

Through the update and extension, it has been decided to implement a prototype. IGN FI assumes its assessment of this prototype on time, as the final database delivery. For that, IGN FI has developed a procedure that could be summarized as following:

- the ArcInfo tables of the database are exported into format .dbf
- the .dbf files are imported into the MS ACCESS software, to perform necessary analytical requests. The following criteria for checking can be imagined:
 1. Quantitative: Size of the Database; comparison of the number of lines between the previous version of the CCEr and the updated version, Request about addition lines between 2 tables has to be performed.
 2. Qualitative: How many fields are updated and what type of information was changed, to do this, different requests to the Database need to be created...
 3. Other thematical aspects should be considered and controls will be derived from the specific database updating and extending quality and control methods document to be draft by BRGM.

4.2.2 Between IGN FI and EADS SD&E

Within the WP2, EADS SD&E is responsible for the database design in terms of metadata standard norm definition, metadata model creation, datasets structure analysis, data model creation, information requirements for policy making, technical assistance, reporting, data access and management tools, participation to the writing of guidelines for updating and maintaining the database.

4.2.2.1 *Questionnaire and EUROSION Metadata norm assessment.*

A questionnaire has been drafted and sent to every consortium member and meta- or data provider during the inventory phase so as to collect information and have a clearer view on the useful metadata fields. In parallel they've compared several geographical metadata norms (e.g. ISO/DIS 19115) to propose a new EUROSION metadata model. These two linked aspects are actually EUROSION deliverables and have been assessed by the WP2 leader.

4.2.2.2 *Metadata model Audit*

The following phase is the implementation of the metadata model, providing a documented *XML* schema to be delivered and further integrated within *ad hoc* software. IGN FI will contract an expert auditor to assess this deliverable.

4.2.2.3 *Data model Audit*

A future phase will consist in gathering data sets structures to elaborate the EUROSION data model. To validate this deliverable IGN FI will send an expert auditor to EADS SD&E.

4.2.2.4 *Other tools to be assessed.*

To be determined

4.2.3 Between IGN FI and IFEN

To be determined considering Ifen administrative problems

4.2.4 Between IGN FI and RIKZ

A trust protocol has been concluded between both WP2 leader and WP2.7 responsible who is employed by RIKZ). The task assigned to RIKZ is to be outsourced externally. The RIKZ responsible, through its skills, is appointed to act as an auditor regarding the results provided by the sub-contracted team. The quality control shall be assumed technically by RIKZ responsible.

4.2.5 Between IGN FI and UAB

UAB and IGN FI have initiated a collaboration with the ETC/TE for the Coastal Reporting Units. This task has been requalified so as UAB has to elaborate a Study of Vulnerability Areas (foreseen to be outsourced). For that UAB is assuming a high control, from terms of reference, follow-up and further discussions to make the work start. A review will be necessary to validate the document, involving other consortium members as well.

4.3. REPORTING TO THE WORK PACKAGE LEADER

Every Sub Work Package leader's responsibility is to report progress on the given task to the Work Package leader, emphasizing encountered difficulties, solutions given, indicating delays or confirming planned dates.

The way of reporting shall correspond to the Sub Work Package leaders habits (mails, reports, phone calls plus mandatory further written review). This should be done as frequent as it could be, based on bi-week calls or mails or more frequently in case of serious problems for which the solution requests the approval of either the Work Package Leader or Team Leader itself.

Specific case for BRGM and its SubContractor: data purchasing request and quarterly reporting.

For the specific case of acquiring data such as scanned or paper maps, numeric data or metadata (e.g. ancillary data), IGN FI agreed to purchase for the BRGM and its Subcontractor additional data. The way they must proceed is described inside an internal document within the following procedure:

- Request for Data purchasing

For each product or data set to be purchased a form must be sent or faxed to the WP2 leader for agreement. It will be returned agreed or refused by the WP2 leader.

