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Project acronym: **VERYSchool**

Project title: **Valuable EneRgY for a smart School**

D1.1 Management Handbook and Quality Assurance Plan.

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Dissemination Level		
PU	Public	
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	**Confidential, only for members of the consortium (including the Commission Services)**	**√**

VERYSchool

Valuable EneRgY for a smart School

D1.1 Management Handbook and Quality Assurance Plan

Document Control

WP1: Project Management

Work Package Leader: **AESS** (Marcello Antinucci)

File Reference: VERYSchool - Deliverable D1.1

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Vers.	Date	Description	Author
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V3.0	27/01/2012	WP Leader review with minor amends to deliverables	AGa
V2.0	20/01/2012	Partner's review	All
V1.0	14/12/2012	First document delivered to Partners for comments and additional content.	AGa

Table of Content

1 Executive Summary

The intent of this **Management Handbook and Quality Assurance Plan** is to facilitate and to promote the use of a performance-based management process in **VERYSchool** project.

This document is based on information available in the GA and its Annexes, and in the CA. Activities, results and publications are coordinated and administered by Agency for Energy and Sustainable Development (AESS) as Project Coordinator.

The handbook provides guidance to people for defining the initial versions, reviewing or updating any output in the progress of work. The whole document is a resource within the project with the main purpose to outline the scope and objectives of the work, and to provide a common format of project delivery.

Under this handbook, the **strategic plan** incorporates tools and methodologies which aim to:

1. establish top-level procedures for achieving goals and objectives, as well as program reviews as necessary;
2. define how project results can be achieved; and
3. measure project performances while achieving results.

The handbook consists of the following sections:

- Performance-based Management Program
- Performance Measurement System
- Accountability for Performance
- Collecting Data to Assess Performance
- Analyzing, Reviewing, and Reporting Performance Data
- Using Performance Information to Drive Improvement
- Quality Assurance Plan

Within this framework, the handbook:

a. assigns individual accountability (authority and responsibilities), meeting and reporting requirements, conflict resolution, risks handling procedures, financial requirements, the project website and dissemination guidelines;

b. provides a mechanism whereby the Partners can follow an agreed process for all major management activities and the execution of the project.

The handbook is under version control and procedures are open to revision as the project progresses. The document will be checked on a regular basis and updated with respect to emergency needs or upon Partner's requests. It is stored on the project intranet (*Basecamp* website) where partners can assess the latest version directly to control their amendments.

1.1 Working Group

The project Coordinator wrote this handbook and all Partners participated to its review.

1.2 Structure of the Document

Chapter 2: is a summary of the project outcomes and Consortium organization.

Chapter 3: provides guidance for a Performance-Based Management Program (PBMP) established to develop VERYSchool project, how to apply and how to review/update the PBMP during the whole project life-cycle.

Chapter 4: Details the Project Quality Assurance Plan established and maintained to cover all aspects of Project Management.

1.3 Acronyms and abbreviations

AESS, Project Beneficiary Nr.1 - Coordinator

AMEM, , Project Beneficiary Nr.13 - Partner

CA, Consortium Agreement

CIP, Competitiveness and Innovation Programme

DAPP, Project Beneficiary Nr.6 - Partner

DOKI and/or **SCE/DOKI,** Project Beneficiary Nr.2 - Partner

DoW, Description of Work

EAP, Project Beneficiary Nr.4 - Partner

EC, European Commission

Enerit, Project Beneficiary Nr.5 - Partner

GA, Grant Agreement

GENOA, Project Beneficiary Nr.7 - Partner

IES, , Project Beneficiary Nr.10 - Partner

IPR, Intellectual Property Rights

IsG, , Project Beneficiary Nr.9 - Partner

ISPE, Project Beneficiary Nr.12 - Partner

LED, Light Emitting Diodes

PDCA, Plan-Do-Check-Act Cycle

PBMP, Performance-Based Management Program

SELF, Project Beneficiary Nr.8 - Partner

SPO, strategic performance objectives

SZTAKI, Project Beneficiary Nr.3 - Partner

TBC, To be Confirmed

UBFME, , Project Beneficiary Nr.11 - Partner

WP, Work Package

2 VERYSchool: Project at a glance

2.1 The Partnership and Individual roles.

The VERYSchool Consortium is formed by 13 Partners: 2 Energy Agencies (AESS, EAP), 1 Educational Directorate (AMEM), 1 Municipality (GENOA), 5 Industrial Partners (DOKI, ENERIT, DAPP, IsG, IES), 2 R&D Partners(SZTAKI, UBFME), 1 ESCO (SELF) and 1 Banking Sector Partner (ISPE).

The two Regional Energy Agencies establish a link to local communities and take energy performances updated with current legal requirements. The Educational Directorate offers direct experience on School management and administration. The Municipality offers vision, leadership and helps to shape policy development. Industries, SMEs and R&D offer more qualified solutions on energy management and building control industry. The ESCO promotes and implements financial and contractual innovation. The Bank Consultant helps to develop financial aspects for understanding how schools currently finance their energy efficiency improvements and to outline how the financing options can change according to the model adopted.

Figure 2.1 show the 13 member organizations representing 9 European countries: Italy, Hungary, Bulgaria, Ireland, Portugal, United Kingdom, Serbia, Belgium and Turkey.

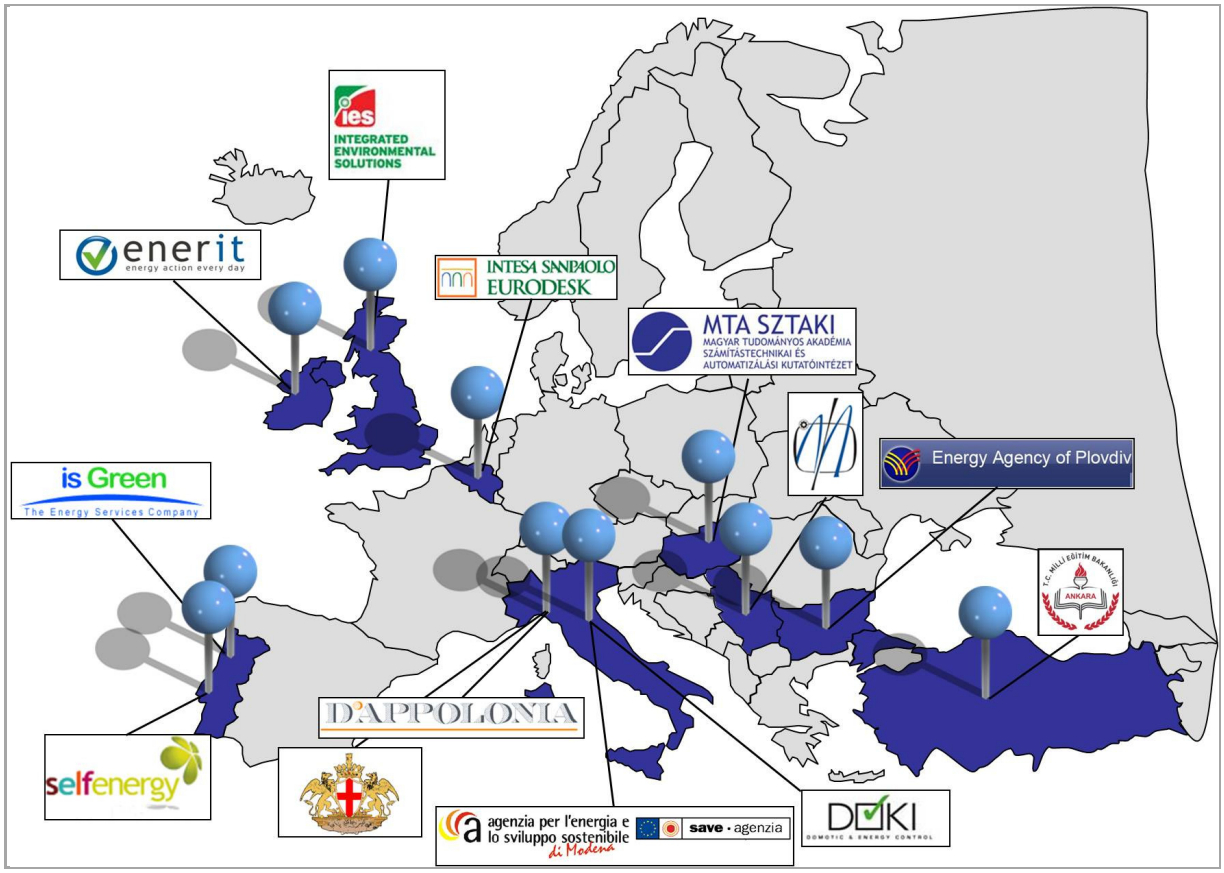

Figure 2.1 - European dimension of the VERYSchool Consortium.

The main Partner's role in the project are summarized in Table 2.1.

Partner	Main Function	Detailed role in the project
AESS	Project Coordinator	- Overall project coordinator - Building Requirements and Stakeholder Specifications - School specific optimisation scenarios - Energy Audit of Pilot 1 - ICT business model for schools - EPBD implementation and validation - Dissemination & Awareness - Hosting of the "Global Level" platform for the, connecting all pilots and serving as "good example" of territorial management
DOKI	BMS manufacturer and system integrator. Management of Pilot 1	- Integration of its own BEMS with the other technologies - Control algorithms development - Installation in the 4 Pilots and follow-up of demonstration phase
SZTAKI	Software engineering WP3 Leader	- Software development and integration - Integration of specific processing steps and protocols - Dissemination within the scientific community
EAP	Energy efficiency. Management of Pilot 3 WP6 Leader	- Management and Energy Audit of Pilot 3 - Development of a Measurement and Verification Plan - School specific optimisation scenarios - ICT business model for schools - EPBD implementation and validation - Dissemination & Awareness
Enerit	Software development. Updating their software to school environment WP4 Leader	- use its own software to make a systematic approach for successfully work at schools - Figuring out what is needed in Energy Action Navigator software - Implementing the Energy Navigator software. - Checking how the Navigator works in a real situation, as stand-alone module and integrated in the VERYSchool software architecture
DAPP	Software development and system integration WP 2 Leader	- ICT Roadmaps for EU Schools - Green design and RES Technologies - VERYSchool Valuable Action Plan
Genoa	Management of Pilot 2.	- Management and Energy Audit of Pilot 2 - ICT business model for schools - Public Awareness and Dissemination
SELF	Energy services. Management of Pilot 4. WP 5 Leader	- Management and Energy Audit of Pilot 4 - Energy business models for schools and replication plan - Progress toward the regulatory environment that supports energy grid exchange with grid network providers. - Exploitation at European level and amongst like associations. - Review of best practices in RES and energy management.
IsG	Lighting manufacturer and system integrator.	- Integration of its own light technology with the others - Control algorithms development - Installation in the 4 Pilots and follow-up of demonstration phase
IES	Software development. Carbon Assessment	- use its own software to make a systematic approach for successfully work at schools. - integration of the optimum scenarios with the <VE>; - link with the Energy Action Navigator - integration of energy audit results with IES Carbon Assessor and Building Energy Index tools for benchmarking and comparison.
UBFME	Energy management and eco-friendly strategies.	- co-ordination of Energy audit in the Pilots. - Managing RET and Connecting to the grid and district heating network, energy efficiency, eco friendly retrofit strategies. - validation of project results and dissemination.

