

Competitive and Sustainable Growth (GROWTH) Programme



SAMARIS

Sustainable and Advanced MAterials for Road InfraStructure

**REVISED CLASSIFICATION AND OVERVIEW OF DELIVERABLES,
MILESTONES AND DUE MONTHS**

Revised classification and overview of deliverables, milestones and due months according to Inception report

Background

This document contains a revised classification of all contracted deliverables in project SAMARIS. It serves the purpose of facilitating the Commission's prioritization of the review and approval processes for these deliverables.

Primary deliverables

Table 1 lists the 9 deliverables which are considered as primary in the sense that they shall bring out those final results which represent the achievement of the objectives of the project. They will all be verified by independent researchers and validated by representative end users before being approved by the project management committee and submitted to the Commission.

Other deliverables

Table 2 lists all other deliverables and identify the primary deliverable to which they are affiliated. Many of them will present results and conclusions of original experimental research and will as such need verification by independent researchers before management committee approval and submission. Others are state-of-the-art reports that may be based on literature surveys or on international information collection by questionnaires. They will in most cases need independent evaluation in the form of verification or validation before approval and submission. The process will be decided on a case-by-case basis. This table also contains all deliverables from the management and the dissemination activities of the project.

Milestones

Table 3 lists all milestones in the project.

Guide to the tables

The rows of the tables are shaded to distinguish between deliverables from

- the pavement stream of work packages, with **light grey** background
- the structures stream of work packages, with **dark grey** background, and
- the management and dissemination work packages, with **unshaded** background

The detailed planning of work that preceded the writing of the Inception Report revealed a few cases of problems that required the rescheduling of the due dates of deliverables and associated milestones. This is presented in the "Delivery Month" column and the necessary explanations are in all cases given in the footnotes.

Table 1: Overview of the primary deliverables

Deliverable No.	Delivery date (month)	Output from WP	Nature of deliverable and brief description
D15	20	6	Situation in the CE countries as regard recycling
D16	24 (+2) ¹	3	Report on methodology for assessing the possibility to re-use materials for road construction
D22	30	14	Report on tests of HPFRCC in the field
D24	31	4	Environmental annexes to road products standards
D25	33	13	Specifications for the use of corrosion inhibitors for maintenance of highway structures
D27/D28	33	5	Calibration and validation report for modelling of permanent deformation of unbound and bituminous layers in flexible pavements and recommendations for the definition of performance-based specifications
D29	33	6	Technical guide for recycling techniques in road construction
D30	33	15	Guidelines for optimised assessment of highway structures
D31	36	12	Guidelines on selection and use of innovative materials for the rehabilitation of highway structures

¹ As originally foreseen in Table 9 of “Description of Work”. Erroneously listed in Table 5.1 of same document as month 22.

Table 2: Overview of other deliverables and project outputs

Deliverable No.	Delivery date (month)	Output from WP	Nature of deliverable and brief description	Integrated in primary deliverable no.
D1	3	16	Project web-site	n.a.
D2	6	2 and 12	Developed work programme/Inception report	n.a.
D3	7	16	Brochure presenting the project	n.a.
D7	10	4	State of the art report on test methods for the detection of hazardous components in road materials to be recycled	D24
D4	12 (+5) ¹	3	State of the art report “Existing specific national regulations applied to material recycling”	D16
D5	15 (+3) ²	6	Literature survey of recycling of by-products in road construction in Europe	D15
D6	15 (+3) ³	5	Data base and report on reference full-scale tests results on pavements	D27/D28
D8	14	4	Review of road authorities’ positions on reaction to fire of pavement materials	D24
D9	15	3	Critical analysis of European documents	D16
D10	15	5	Report on models for prediction of permanent deformation of unbound materials in flexible pavements	D27/28
D11	15	5	Report on models for prediction of rutting of bituminous surface layers	D27/28
D12	18	6	Recommendations for mixing plants for recycling works	D29
D13	18	14	Report on preliminary studies for the use of HPCRCC for rehabilitation of road infrastructure components	D31
D14	18	1	Mid-term assessment report	n.a.
D17	24	13	Report on test of effectiveness of corrosion inhibitors in laboratory trials	D31
D18	24	14	Report on tests of HPCRCC in the laboratory	D31
D19	24	15	Report on state-of-the-art of the assessment of structures in selected EEA and CE countries	D30