- Quarterly Report Sheet on data purchased

Every 3 months, a follow-up sheet summarizing all data purchased has to be sent to the WP2 leader, indicating a brief description of the data, their cost, and the restrictions (even none) linked to their diffusion. If data have been obtained for free

or in collaboration with different organisms or companies, they also have to be mentioned, data by data or set by set.

Joined to this completed report sheet shall be provided a copy of the agreements and restrictions terms in order for IGN FI to complete and/or implement the metadata on most of these data.

A specific document has been draft : *Data_Access_Rules_v1.0.doc*

4.4. REPORTING TO THE TEAM LEADER

Every Work Package leader responsibility is also to report the results of their assessment of various works performed by their partners (consortium members) and Subcontractors inside the Work Package. This should be done periodically (once a week or more frequently in case of serious problems for which the solution requests the approval of the Team Leader itself).

For the validation of a contractual deliverable, the Work Package leader has to draft a document and report contributions validation using a template as such as the *Deliverable Validation Sheet* shown below and send or fax it to the Team Leader.

The structure of the *Deliverable Validation Sheet* is based on the Inception Report and deadlines are far more realistic considering the last *Progress Report* coming from the Team Leader. An example is shown below:

CODE	TITLE	TYPE*	DEADLINE	EFFECTIVE DATE OF SUBMISSION	COMMENTS
D2.3.1	Questionnaire	Report	21-jun-2002	15-oct-2002	

Date	Réf. of deliverable	Validation Comments and	Agreement by WP leader Date Name	Agreement by Team Leader Proceed to Payment
14/11/2002	D2.3.2	Validated conform to T. of Ref	14/11/02 WP2 leader Signature, Stamp	Signature, Stamp or Written Agreement

4.5. VALIDATION AND PAYMENT FROM RIKZ (TEAM LEADER)

4.5.1 Validation and Payment due to WP2 leading institution

In line with article 4.3.1. of the General Provisions and article 5 of Schedule 3 of the contract signed between RIKZ and each EUROSION consortium member, amounts due to WP2 leading institution shall be made payable as soon as :

- The WP2 leading institution has submitted its invoice to RIKZ
- The payment has been received from the European Commission, consequently to the acceptance of the Interim/Final reports by the Steering Group.

Interim and Final Reports are indeed expected to provide a fair image of the WP2 overall performance and WP2 deliverables' quality.

However, should the Team Leader be willing to carry out an external and independent audit of some particular WP2 deliverables, he shall inform WP2 leader about his intentions at least 1 month before submission of the Interim or Final Report to the European Commission and will propose a quality assessment methodology to be agreed by WP2 leader. Results of the audit shall be made available within 30 days after submission of the Interim/Final report to the European Commission.

Should the results of the audit be negative, the team leader and the WP2 leader shall negotiate an amount to be deducted from the invoice and a detailed list of actions to be undertaken to resolve the situation. An immediate payment will be made on the basis of the reduced invoice.

Meanwhile, a new audit will determine the acceptability of the rejected deliverables. The residual amount will be sold out as soon as the new audit states this acceptability.

4.5.2 Payment due to other consortium members involved in WP2

In line with article 4.3.1. of the General Provisions and article 5 of Schedule 3 of the contract signed between RIKZ and each EUROSION consortium member, payments to EUROSION consortium members involved in WP2 should be made as soon as :

1. The consortium member has submitted its invoice to RIKZ
2. The payment has been received from the European Commission
3. The technical contribution of each consortium members within WP2 has been approved by the Work Package 2 leader.