Partner	Main Function	Detailed role in the project
ISPE	Financial Institution	- identification of modes of financing adopted by schools to support their energy efficiency investments and related barriers. - identification of innovative financing options through the analysis of existing best practices at European and international level. - Organization of a Workshop at European level gathering school managers, ESCO and financial experts dealing with financing issues in supporting energy efficiency investments in schools.
AMEM	Specification of user requirements.	- Building Requirements and Stakeholder Specifications - ICT business model for schools - EPBD validation - Implementation and validation of the project results - Dissemination & Awareness

Table 2.1 the main Partner's role in the project.

2.2 The Work Plan

The VERYSchool project is scheduled over a time frame of **36 months**. The **work package structure** is organized to optimally cover all important issues which foster the VERYSchool S&T objectives. The whole set of objectives converges into a unique concept and originates the work plan depicted in Figure 2.2, established for the project implementation.

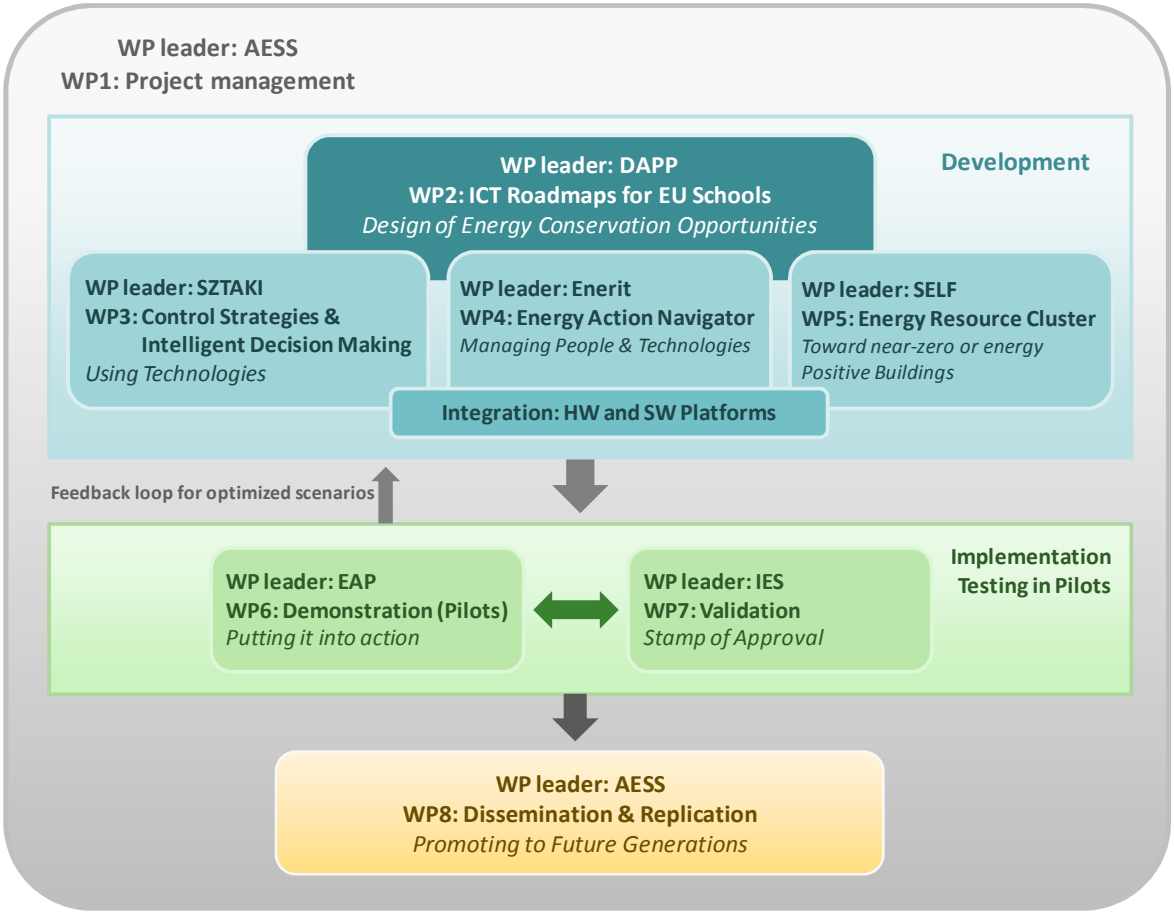

Figure 2.2: structure and interdependency of Work Packages

The **work plan** is organized into main components: project management, development, implementation and testing in Pilots validation and dissemination - replication. Tables in the following pages - included in other contractual documents - summarize organization, timing, leaderships, partner's role and contribution; they are hereafter duplicated for ease of reading and understanding of this handbook.

Work Packages are summarized in Table 2.2.

WP No.	*Title*	*Leader*	*Person months*	Start Month	End Month
WP1	*Project Management*	***AESS***	***28,0***	1	36
WP2	*ICT Roadmaps for EU Schools (design of Energy Conservation Measures)*	***DAPP***	***28,5***	1	6
WP3	*Control Strategies & Intelligent Decision Making (using Technologies)*	***SZTAKI***	***60,0***	3	18
WP4	*Energy Action Navigator (managing people & technologies)*	***Enerit***	***46,5***	5	18
WP5	*Energy Resource Cluster (towards near-zero or positive buildings)*	***SELF***	***40,0***	1	30
WP6	*Demonstration (putting into action)*	***EAP***	***62,0***	15	32
WP7	*Validation (stamp of approval)*	***IES***	***48,0***	26	36
WP8	*Dissemination & Replication (promoting to future generations)*	***AESS***	***57,0***	1	36
			370,0		

Table 2.2 – List of Project Work Packages

Scheduled Milestones are summarized in Table 2.3.

No	Name	WP involved	Lead by	Delivery month	Means of verification
MS1	Specifications Complete	WP2	**DAPP**	**M6**	Approval of all WP2 deliverables by WP3, WP4 and WP5 Leaders. Quality procedures passed and MS1 approved by GA.
MS2	VERYSchool Pilot Integrated Prototype	WP3	**SZTAKI**	**M18**	VERYSchool BEMS prototypes available, integrated, and delivered to pilots for implementation. Pilot local approvals obtained. Approval of all WP3 deliverables by WP2, WP4 and WP5 Leaders. Quality procedures passed and MS2 approved by GA.
MS3	Energy Navigator System	WP4	**Enerit**	**M18**	System implemented in the Pilots. Pre-control monitoring plan ready. Approval of all WP4 deliverables by WP2, WP3 and WP5 Leaders. Quality procedures passed and MS3 approved by GA.
MS4	Energy Resource Cluster Ready	WP5	**SELF**	**M30**	Approval of all WP5 deliverables. Quality procedures passed and MS4 approved by GA. Green Design, RES & RET content of VERYSchool Navigation Platform.
MS5	Valuable Action Plan	WP8	**SELF**	**M36**	Valuable Action Plan available. Quality procedures passed and MS5 approved by GA.
MS6	Validation Complete	WP7	**IES**	**M36**	Approval of all WP7 deliverables. Quality procedures passed and MS6 approved by GA. Core VERYSchool products and services ready.
M7	Project Complete	WP8	**AESS**	**M36**	Completion of All Deliverables and Project Activities.

Table 2.3 – List of Project Milestones

The performance-based management process established to map the whole project implementation will use a chart tracking technique to monitor and to control the progresses of the project versus time (Milestones) and versus the use of the resources (Work Packages).

Figure 2.3 shows in a radar chart the time scheduling for the completion of project Milestones. At the initial stage, “planned” vs. “implementation” project Milestones are coincident; indeed the “implementation” polygon will be update and/or consolidated at each review period. This map tracking process allows to assess if the milestone is on time, anticipated or delayed, with the amount of time early or late.

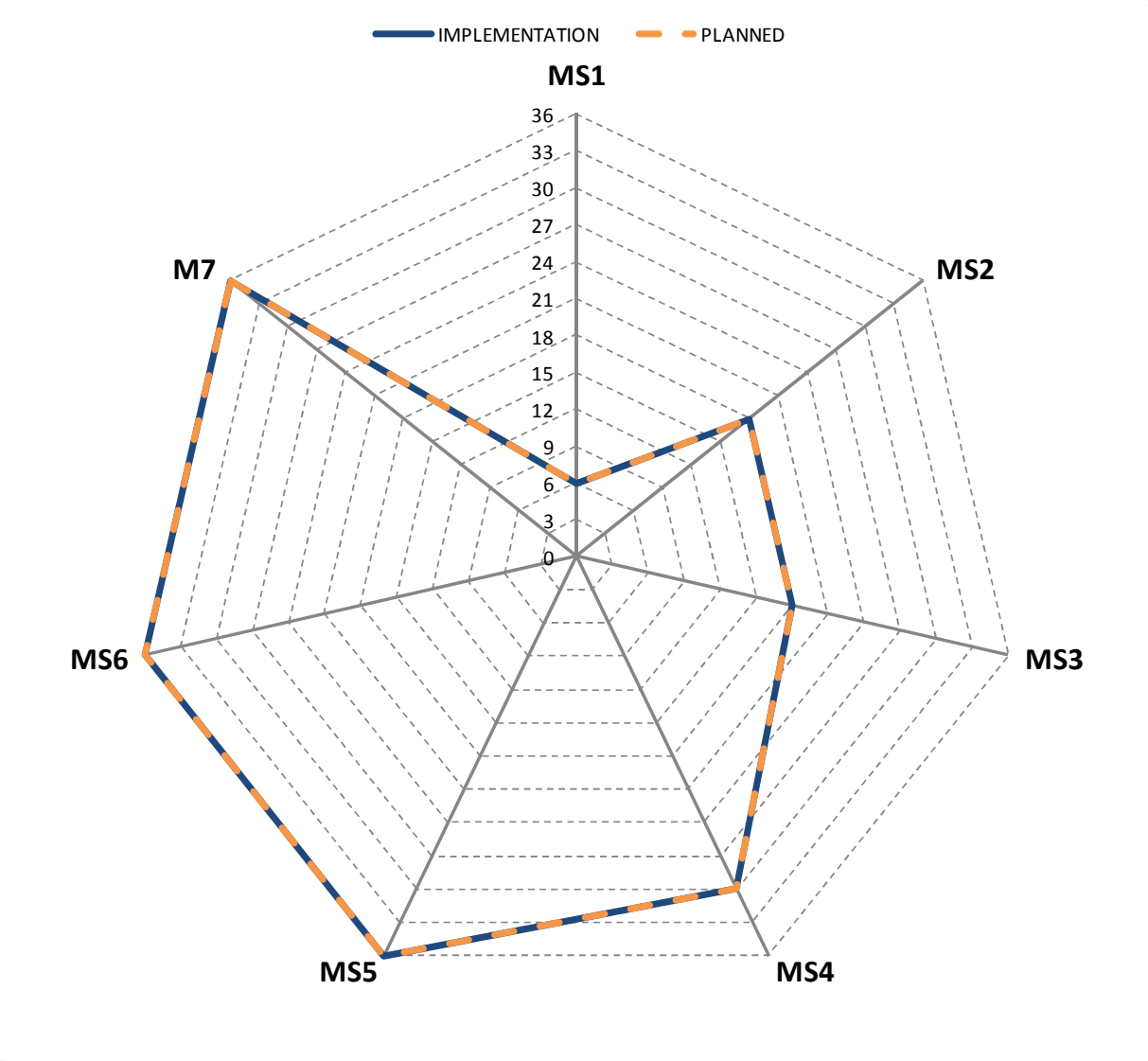

Figure 2.3: Milestone tracking time: planned vs. implementation.