- ¹ Originally foreseen in Table 9 of “Description of Work” to be due in month 9. Erroneously listed in Table 5.1 of same document as month 7. Will require international questionnaire and subsequent analysis. Rescheduled (from month 9) to month 12.
- ² Rescheduled due to change of leader of Work Package 6.
- ³ Because of the synergy between the models and the data in the database, it is advantageous if the database and hence D6 coincide with the D10 and D11 due in Month 15. This change in an intermediate step in WP5 will not change the total duration of the WP.

Deliverable No.	Delivery date (month)	Output from WP	Nature of deliverable and brief description	Integrated in primary deliverable no.
D20	30	4	Report on test procedure for reaction to fire of pavement materials	D24
D21	30	13	Report on test of effectiveness of corrosion inhibitors in field trials	D31
D23	32	4	Report on test methods for the detection of hazardous components in road by-products	D24
D26	33	14	Modelling of HPCRCC in hybrid structures	D31
D32	36	16	Final executive summary report	n.a.
D33	36	16	Briefing material for national promotion of project results	n.a.
D34	38 (new) ¹	1	Summary technological implementation plan	n.a.

¹ This deliverable was not foreseen in Annex 1 “Description of work” of the contract.

Table 3: Overview of the Milestones

Milestone No.	Delivery date (month)	Output from WP No.	Brief description of Milestone objectives	Criteria for assessment
M1	3	16	Project web-site	Fully operational home page with basic project information
M2	6	12	Complete review of repair methods for structures	Inception report for structure WPs available
M3	6	13	Decisions on properties of concretes to be used in laboratory and field test trials of CI.	Selection of materials
M4	6	14	Identification of most important phenomena for defining HPFRCC main test programme	Results of numerical simulations and preliminary tests available
M5	6	2	Approval of scientific methodology and work programme for pavement WPs	Consistency with objectives of project
M6	9	12	Complete critical review of relevant R&D work	Internal draft report available
M7	12	3	Determine the influent parameters and their range of variation before developing the methodology for assessing the possibility to use by-products	Suitability of the information collected
M8	12	4	Evaluation of existing test methods for detection of hazardous components and decision for the development of new tests	Applicability of existing methods to the context of recycling
M9	16 (+4) ¹	5	Evaluation of full-scale pavement tests results data base and need for additional specific data to be collected	Quality and completeness of data sets
M10	15 (+3) ²	6	Approval of the draft of the structure and table of content of the technical guide on recycling techniques	Comparison with information collected from literature survey and enquiry.
M11	12	15	Collection of structural data completed	All questionnaires completed and returned
M12	12	14	Selection of materials for main test series of HPFRCC	Preliminary test results and conclusions concerning materials for main tests available
M13	15	4	Determine the necessity to develop test methods for assessing the reaction to fire of pavement materials.	From road authorities answers.
M14	16	5	Evaluation of the need for additional tests for validation of models for permanent deformation of unbound materials in	Comparison of existing data with model requirements

¹ This milestone is dependent on D6 for which revised due month is explained in footnote 3 to table 2.

² This milestone is dependent on D5 for which revised due month is explained in footnote 2 to table 2.

Milestone No.	Delivery date (month)	Output from WP No.	Brief description of Milestone objectives	Criteria for assessment
			flexible pavements	
M15	16	5	Evaluation of the need for additional laboratory tests for validation of models for rutting of bituminous layers	Comparison of existing data with model requirements
M16	18	15	Collection of traffic data completed	Database on traffic data base and WIM measurements available
M17	19	1	Mid-term assessment passed	Consistency with work-programme and objectives of the project
M18	21(-3) ¹	14	Choice of on-site applications for pilot tests of HPFRCC	Results and interpretations of main test series available
M19	33	16	Final symposium organised	Preparations completed

¹ The laboratory tests will make this decision possible and desirable 3 months earlier than originally foreseen.