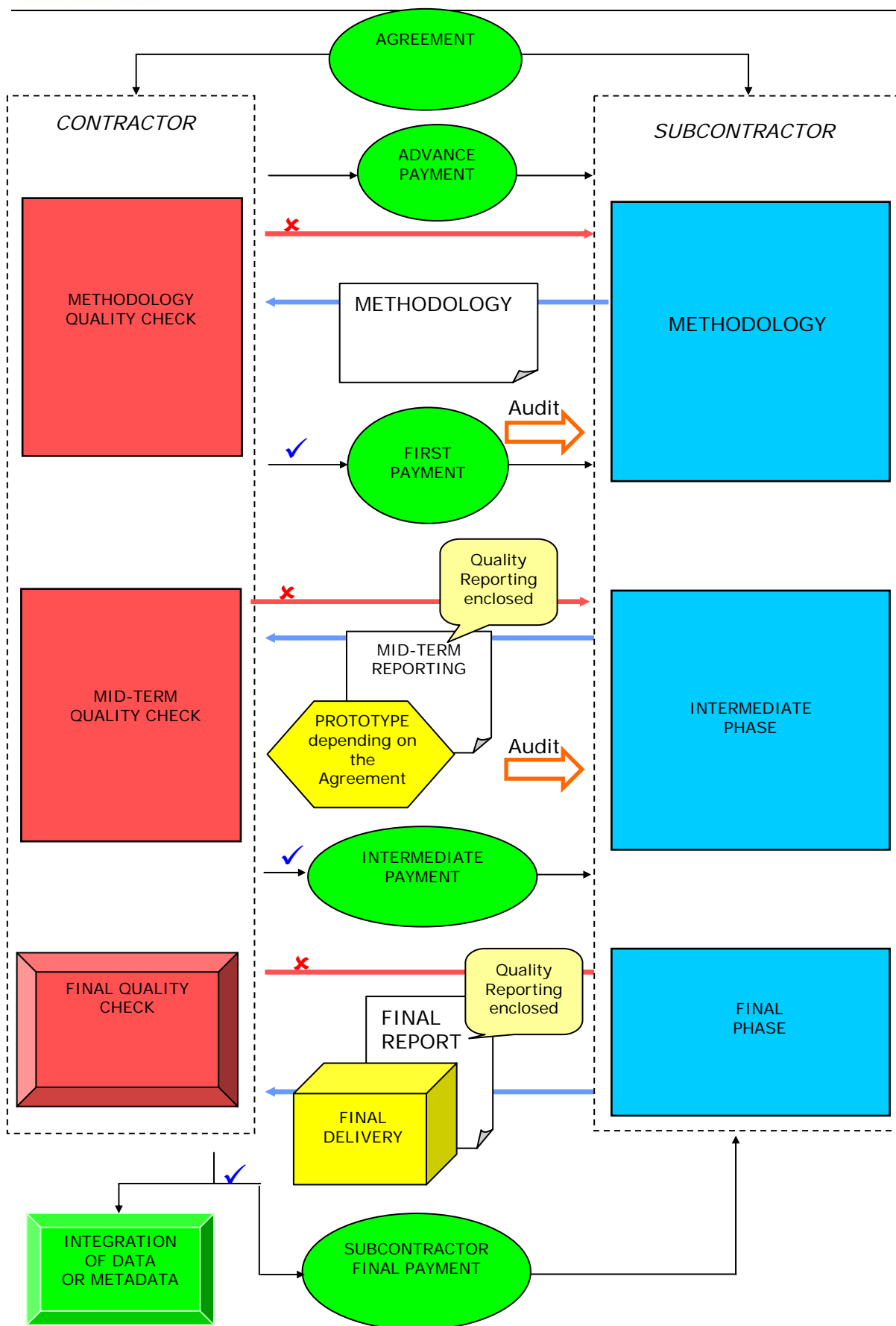
Upon request of the Team Leader, the Work Package 2 leader shall provide the Team Leader with a written statement that contributions from EUROSION consortium members involved in WP2 are approved by WP2 leader. Should some contributions not be approved, WP2 leader shall provide the Team Leader with a maximum 10-page-report with the following information:

-
- Detailed description of contributions rejected
 - In case the contribution was not initially planned in the implementation plan but agreed later, evidence that the contribution had been agreed by the WP2 leader and the consortium member (e.g. minutes of meeting, emails, letters).
 - Budget allocated to the contributions rejected
 - Rationale for rejection
 - Actions to be undertaken to resolve the situation

On the basis on this report, RIKZ will inform the consortium member that its invoice has not been approved and will offer the consortium member two different options:

Option 1. the payment of the whole invoice is delayed until all contributions have been approved.