Figure 2.4 shows in a bar chart the use of resources (person-months) for the completion of project Work Packages. At the present (early) stage WP staff efforts "planned" vs. "implementation" have been revised, without affecting the total person-months. The "implementation" bar will be update and/or consolidated at each review period. This map tracking process allows to assess if the use of resources is as planned, lower or higher, at the completion of each WP.

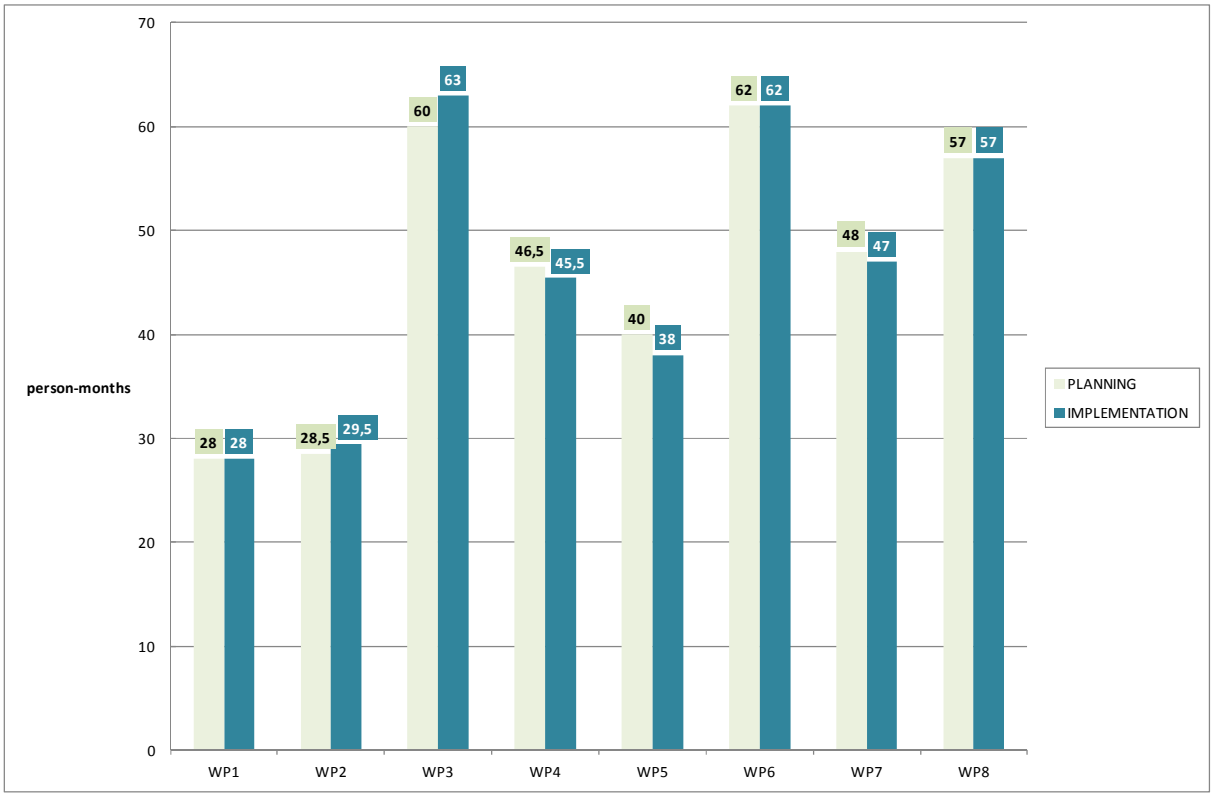

Figure 2.4: WPs map tracking - use of resources: planned vs. implementation.

Scheduled Deliverables - organized versus project reviews - are summarized in Tables 2.4.a ÷ d [1]

First Project Review: form Month 1 to Month 6.

No	Name	WP	Task	Leader	Nature	Level	Delivery
D1.1	Management Handbook and Quality Assurance Plan	1	-	AESS	R	CO	M2
D1.2	First Periodic Report: project reviews		-	AESS	R	CO	M6+1
D2.1	Building Requirements and User Specifications	2	T2.1	AESS	R	PU	M6
D2.2	Establishing an Energy Management Program for Schools		T2.2	Enerit	R	PU	M6
D2.3	Measurement & Verification Planning for Schools		T2.3	DAPP	R	PU	M6
D2.4	Technologies and their Integration		T2.4+T2.5	SZTAKI	R	PU	M6
D5.1	Energy Audit results	5	T5.1	UBFME	R	PU	M6
D8.1	Kickoff Materials	8	-	AESS	R	PU	M3
D8.2	Project website		-	AESS	O	PU	M3

Table 2.4.a - List of Project Deliverables scheduled for the 1st project review

Second Project Review: form Month 7 to Month 18.

No	Name	WP	Task	Leader	Nature	Level	Delivery
D1.3	Second Periodic Report: project reviews	1	-	AESS	R	CO	M18+1
D3.1	School specific optimisation scenarios	3	T3.1+T3.2	DAPP	R	PU	M10
D3.2	Manual Energy Savings Actions		T3.3	IES	R	PU	M14
D3.3	VERYSchool BEMS: First version		T3.4+T3.5	SZTAKI	P	CO	M18
D4.1	ICT business model for schools	4	T4.1	SELF	R	PU	M12
D4.2	Energy Action Navigator stand-alone software: 1st version		T4.2	Enerit	P	CO	M18
D4.3	Navigator and SCADA software demonstrated working together: 1st Version.		T4.3	SZTAKI	P	RE	M18
D8.3	Plan for Disseminating the knowledge	8	-	AESS	R	PU	M18

Table 2.4.b - List of Project Deliverables scheduled for the 2nd project review

Third Project Review: form Month 19 to Month 30.

No	Name	WP	Task	Leader	Nature	Level	Delivery
D1.4	Third Periodic Report: project reviews	1		AESS	R	CO	M30+1
D5.2	Green design and RES strategies for Schools – Part 1	5	T5.2+T5.3	IES	R	PU	M30
	Green design and RES strategies for Schools – Part 2	5	T5.4+T5.5	IES	R	PU	M30
D6.1	Pilots Implementation	6	T6.1+T6.2	EAP	R	PU	M20

Table 2.4.c - List of Project Deliverables scheduled for the 3rd project review

Fourth Project Review: form Month 31 to Month 36.

No	Name	WP	Task	Leader	Nature	Level	Delivery
D1.5	Fourth Periodic Report: project reviews	1	-	AESS	R	CO	M36
D1.6	Final Report	1	-	AESS	R	CO	M36+1
D6.2	Final Pilot Report	6	T6.3	IES	R	PU	M32
D7.1	Pilot Assessment	7	T7.1+T7.2	DAPP	R	PU	M36
D7.2	Energy Navigator Validated: Final Version		D4.2i+T7.3	Enerit	P	PU	M36
D7.3	Decision Making Software Validated: Final Version		D4.3+T7.4	IES	P	PU	M36
D8.4	VERYSchool Education and Awareness Activities	8	-	AESS	R	PU	M36
D8.5	Valuable Action Plan	8	-	SELF	R	PU	M36

Table 2.4.d - List of Project Deliverables scheduled for the 4th project review

[1] The explanation of "Nature" and "Dissemination Level" of Deliverables are those included in the DoW at page 38.

Task structure over the WPs is summarized in Table 2.5.

WP	Name	Start Month	End Month	Lead by	Participants
WP2	**ICT Roadmaps for EU Schools**	**1**	**6**	**DAPP**	**ALL**
T2.1	Building Requirements and Stakeholder Specifications	1	6	AESS	DAPP, Genoa, UBFME, AMEM, Enerit, ISPE, IES
T2.2	Building an Energy Management Program	1	6	Enerit	EAP, DAPP, AMEM, SZTAKI, IES
T2.3	Development of a Measurement and Verification Plan	1	6	DAPP	EAP, SELF, IES, UBFME
T2.4	Technology Selection: Smart Metering, BMS, and Smart Lighting	1	6	IsG	DOKI, SZTAKI, DAPP, IES
T2.5	Construct of the System Architecture	1	6	SZTAKI	DOKI, Enerit, DAPP, IsG, IES
WP3	**Control Strategies & Intelligent Decision Making**	**3**	**18**	**SZTAKI**	**AESS, DOKI, Enerit, DAPP, IsG, IES, AMEM**
T3.1	School specific optimization scenarios	3	10	DAPP	AESS, AMEM
T3.2	Linking smart metering and simulation to optimisation scenarios	7	14	IES	DOKI, DAPP, IsG
T3.3	User Actions and Behavioural Changes	7	18	Enerit	DAPP
T3.4	Energy system automated control	5	18	DOKI	SZTAKI, IsG, IES
T3.5	Integration, Interoperability, and Programming	7	18	SZTAKI	DOKI, Enerit, IsG, IES
WP4	**Energy Action Navigator**	**5**	**18**	**Enerit**	**AESS, DOKI, SZTAKI, DAPP, SELF, IsG, IES, ISPE, AMEM**
T4.1	ICT Business Models for Schools	5	12	SELF	AESS, Enerit, DAPP, ISPE, AMEM
T4.2	Energy Action Navigator	5	18	Enerit	AESS, SZTAKI, DAPP, IES
T4.3	SCADA & Action Management integrated at Local & Global Levels	9	18	SZTAKI	DOKI, Enerit, DAPP, IsG, IES
WP5	**Energy Resource Cluster**	**1**	**30**	**SELF**	**AESS, EAP, Enerit, DAPP, SELF, IsG, IES, UBFME, AMEM**
T5.1	Pilots Energy Audits: starting point	1	6	UBFME	AESS, EAP, DAPP, SELF
T5.2	VERYSchool Carbon Assessor	19	22	IES	SELF, UBFME
T5.3	Green Design and RES Technologies	21	26	DAPP	AESS, SELF, IsG, AMEM
T5.4	Pilot RES Assessment	23	30	IES	AESS, SELF, AMEM
T5.5	Managing RES and Connecting to the grid	25	30	UBFME	Enerit, SELF, AMEM
WP6	**Demonstration (putting into action)**	**15**	**32**	**EAP**	**DOKI, Enerit, DAPP, Genoa, SELF, IsG, IES.**
T6.1	Pilot Preparation	15	18	IsG	DOKI, EAP, Genoa and SELF
T6.2	Pilot Installation	19	20	DOKI	Enerit, IsG, IES, EAP, Genoa, SELF
T6.3	Pilot Demonstration	21	32	IES	DOKI, Enerit, DAPP, IsG, EAP, Genoa, SELF
WP7	**Validation**	**25**	**36**	**IES**	**AESS, DOKI, SZTAKI, EAP, DAPP, Genoa, SELF, IES, UBFME, AMEM**
T7.1	Measurement & Assessment Methodology – IPMVP for VERYSchool	25	36	DAPP	EAP, SELF, IES, AMEM
T7.2	Energy Benchmark Indicator	25	36	IES	AESS, EAP, Genoa, SELF, IES, UBFME, AMEM
T7.3	Schools Management Performance against ISO 50001 Practices	25	36	Enerit	EAP, SELF, IES, AMEM
T7.4	Feedback Loop	21	32	SZTAKI	DOKI, Enerit, IES
WP8	**Dissemination & Replication**	**1**	**36**	**AESS**	**ALL**
T8.1	Awareness and Dissemination	1	36	AESS	EAP, DAPP, Genoa, SELF, IsG, IES, ISPE, AMEM
T8.2	VERYSchool Education and Awareness Campaign	13	36	AESS	SZTAKI, EAP, SELF, UBFME, AMEM
T8.3	VERYSchool Valuable Action Plan	25	36	SELF	AESS, DOKI, EAP, Enerit, DAPP, Genoa, IsG, IES, ISPE, AMEM

Table 2.5 – List of Project Tasks.

Estimated **project monitoring indicators** over the 3 years life cycle are summarized in Table 2.6.

No.	Expected result	Indicator name	Expected Progress		
			Year 1	Year 2	Year 3
1	ICT selection and Energy measures for the unique characteristics and environment of schools	*Building and User needs Characterised*	100%	100%	100%
		Optimisation Scenarios defined	80%	80%	100%
		Construction of System Architecture	80%	90%	100%
2	Energy Conservation Implementation	*Control Action Plans for Optimisation Scenario implemented as integrated local BEMS*	10%	70%	100%
		Manual Action Plans developed for Optimisation Scenarios	50%	80%	100%
		Number of Green Design with RES and RET implemented in school buildings	0	0	4
3	VERYSchool Navigator	*Platform Development to be used at Pilot (local) level*	40%	80%	100%
		Navigator Action Management implemented at Global level	20%	40%	100%
4	Applicability and competitiveness	*Number of distinct fields where the VERYSchool energy conservation measures are implemented*	0	4	4
		ICT Business and Replication Plan for schools	20%	20%	100%
5	Dissemination	*Targeted website hits*	3000	6000	10000
		Number of Schools made aware of VERYSchool [2]	50	100	500
		Number of Workshops per year organized by Consortium Partners [3]	1	2	4
		Number of participation per year on Dissemination Events organized by others (Seminars, Conference, etc. [4])	8	12	16

Table 2.6: Project Monitoring Indicators over the 3 years life cycle.

[2] The number of schools aware of the VERYSchool project is prudentially assumed low, specially for Y2 and Y3; to get support and visibility (after year 1) and to respond to the needs for dissemination and market exploitation, industrial partners aims to increase the order of magnitude by a massive involvement of public administrators and school authorities.

[3] Workshops organised by AESS during Y1; by EAP and Genoa in Y2; by AESS, UBFME, ISPE & AMEM in Y3.

[4] AESS: 1 video to promote the project and the EPBD in the school, 1 movie for local TV, 6 publications on newspapers, 3 press conference involving public authorities (use of AESS' SmartLabs); SZTAKI: 4 publications (e.g. CIRP, IEEE, IFAC, IFIP); EAP: 4 publications; Enerit: 1 publication; DAPP: 2 publications; Genoa: 2 publications; SELF: 2 publications; IES: 3 publications; UBFME: 3 publications; ISPE: 4 meetings to conduct interviews within WP4 (Business model – financing aspects) and 3 participations in events sponsored by Intesa Sanpaolo Group to disseminate the results of the projects, such as: (a) *Forum Pubblica Amministrazione*; (b) *Energethica*; (c) *EnergyMed*.

2.3 Allocated Resources

Allocated Resources over the Task/WPs structure – as an update of the original project planned resource (Table 2.2) after kick-off meeting - is summarized in Table 2.7.

as per DOW			Revised																		
WPs	MM	Task	AESS	DOKI	SZTAKI	EAP	Enerit	DAPP	Genoa	SELF	IsG	IES	UBFME	ISPE	AMEM	Dx.1	Dx.2	Dx.3	Dx.4	Dx.5	Dx.6	TotDx
WP1	28,0	T1.1	**22,0**	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	2,0	2,0	2,0	2,0	3,0	17,0	**28,0**
WP2	28,5	T2.1	3,00				0,25	**1,0**	0,5			0,25	0,5	1	1,0	7,50						**29,5**
		T2.2			0,25	1,0	1,5	**2,5**				0,25			1,0		6,50					
		T2.3				1,0		**3,0**		0,5		1,00	0,5					6,00				
		T2.4		0,5	1,0			**1,0**			1,5								9,50			
		T2.5		0,5	2,75		0,25	**0,5**			0,5	1,00										
WP3	60,0	T3.1	4,0					6,0							1,0	18,0						**63,0**
		T3.2		1,0				1,0			1,0	4,0										
		T3.3					6,0	1,0									7,0					
		T3.4		9,0	**2,0**						7,0	2,0						38,0				
		T3.5		2,0	**10,0**		2,0				1,0	3,0										
WP4	46,5	T4.1	0,5				**0,5**	1,5		4,5				4,0	2,0	13,0						**45,5**
		T4.2	1,5		3,0		**9,5**	3,0				3,0					20,0					
		T4.3		1,0	5,5		**2,0**	2,0			1,0	1,0						12,5				
WP5	40,0	T5.1	2,0			2,0		2,0		**2,0**			2,0			10,0						**38,0**
		T5.2								**1,0**		3,0	1,0				13,0					
		T5.3	1,0					2,0		**2,0**	2,0				1,0							
		T5.4	1,0							**1,0**		3,0			1,0			15,0				
		T5.5					2,0			**1,0**			4,0		2,0							
WP6	62,0	T6.1		4,0		**2,0**			2,0	2,0	2,0					20,0						**62,0**
		T6.2		2,0		**1,0**	1,0		1,0	1,0	1,0	1,0										
		T6.3		10,0		**9,0**	3,0	4,0	5,0	5,0	3,0	3,0					42,0					
WP7	48,0	T7.1				2,0		3,0		2,0		**1,0**			1,0	26,0						**47,0**
		T7.2	2,0			2,0		,	2,0	3,0		**4,0**	2,0		2,0							
		T7.3				2,0	3,0			2,0		**1,0**			1,0		9,0					
		T7.4		3,0	7,0		1,0					**1,0**						12,0				
WP8	57,0	T8.1	**10,0**			1,5		1,0	4,0	0,5	1,0	1,0		4,5	1,0	4,0	10,0					**57,0**
		T8.2	**2,0**		1,0	1,5				0,5			4,0		6,0			24,0				
		T8.3	**2,0**	1,0		1,0	2,0	1,0	1,0	3,0	1,0	1,5		3,0	1,0				19,0			
Total	370,0		**51,0**	**34,5**	**33,0**	**26,5**	**34,5**	**36,0**	**16,0**	**31,5**	**22,5**	**35,5**	**14,5**	**13,0**	**21,5**							**370,0**

WP Leader

Task Leader

Table 2.7 – Allocated resources over the task/WPs structure.

2.4 The Management Structure

VERYSchool is a medium-sized project with a high level of integration requirements and 4 Pilot activities. The performance-based management structure for effective project direction, governance, communication, reporting, progress monitoring, quality assurance, and risk mitigation, together with individuals appointments, is depicted in Figure 2.5.

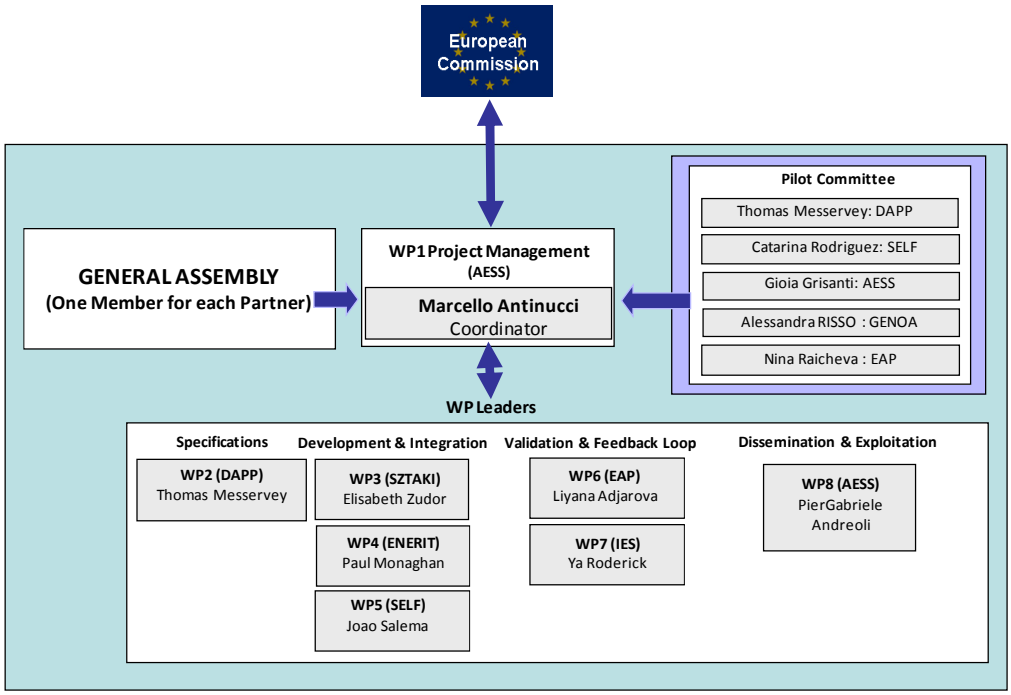

Figure 2.5: VERYSchool Management Structure

At the macro level, the General Assembly (where each Partner is represented as Committee Member) governs the project, communicates through the Coordinator with the EC Project Officer and receives inputs and/or advancements from the WP Leaders and from the Pilot Committee.

The project development and implementation is performed in accordance with **fundamental ethical principles** and with **promotion of equal opportunities between men and women**.