Option 2. the consortium member agrees to deduce from its invoice the budget allocated to the rejected contribution, for immediate payment. The residual amount will be sold out as soon as all contributions have been approved by WP2 leader.



5. TRANSVERSAL PATTERN–WORK

ORGANISATION WITHIN CONSORTIUM

Transversal pattern represents an summary to describe how to work efficiently within the consortium.

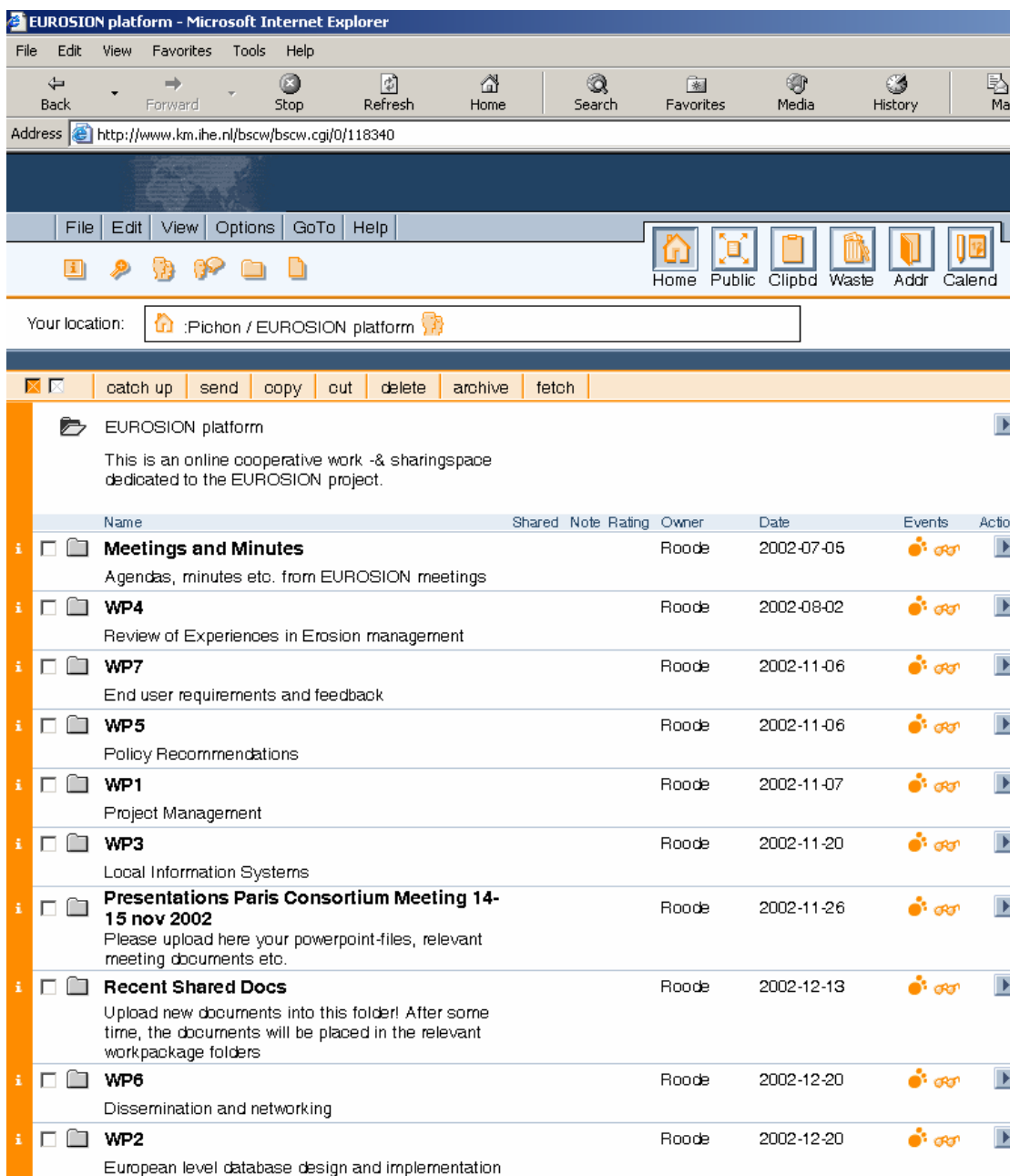
5.1. INFORMATION EXCHANGE

The information exchange is based on a platform customized for the EUROSION project and internally called '*EUROSION Platform*', e-mails use, reading reports and collection of contributions to the EUROSION web site. There are 6 newsletters – EUROSION NEWS - planned during the project. All consortium members are requested to provide their inputs to some of these issues, upon EUCG invitation.

5.1.1 EUROSION platform

To facilitate the exchanges within EUROSION consortium internet-based interactive forum has been organized, to provide the possibility to share internal or deliverable documents.

Through securized access, each consortium member may use a shared disk volume dedicated to deliverables or internal documents within EUROSION project. To provide better orientation in the content of the site new documents and files are also put into the "Recent Shared Docs" folder, before archiving in according directories.



EUROSION platform - Microsoft Internet Explorer

Address: http://www.km.ihe.nl/bscw/bscw.cgi/0/118340

Your location: .Pichon / EUROSION platform

Name	Shared	Note	Rating	Owner	Date	Events	Action
Meetings and Minutes Agendas, minutes etc. from EUROSION meetings				Roode	2002-07-05		
WP4 Review of Experiences in Erosion management				Roode	2002-08-02		
WP7 End user requirements and feedback				Roode	2002-11-06		
WP5 Policy Recommendations				Roode	2002-11-06		
WP1 Project Management				Roode	2002-11-07		
WP3 Local Information Systems				Roode	2002-11-20		
Presentations Paris Consortium Meeting 14-15 nov 2002 Please upload here your powerpoint-files, relevant meeting documents etc.				Roode	2002-11-26		
Recent Shared Docs Upload new documents into this folder! After some time, the documents will be placed in the relevant workpackage folders				Roode	2002-12-13		
WP6 Dissemination and networking				Roode	2002-12-20		
WP2 European level database design and implementation				Roode	2002-12-20		

Screenshot of the 'EUROSION platform'

5.1.2 E-mail use

Contacts have been established between people during the Kick-Off meeting held in The Hague by RIKZ building on February 14-15th 2002.

All the e-mail exchanged are classified into e-mail digital folders. The most important e-mails are printed and archived into a folder management system.