3 Performance-Based Management Program

Intent:

a. *to provide guidance to People involved into the VERYSchool project development on how to apply the PBMP and on how to review/update it during the whole project life-cycle*

b. *to cover the relationships of performance measurement established as robust platform for monitoring, throughout indexes, links, analysis and techniques, the progress of project performance and to act upon remedial actions during the whole project life-cycle*.

c. *to collect and to provide high quality data set for validating the project performances, ensuring the Consortium has a common and documented vision to success in management, development and project outcomes*.

To effectively implement the Performance-Based Management Program, the VERYSchool project management - within the whole set of objectives of the ICT-PSP-CIP Call for Pilot Action - addresses activities to become results-oriented by three key steps:

(1) define clear missions and desired outcomes (*what*, *when*, from *whom*),

(2) measure performance to gauge actual progresses versus plan, and

(3) use performance information as a basis for decision making.

Guided by the Coordinator, WP/Task Leaders and project developers put these three key steps in relationship to each other in order to establish an integrated process which focuses on practice and operations. The selected model which implements this methodology is shown in Figure 3.1

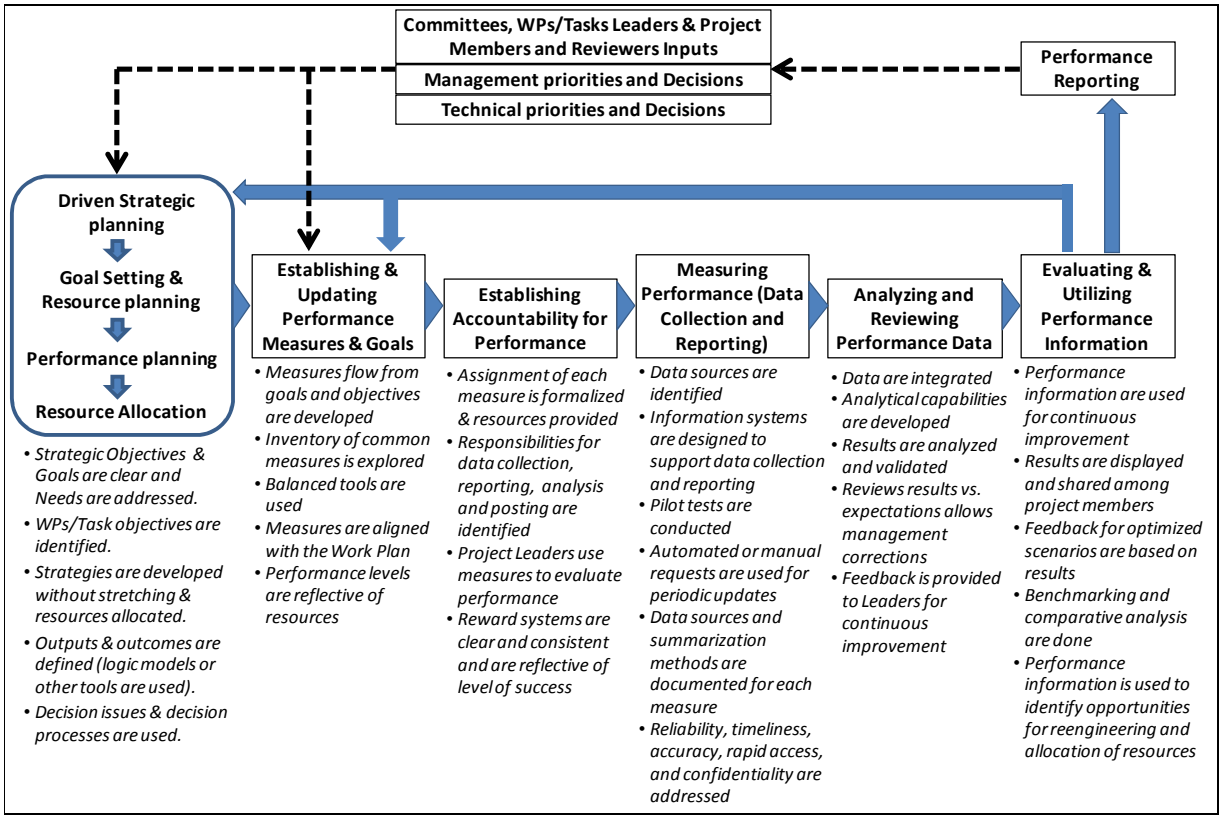

Figure 3.1. Performance-based Management model selected for VERYSchool project

Basically, the VERYSchool PBMP follows a **Plan-Do-Check-Act** process (Continuous Improvement), whose basic concepts are depicted in Figure 3.2.

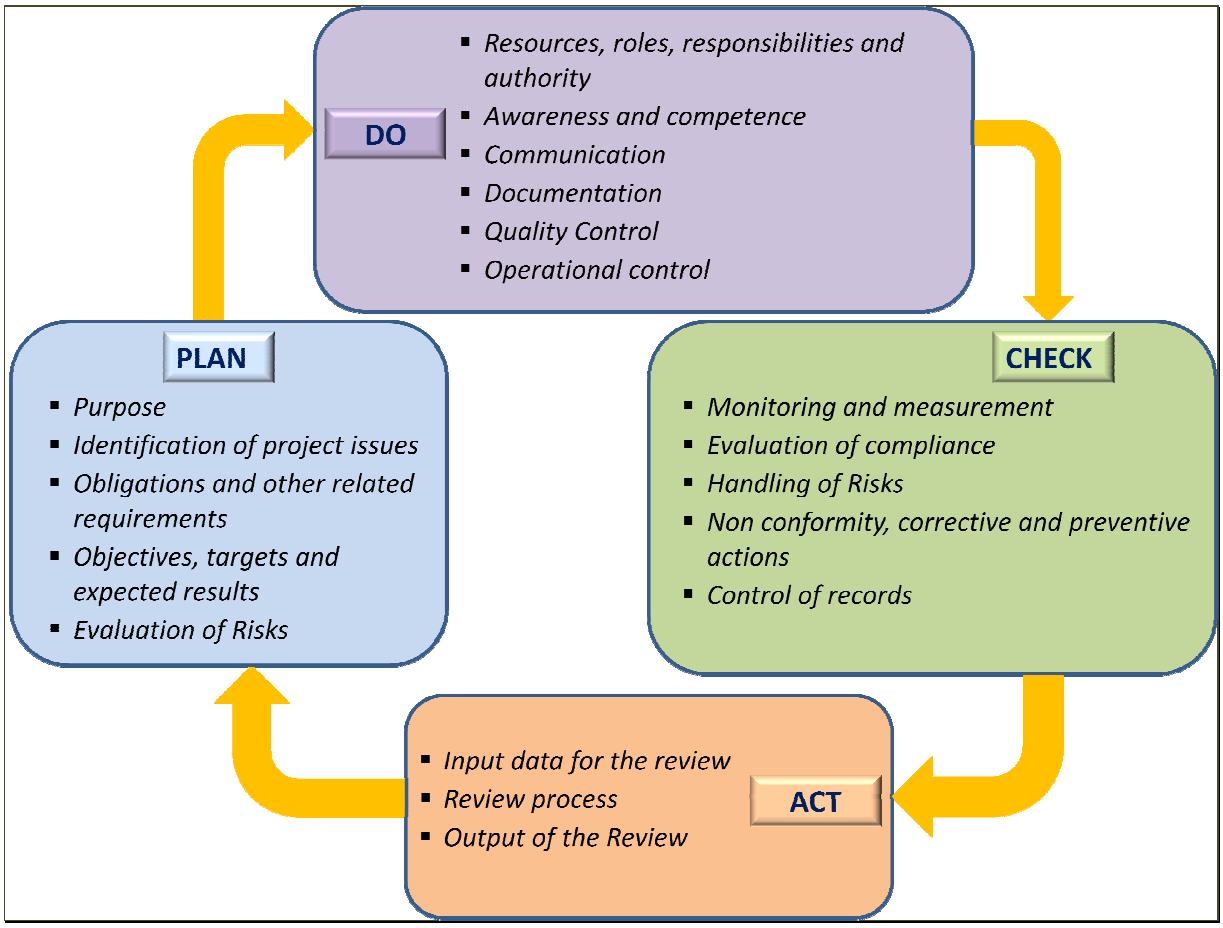

Figure 3.2 - Plan-Do-Check-Act for the VERYSchool performance-based management programme.

The closed-loop strategy to effectively operate the performance-based management cycle shown in Figure 3.2 is implemented and managed through the following operative process.

PLAN	*the appropriate organization for achieving the Strategic Performance Objectives (SPO).*
DO	*performance measures based on and linked to the outcomes of the SPO.*
CHECK	*how the ongoing work is done, by collecting data (measurements), analyzing, reviewing, and reporting the project's performances.*
ACT	*management actions for driving performance improvement, i.e., make changes and corrections and/or "fine tune" organizational operations.*

Once the necessary changes, corrections, or fine tuning are determined, the cycle starts over again. Accountability for performance is established at all steps in the framework.

3.1 Performance Measurement

Performance Measurement in VERYSchool are always tied to a target: goal or objective. This concept is considered by Consortium Members as the core for the optimal project management.

Flowing from the project objectives, goals, outcomes and strategic deliverables, the Performance Measurement provides a standard methodology for collecting, analyzing, handling and reporting data and

to communicate internally (within Consortium Members) and externally (with EC Project Officer and potential stakeholders).
In detail by:

- documenting progresses towards established objectives,
- justifying budgetary expenditures,
- showing any variation in a task or deviation from the DoW,
- identifying areas of both strength and weakness, through an on-going assessment of the current activities (development, demonstration, validation) in alignment with driving improvement.
- providing all necessary information to make intelligent decisions.

Metrics of this methodology in VERYSchool is built upon the basic concepts summarized in Table 3.1.

A measure of …	Measures ….	Expressed as comparison of ….
Effectiveness,	The degree to which the task activity output (work done) conforms to requirements.	Actual outputs vs. planned outputs
Efficiency	The degree to which the task activity produces the required output at minimum resource cost.	Actual inputs vs. planned inputs
Quality	The degree to which a project result or outcome meets requirements and expectations promised in the DoW.	Number of task produced correctly vs. total number of tasks produced
Timeliness	The unit of work (task or work package) correctly done on time.	Number of task produced on time vs. total number of tasks produced
Risks	The evaluation of which specific tasks are most critical or which tasks pose the greatest risk to successful project accomplishments.	Greater emphasis on measuring high-risk process and lesser emphasis on measuring medium to low-risk tasks.
Safety	The overall health and people working environment for doing the work.	Special attention to the Pilot demonstration activities

Table 3.1 – characteristics of the Performance metrics.

This means that applying all the above mentioned methodology (as a whole) the performance metrics of on-going activities let each Consortium Member to know and understand:

- how well the on-going tasks/activities are doing,
- if project goals are matched,
- if project scheduling and timing are both constantly verified,
- if on-going processes are under control and ready to link with other tasks/activities,
- if and where improvements or corrective actions are necessary.