5.2. READING REPORTS

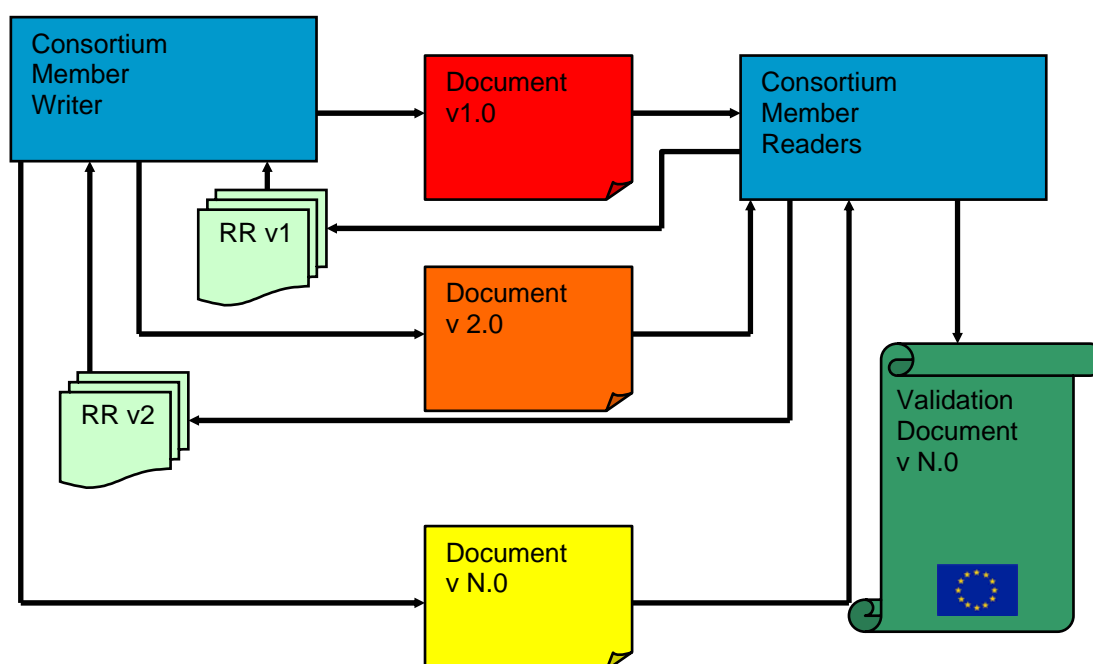
The preparation of Reading Reports is one of the procedures applied to improve the coherence of all contractual deliverables (report, nomenclature, newsletter, prototype, data set...).

The iterative procedure has been set allowing consortium members to provide the Author with remarks or comments. For that, each deliverable should come with an additional *Reading Report* file that allows a critical feedback from all readers.

This operation has to be performed at least twice:

- For first draft version of the deliverable
 - For final draft version of the deliverable, which integrates remarks from previous *Reading Reports* and other improvements.
- As a result the document is validated or not.

The ideal or generic procedure of (re-)reading is drawn below.



Generic Reading Report Procedure Schema

Nevertheless, this iterative procedure could be an never-ending story and the clever involvement of writer and reader shall prevail. If the process let appear too many iterations, such as a wasting time is stated, the Work Package leader is not able to Validate the Document shall require the Team Leader intervention. The Team Leader may decide to listen both reviewers and author and give a *modus operandi* according to the opinions received.



5.3. UNIFIED DOCUMENTS FORMAT

5.3.1 Consortium documents format

EUCC has elaborated the uniform graphic chart for EUROSION consortium deliverables:

- Fonts type Verdana 10,
- Document Header – Name of report, EUROSION –version of report (month/year)
- official EUROSION logo.

All styles are defined in Template.doc and available on the BSCW platform:

<p style="text-align: center;">Name of report EUROSION –version of report (month/year)</p>  <hr/> <p style="text-align: center;">TABLE OF CONTENTS</p> <p>1. Heading 1..... 2 1.1 Heading 2..... 2 1.1.1 Heading 3..... 2</p> <hr/> <p style="text-align: right;">Pagenumber 1</p>	<p style="text-align: center;">Name of report EUROSION –version of report (month/year)</p>  <hr/> <p>1. HEADING 1 1.1 Heading 2 1.1.1 Heading 3²</p> <p>Heading 4 Heading 5</p> <p>Normal text – verdana 10</p> <p>> bullets</p> <p>Table Text:</p> <table border="1" style="width: 100%;"> <tr> <td>Table title</td> <td>Table title</td> <td>Table title</td> <td>Table title</td> <td>Table title</td> </tr> <tr> <td>Table text</td> <td>Table text</td> <td>Table text</td> <td>Table text</td> <td>Table text</td> </tr> <tr> <td>Table text</td> <td>Table text</td> <td>Table text</td> <td>Table text</td> <td>Table text</td> </tr> </table> <hr/> <p>² Footnote text.</p> <hr/> <p style="text-align: right;">Pagenumber 2</p>	Table title	Table title	Table title	Table title	Table title	Table text	Table text	Table text	Table text	Table text	Table text	Table text	Table text	Table text	Table text
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Table text	Table text	Table text	Table text	Table text												
Table text	Table text	Table text	Table text	Table text												

5.3.2 Files Naming Rules

To assure uniformity for produced documents within EUROSION consortium, easy naming rules have to be used:

- DXX.XX for contractual documents to be delivered (cf. Inception Report final version)
- INTWPX.X for internal Work Package exchange documents

5.3.3 Deliverables Web-diffusion

For diffusible deliverables whose can be downloaded from the web site www.euroSION.org, EUCC consortium member's aim consists in checking the conformity of the rules described above and correcting errors or mistaken, and thus standardize output reports deliverable in order to make them available even in doc and/or pdf format, zipped or not.

6. GLOSSARY

6.1. ABBREVIATIONS

AQL	Acceptable quality level
RMSE	Root mean square error

6.2. DEFINITIONS

Absolute or External accuracy Accuracy	Closeness of reported coordinate values to values accepted as or being true Closeness of agreement between a test result and the accepted reference value
Accuracy of a time measurement	Correctness of the temporal references of an item (reporting of error in time measurement)
Classification correctness	Comparison of the classes assigned to features or their attributes to a universe of discourse (e.g. ground truth or reference dataset)
Commission	Excess data present in a dataset
Completeness	Presence and absence of features, their attributes and relationships
Conceptual consistency	Adherence to rules of the conceptual schema
Conformance	Fulfilment of specified requirements
Data quality element	Quantitative component documenting the quality of a dataset
Data quality evaluation procedure	Operation(s) used in applying and reporting quality evaluation methods and their results
Data quality measure	Type of test applied to the data specified by a data quality scope
Data quality result	Value or set of values resulting from applying a data measure or the outcome of evaluating the obtained value or set of values against a specified acceptable quality level
Dataset	Identifiable collection of the data
Direct evaluation method	Method of evaluating the quality of a dataset based on inspection of the items within the dataset
Domain consistency	Adherence of values to the value domains
Dublin Core	Dublin Core Metadata Element Set, summary of definitions representing formal standard for description of metadata elements; contains 15 elements
Feature	Abstraction of real world phenomena
Feature attribute	Characteristics of a feature
Format consistency	Degree to which data is stored in accordance with the physical structure of the dataset
Full inspection	Inspection of every item in a dataset, known also as 100% inspection
Gridded data position accuracy	Closeness of gridded data position values to values accepted as or being true
Indirect evaluation	Method of evaluation the quality of a dataset based on external

method		knowledge, e.g. dataset lineage, such as production method or source data
Logical consistency		Degree of adherence to logical rules of data structure, attribution and relationships (data structure can be conceptual, logical and physical)
Metadata		Data about data
Non-quantitative attribute correctness		Correctness of non-quantitative attributes
Omission		Data absent from a dataset
Positional accuracy		Accuracy of the position of features
Quality		Totality of characteristics of a product that bear on its ability to satisfy stated and implied needs
Quantitative attribute accuracy		Accuracy of quantitative attributes
Reference data		Data accepted as representing the universe of discourse, to be used as reference for direct external quality evaluation measures
Relative Internal accuracy	or	Closeness of the relative positions of features in a dataset to their respective relative positions accepted as or being true
Temporal accuracy		Accuracy of the temporal attributes and temporal relationships of features
Temporal consistency		Correctness of ordered events or sequences, if reported
Temporal validity		Validity of data with respect to time
Thematic accuracy		Accuracy of quantitative attributes and the correctness of non-quantitative attributes and of the classifications of features and their relationships
Topological consistency		Correctness of the explicitly encoded topological characteristics of a dataset
Universe of discourse	of	View of the real or hypothetical world that includes everything of interest (ground truth)

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