The ultimate step of this approach is to set-up effective agents and decision-making process for changes, if the quantified or qualitative results of an activity/task are not aligned with the desired and expected outcomes.
The project Coordinator will track the performance metrics for the project activities progress and expended resources, as closed-loop control in terms of completion. In practical terms, the above described metrics are used in VERYSchool as a framework for **internal performance measurement**, where every Party periodically report to the project Coordinator (the Consortium chooses to do it each three-months) following a template (also hosted on the private area of *Basecamp* site) that includes:

- effort expended since the previous interim report, per task and per deliverable (all effort being allocated to a task and to a deliverable). Per-task effort information will be used by the project manager, and not reported to any external parties.
- estimates of percentage complete for each deliverables (reported by lead participants), for each tasks (reported by task leaders), for each Work Package (reported by WP Leaders), and any project milestones reached.
- any significant changes to the average cost per person-month as compared to the DOW.
- any potential risks to the project (e.g. new commitments, financial, technical, legal changes, etc).
- any problems encountered and how they were (or can/will be) handled.
- any deviations from the plan.

3.2 Accountability for Performance

In general terms **accountability** is a concept which deals with people (individual and group as well) and it is intended as the liability for ensuring that an obligation (or responsibility) to perform a task is fulfilled. As used in this handbook, accountability is a results-oriented procedure which only looks at the outcomes established for improving the performances; never to place blame and deliver punishment.
This said, the VERYSchool accountability environment refers to the condition in which Individuals, Teams and Consortium Members are getting organized to be:

- motivated to execute their authority and/or fulfill their responsibility;
- stimulated to perform their work and to achieve the desired results;
- inspired to share their results; and
- willing to accept the liability for those results.

The whole VERYSchool Consortium recognizes that key requirements for the successful establishment of an accountability environment, from whom the project development getting benefits, are:

• Leadership	• Transparency	• Consequences
• Reciprocation	• Clarity	• Consistency
• Equity	• Balance	• Follow-Up
• Trust	• Ownership	

All these concepts are merged and converge in the VERYSchool Performance Management System as mutual relationship between ***Authority*** and ***Responsibility***.

Authority is assigned as the right to act without prior approval from the General Assembly to meet in a workmanlike the contents of the DoW. Then:

- the General Assembly has the authority for strategic revisions of project plan and outcomes,
- the project Coordinator has the authority to drive the project development strictly observant of scheduling, timing and quality, and to take fast decisions to manage emergencies without approval of the GA.
- WP- and Task-Leaders have the authority to drive in effective manner the assigned work.

Responsibility is delegated to each person to do the work with duly diligence according to the roles they have in the project. In any case, assigned authority and/or delegated responsibility, within the Plan-Do-Check-Act Performance management is the basic framework to provide feedback for improvements and to maintain standards of high quality.

3.3 Assigned responsibilities

The General Assembly is the highest internal monitoring, strategic guidance and decision-making body on the VERYSchool Consortium and it is formed with one representative from each Party. The General Assembly acts as Executive Board and it is chaired by the project Coordinator while each member has the necessary authority to represent the Party and to take decisions on its behalf and to make commitment of staff and other resources as required by the project. In particular, the GA will be responsible for:

- monitoring/revising the work content and the implementation plan with regard to the deliverables and milestones, project progresses against time and budget allocations,
- updating administrative roadmaps and financial issues (e.g. allocation of funding) and intellectual property rights,
- analysing Commission's Reviewer comments on strategic level and initiating the necessary corrective actions,
- proposing changes (only and if strictly necessary for the project completion) to Annex I of the Grant Agreement to be agreed by the European Commission, after having established that there is no alternative path within Consortium to prevent a similar occurrence,
- analyzing/deciding on proposals to change the Consortium Agreement suggested by a Party,
- following the evolution of the Consortium including (potential) entry and withdrawal of Parties,
- proposing to the European Commission for a change of the Coordinator, for the exclusion of an offending partner, for the acceptance of new parties,
- ascertaining of a Defaulting Party and taking the corrective measures required in case of termination of a Defaulting Party's participation in the Consortium,
- requesting to the EC the suspension or termination or extension of all or part of the Project or the Consortium Agreement,
- overseeing of dissemination activities.

The Coordinator is the focus point for any item of concern during the project. He will responsible for the transmission of any related document to the GA and follow up their decisions. Termination and replacement of a participant will be regulated in general as proposed in the Consortium Agreement.

The Coordinator - as the legal entity to act between the Parties and the EC - is responsible for the overall management, including all the legal, contractual, financial, and administrative aspects of the consortium management and for being the primary contact point to the EC Project Officer and to the External Experts appointed by the EC as Reviewers. The Coordinator is responsible for:

- ensuring efficient and effective governance of the project, taking all necessary and reasonable measures to ensure that the project is carried out in accordance with the terms of the Grant Agreement without compliance matters,
- ensuring efficient administrative, financial, and contractual management of the project, administering the Community financial contribution and fulfilling the financial tasks described in Article II.2 of the GA and in the CA,
- preparing "templates" in order to harmonize into a standard format body all the reports which are to be delivered within the project and collecting, reviewing, verifying the consistency and submitting reports and other deliverables (including financial statements and related certifications) to the EC Project Officer,
- transmitting documents and information connected with the Project, including copies of documents and changes of contact information to and between Work Package Leaders, as appropriate, and any other Parties concerned,

- providing, upon request, the Parties with official copies or originals of documents which are in the sole possession of the Coordinator when such copies or originals are necessary for the Parties to present claims,
- monitoring compliance by the Parties with their obligations,
- keeping the address list of members and other contact persons updated and available,
- conducting effective knowledge management while governing external affairs and presentation of the project objective and results (incl. PR) in accordance with terms agreed in the CA,
- mediating and fellowshipping of possible internal conflicts within the Consortium,
- ensuring decision making processes and quality assurance procedures specific to the VERYSchool project are established and followed,
- taking care of any possible risk for achieving the project deliverables and results within the framework established by the Quality Assurance Plan and of planned time limits,
- chairing the meetings of the General Assembly,
- chairing the meetings of the Pilot Committee,
- allowing the EC Project Officer to take part in meetings concerning the project, any time a request is formulated.

Each Party [5] is responsible for:

- performing the work as identified in Annex I of the GA,
- coordinating its staff with due diligence to ensure that the assigned tasks are correctly and timely performed, and promptly providing all information reasonably required by a consortium party or the Coordinator to carry out its tasks, always taking reasonable measures to ensure the accuracy of such information,
- providing information for the "explanation of the use of the resources" during the encoding of the cost statement (form C) by using the functionality of the NEF Form-C application adopted in DG INFSO projects and reporting costs (per activity and cost category) is a consistent manner with explanation on how the amount (or parts of it) was used for each project review,
- informing the coordinator of any change of its legal, financial, organizational or technical situation; as well as any change in legal name, address or legal representatives,
- informing the other parties and the coordinator of any event which might affect the implementation of the project,
- avoiding, as much as possible, any commitments or conflicts of interest that may interfere with its obligations in this project, or influence its impartial and objective performance in the project,
- taking part in relevant meetings concerning technical issues, supervision, monitoring and reviews of the project,
- providing all detailed data requested by the EC for the purposes of the proper administration of the project,
- adhering to the Consortium Agreement,
- appointing its representative as GA member with the necessary authority to represent the Party and to take decisions on its behalf and to make commitment of staff and other resources as required by the project.

[5] See also the Grant Agreement, II.3 for additional details, in particular concerning the obligations of each party in relation to the EC.

Work Package Leaders are responsible for:

- ensuring the implementation of the Work Package following the planned breaking of the work package into its tasks, assigning responsibility for tasks, coordinating task leaders, planning for the future period, scheduling tasks in time,
- coordinating on a day-to-day basis the progress of the technical work under the specific Work Package and submitting the implementation plan to the General Assembly for review,
- working in closed contact with the Coordinator and the other work package leaders to ensure coherence of the project as a whole and continually assessing the quality of the technical work and report,
- communicating any plans, deliverables, documents and information connected with the Work Package between its members and, if relevant, to the General Assembly and following up decisions for what affects the Work Package development,
- alerting the Coordinator and the General Assembly of any discrepancy with the implementation plan, including any delay in the performance of the Work Package which addresses both the quality of work or the timing of deliverables, technical disputes and presumed breach of responsibilities of a Party working in the Work Package,
- formulating a revised implementation plan for the activities within the Work Package which can imply proposing to the General Assembly changes to the Project Plan and/or Annex I of the Grant Agreement,
- reporting the general Assembly to decide upon any exchange of tasks and related budgets between the Parties in the Work Package when such exchange has no impact beyond the scope of the Work Package and its budget.

Task Leaders and Leaders of Deliverable are responsible for ensuring that the task/deliverable production is on-time and upon the quality requirements of the project. Specifically, their responsibility is for:

- splitting down task activities into smaller concrete sub-tasks verifying the responsibility of each Party working in the task,
- creating an outline/table of contents/skeleton of the deliverable and make it available on the project private area as soon as work begins on the associated tasks,
- collect contributions from all participants and integrate them into a coherent whole,
- initiate review activities at the correct times,
- deliver the deliverable on time,
- review and recommend deliverables for approval at appropriate stages of the project.

The Pilot Committee is a supervisory body which rely heavily on VERYSchool pilot buildings and activities to shape, develop, and conduct the demonstration activities. The Pilot Committee - established because the integration of technologies with different functionalities from different Consortium partners and the geographically scattered Pilot locations makes it appropriate to have a decision making body devoted to timely assist and govern pilot activities - is responsible for:

- coordinating the Pilots Energy Audits as starting point of the project,
- coordinating the Pilot Preparation with all local permissions achieved and all preparatory and identified works (including masonry work and drafting of electrical cables) made in a workmanlike within the scheduled timing for a successful installation of VERYSchool BEMS and Action Management Navigator,

- coordinating the Pilot Installation of the VERYSchool System, delivered in the 4 Pilots geographically scattered, until system is ready to start within the scheduled timing,
- coordinating the Pilot Demonstration and monitoring the effective and efficient execution of the functional tests which allow the further validation of VERYSchool optimized scenarios,
- coordinating the demonstration activities looking for replication the process and the methodology with a feedback loop to optimize the system performance,
- considering the implementation of a methodology for calculating savings, which is developed by the EC for on-going CIP projects, to deliver the experimental data collected in the 4 Pilots (High Quality Data Set within VERYSchool project used for validation) in a format which is standardised and fully compatible with the external EC software tool.

3.4 Performance Assessment

To be effective, Performance-based Management Systems should necessarily be centered on data management and VERYSchool is organized for this purpose. Standing that VERYSchool is a result-oriented (demonstration) project with no large database, the project management typically deals with the following categories of data sets:

- performances of activities,
- financial expenditures,
- technical (Pilot) activities,
- knowledge sharing,

with a process for:

- appointing individual accountability in the identification of data needs and selection of data collection methodologies,
- having a driven objective to outweigh the phases of handling (storing), analyzing, exchanging and reporting,

so that decision-making can operate as fastest being aware of all the necessary boundary conditions related to events. Within VERYSchool data collection to assess the project performance is not a discrete function but it is appraised continually, being consistent across the work plan and provided in a timely manner in terms of deliverables, experimental results (field tests for demonstration and validation) and knowledge sharing inside and outside of the project.
All data collected shall be administrated in VERYSchool by the following criteria.

Quality: completeness, accuracy, reliability and consistency across the project structure, to ensure that data can be turned into information used by, and useful to, decision-makers and each dataset meets the project outcomes as described in the DoW, without any oversights or deviations from these requirements.

Sources: each data element can be quantitative and qualitative: the former information usually relates to individual data source (e.g. test measurement, percentage of work completed, indicators/benchmarks of project progress, etc.), the latter can be gathered from multiple sources/strategies for each project objective. Data sources are named and consistently defined across sites (pilots), work packages and tasks

Timing: the type of data being collected and the needs of decision-making dictate the information timing. Some timings are already fixed in the DoW such as completion of Milestones/WPs, Task deliverables, progress review reports and meetings, etc; other timings refers to the internal auditing process, others can produce daily, weekly or monthly data (all mainly referred to experimental data) or only once a year. However, to be useful for management decisions information timing is matched to the need for decisions and to the cost of collection and processing.

Costs: being the data collection (finalized to the reporting system) a bit sophisticated in VERYSchool, its implementation cost is not negligible, but considered in the project overall budget. Improved timeliness, depth of understanding, breadth of coverage, and user ease-of-use concur at this item. For experimental data a tight control and close attention shall be paid to collecting only what is needed, not all what is available. The information system shall be always driven from top-down requirements and considerations to ensure that the benefits of collecting data (and the subsequent processing into meaningful information) is completed in a cost-effective manner.

Protection: Protecting sensitive data is of paramount importance for VERYSchool Consortium as a whole and for each party. As agreed in the Consortium Agreement data protection is mainly related to intellectual property costs, objecting Party's Foreground or Background adversely affected, and ownership of any party's intellectual property. Protected data shall be used for internal management use only and not intended for dissemination outside of the Consortium. So data shall be organized to build a two-tiered information system: one tier designed to provide information destined for dissemination and a second tier designed to report internal operating, financial, and other performance information.

Processing: manual and computer's tools used to help collect, analyze, process, trend and communication both in visual and printed form. Each Party uses its own data management system for querying and reporting data collecting, data mining and data warehousing, while a common and solid methodology, using standard codes and best-practices, is considered to output High Quality Data Set (HQDS) of Pilots experimental data.
The automatic experimental data collection, reducing the physical visits to the facilities and removing any need for physical interaction with technological plants, will further allow to add specific actions for a better planning of the use of resources for demonstration activities in the pilots. All experimental data are transferred over internet to a central data-warehouse. These data shall be inputs for energy saving assessments and output for the VERYSchool optimized scenarios as well. A dedicated Energy Management Portal will provide web access to both Consortium Members and external end users (dissemination profiles).

Reliability: this data characteristic affects all information to transmit to the European Commission: project deliverables, financial sheets and experimental measurement. Furthermore, the collected experimental data sets are conceived to populate a database of information for future comparison. Granting the specific request made by the European Commission during the Negotiation phase of the project, who is jointly developing and implementing for on-going CIP projects a common EC methodology and software platform for calculating savings, the format of these experimental datasets will be fully compatible with the EC methodology to guarantee a standardized and comparable use (analysis and calculations) of the Pilots.

Accuracy: this covers the degree of focus and disaggregation of collected experimental data. For example, for evaluation attempts to determine energy consumption and energy saving measures, data can refer to the Pilot as a whole or to individual end-uses.
According to the technical specification, each data set yields valuable information but can differ from others in its degree of accuracy: the case data collected by official statistics (i.e. energy bills) is usually more coarse (less accurate) than data collected by individual metering, producing a finer (more accurate) data set.

Level of Detail: different levels of detail are considered as best appropriate to accumulate verifiable factors to be used in the evaluation process.

All the above described data collection characteristics are summarized in the following Table 3.2.

	Quality	Sources	Timing	Costs	Protection	Processing	Reliability	Accuracy	Levels of Detail
performances of activities	high	many	Project scheduling	appropriate	Some restricted	yes	high	high	yes
financial expenditures	high	Party	Project scheduling	appropriate	Restricted	yes	high	high	yes
technical (Pilot) activities	high	many	several	appropriate	no	yes	high	high	yes
knowledge sharing	high	many	N/A	appropriate	no	yes	high	high	yes

Table 3.2 – data collection characteristics.

3.5 Using Performance information to drive improvement

Performance information is used at all levels of VERYSchool management to drive performance improvement adopting benchmarking to aid in identifying potential areas of performance improvement and in generating innovative ideas to drive that improvement. VERYSchool focuses on benchmarking methodology in the following areas:

Process: as discrete work processes and operating systems to look at comparisons of:

- internal operations,
- productivity or function of interest (understood as the achievement of project outcomes),
- functions within the same project objective (task or work package).

Performance: as product comparisons, such as:

- technical quality,
- reliability,
- timing,
- ancillary reports and Energy Action Navigator features.

Management Reviews

Navigating VERYSchool project management is crucial to making real-time and appropriate adjustments as technological, human and organization challenges require prompt or immediate information and feedback to respond with necessary course corrections. Within a closed-loop for establishing a competitive environment, VERYSchool management reviews performance information routinely, with a frequency determined by the nature of the objectives being measured, the level of review, the tightness of milestones and other sensitive factors. Generally speaking, performance measures of on-going work is foreseen each three months, with the internal audit reporting from each Partner to the Coordinator. Prompt responses will avoid delays in productivity (development) or incompleteness of contents or non-compliance or low quality products (i.e. milestone, deliverables) or late remedial reactions to act upon obligations and requirements.

Reaction to Data

Each time shortfalls are evident in VERYSchool management or development, a commitment to the corresponding actions of the recovery plan and in monitoring the progress towards recovery is of utmost importance. Partners throughout the Consortium will respond in concert with management's rigor.

Sharing results

End-to-end process and improvement are dependent on the performance of all Partners along the value

chain of VERYSchool development. Timeliness, accuracy and dependencies between Teams and sub-work organizations are absolutely crucial to help management for assessing the effectiveness, and therefore the usefulness, of the project outcomes within an unique structure. As a regulator, the Coordinator is a supplier of guidance and requirements to all partners, while maintaining and sharing performance metrics on the effectiveness of both of these concepts.

Using Performance Information to Identify Opportunities

As performance information is gathered and analyzed, opportunities for reorganizing and improved allocation of resources will become more clear. Determination of the largest gaps in performance between the organization's current level of work and the identified improvement targets makes selection of opportunities much more effective.

Benchmarking

Benchmarking performance will be applied for targeting initial improvement priorities and to review along the whole VERYSchool project development, allowing on the same time to see beyond the existing paradigms of process performance. Throughout benchmarking the likelihood of seeing different solutions to actual process can be greatly improved. Table 3.3 below provides an overview of the major benefits recognized in VERYSchool for applying a benchmarking.

Management …….	**Without Benchmarking**	**With Benchmarking**
Defining Requirements	- Based on history / gut feel - Acting on perception	- Based on development - Acting on objective evaluation
Establishing Effective Goals	- Lack external focus - Reactive - Lagging process	- Credible; outcome-focused - Proactive - process leadership
Developing True Measures of Productivity	- Pursuing pet objectives - Strengths and weaknesses not understood	- Solving real problems - Performance outputs known; based on best-in-class features
Becoming Competitive (within the assignment)	- Internally focused - Evolutionary change - Low commitment	- Focused on objective - Revolutionary ideas with proven performance - High commitment
Industry Practices	- Not invented here - Few solutions - Continuous improvement	- Proactive search for change - Many options - Breakthroughs

Table 3.3 - Timing for delivering internal and periodic activity reports

The main reasons for performing benchmarks in VERYSchool management are to:

- promote quantum leaps in performance,
- minimize the amount of time required to accomplish change,
- help the establishment of effective goals and measures productivity,
- encourage striving for excellence of work and breakthrough thinking,
- emphasize sensitivity to changing current behavior,
- create a better understanding of requirements and the dynamics of the development,
- provide a sense of urgency for applying process improvements,
- ensure that the best practices are included in work processes.

Basically, benchmarking in VERYSchool will be applied in the following main area.

1. internal organization, to provide comparisons among Consortium Members;
2. competitiveness, to provides comparisons among Partners for a specific task/deliverable.
3. functionality, to provide comparisons of similar functions within the same task/deliverable.
4. process, to focus on operability to produce bottom line results, such as increased productivity, reduced cycle time, lower costs, reduced error rates, and minimizing risks.

5. performance, to focus on products features, such as technical quality, timing and reliability.

Benchmarking will be used when:

- the targeted process is critical for gathering the objective,
- analysis indicates that the actual performance is not competitive,
- significant growth opportunities exist of which currently it cannot take advantage,
- there is a low understanding of the current process and of its performance measures,
- the process is committed to change (even radical change).

When significant benchmark gaps between actual performance and requirements are identified, a future performance will be established to allow to achieve parity with the goal. As progress toward the parity goal occurs, a feedback for closing the performance gap(s) will be provided. When the parity goal has been reached, a new goal can be attempted to take a position of leadership in VERYSchool performances production.

Figure 3.3 provides a pictorial view of determining performance gaps.

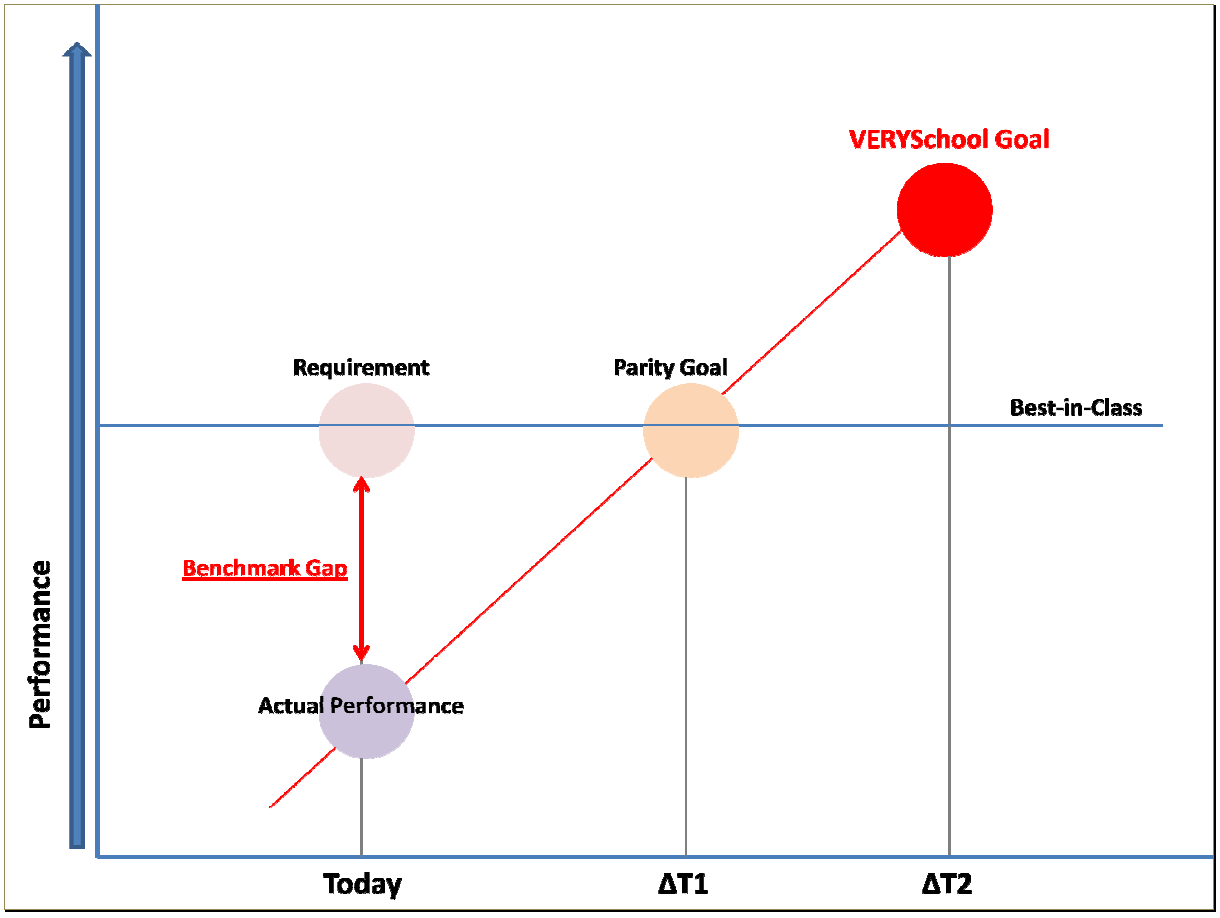

Figure 3.3 - benchmarks gaps and recovery.

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4 Quality Assurance Plan

The Project Quality Assurance Plan is a plan for internal procedures and it is established and maintained by the project Coordinator. It clarifies aspects of Project Management, especially for deliverables, that are not explicitly accounted for in the Grant Agreement, the Consortium Agreement or elsewhere in the Project Manual. The Project Quality Assurance Plan defines:

- the quality standards of deliverables and their acceptance criteria,
- the standardization of the deliverables on the basis of the above criteria,
- in-house measures to ensure that the above criteria are satisfied,
- the control mechanisms internal and/or external of the deliverables,
- the corrective mechanisms.

It provides templates for the production and packaging of deliverables, a procedure for raising comments on deliverables and for accepting deliverables. The following questions serve as a checklist to determine the quality check of the performance-based measures:

- Is the measurement objectively measurable?
- Does the measurement include a clear statement of the end results expected?
- Does the measure support project requirements, including compliance issues where appropriate?
- Does the measure focus on the effectiveness and/or efficiency of project deliverables and milestones?
- Does the measure allow for meaningful trend or statistical analysis?
- Have appropriate standards been applied, with explicit reference to the demonstration (Pilots) activities and to the EC recommendation for producing experimental data sets in a format fully compatible with the methodology build for calculating energy saving?
- Does the measure include indicators to express qualitative criteria?
- Are the measures challenging, but, at the same time, attainable?
- Are assumptions and definitions specified for what constitutes satisfactory performance?
- Has the measure been mutually agreed upon by Consortium Members?

The Project Quality Plan is decided by the General Assembly and updated as needed.

4.1 Analyzing

The intent of data analysis and reviewing is to convert raw data into performance information and knowledge, so that work done doesn't vary from what is being expected or, conversely, to determine what corrective action might be required to be aligned with the DoW.

Analysis within the performance-based management cycle follows the logical flowchart depicted in Figure 4.1.

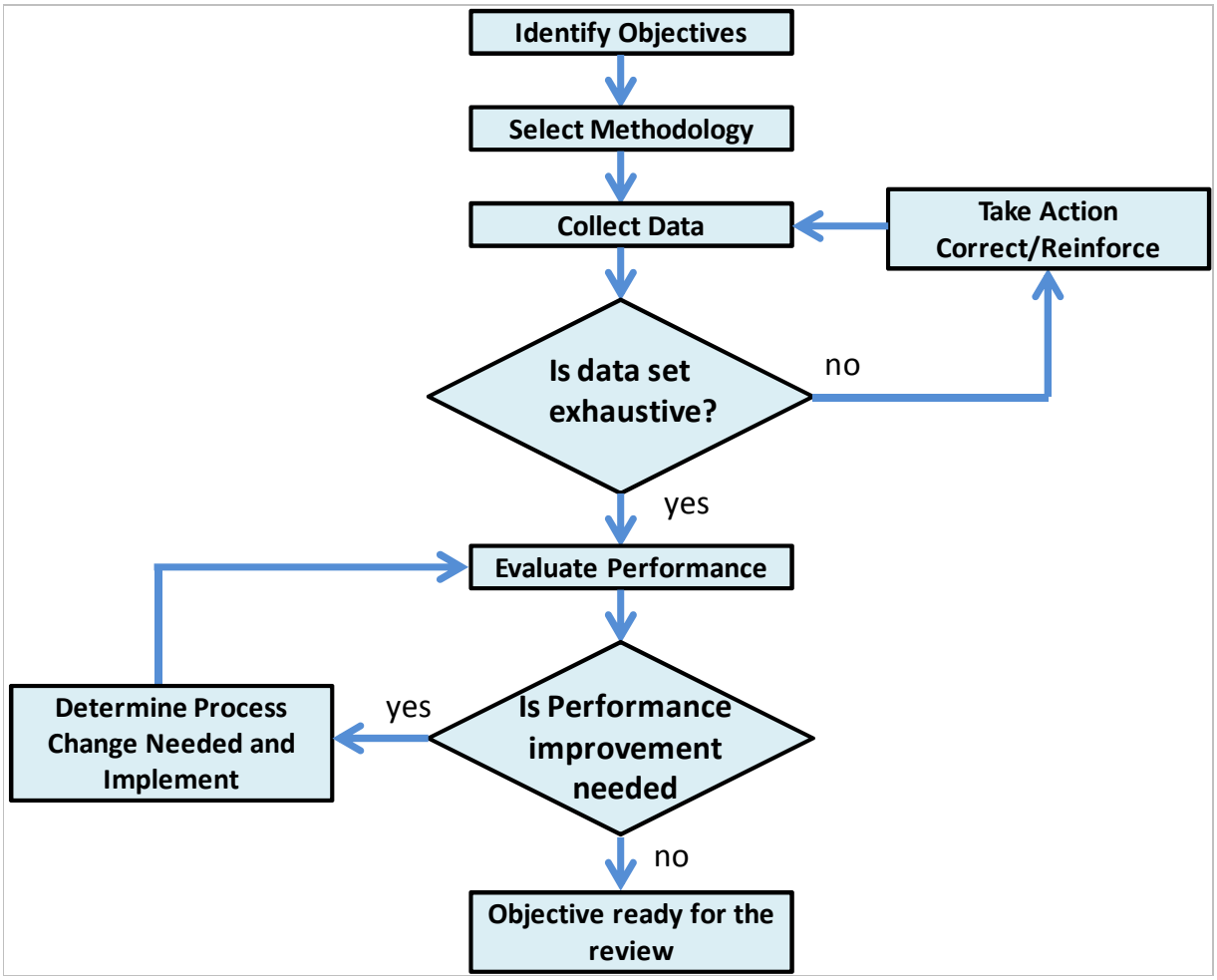


Figure 4.1 – The flow of analysis.

4.2 Reviewing

The Grant Agreement with Art. 4 (page 4) establishes the review periods of the project. The following Table 4.1 summarises the project review periods and scheduling reporting timing:

Review No.	Start	End	Report due to project Coordinator	Report due to EC
1	December 1, 2011	May 31, 2012	June 30, 2012	July 31, 2012
2	June 1, 2012	May 31, 2013	June 30, 2013	July 31 2013
3	June 1, 2013	May 31, 2014	June 30, 2014	July 31, 2014
4	June 1, 2014	November 30, 2014	December 31, 2014	January 31, 2015

Table 4.1: project review periods and scheduling reporting timing

Individual performance measuring activity reports from each Party shall be submitted to the project Coordinator no later than the dates agreed in Table 4.2.

Review No.	For period	Report due	Nature
1	Dec 2011 - Feb 2012	March 15, 2012	Internal report
	Dec 2011 - May 2012	**Jun 15, 2012**	**Periodic report**
2	Jun - Aug 2012	Sept 15 2012	Internal report
	Sept - Nov 2012	Dec 15, 2012	Internal report
	Dec 2012 - Feb 2013	March 15, 2013	Internal report
	Jun 2012 - May 2013	**Jun 15, 2013**	**Periodic report**
3	Jun 2013- Aug 2013	Sept 15 2013	Internal report
	Sept - Nov 2013	Dec 15, 2013	Internal report
	Dec 2013 - Feb 2014	March 15, 2014	Internal report
	Jun 2013 - May 2014	**Jun 15, 2014**	**Periodic report**
4	Jun 2014 - Ago 2014	Sept 15, 2014	Internal report
	Jun - May 2014	**Dec 15, 2014**	**Periodic report**

Table 4.2 – Timing for delivering internal and periodic activity reports.

When required by the scope of the work, the Coordinator may require more frequent reports to ensure adequate tracking of the project.

4.3 Reporting

According to Art. II.4 (page 15) of the General Agreement, the project Coordinator will submit the report to the EC no more than 60 days after the end of each reporting period, provided that all technical and financial information are available.

Each Party is required to submit their periodic reports to the project Coordinator no more than 30 days after the end of each reporting period.

The periodic report to the EC Project officer shall consists of:

- an overview of the progress of work towards the objectives of the project, including any milestones achieved (i.e. what has been done in the period).
- an explanation of any differences – if there will be - between the work carried out and the work expected to be carried out in accordance with Annex I (the DoW) of the Grant Agreement.
- an explanation of the resources used by each Party, including justification for major cost items (e.g. equipment purchases, major travel costs, large consumables) and their necessity to the project.
- a break-down of the effort reported per work package and per deliverable.
- Form C (as provided by the EC) signed by the authorised representative of the partner.
- Certificate on Financial Statement (if required)

If for any reason a Party should not communicate their individual periodic report (e.g. because a Certificate on Financial Statements needs to be prepared and cannot be completed in time), the Party itself is obliged to notify the project coordinator of the circumstances for the occurred inability.

4.4 Document and deliverable control

The list of **Project deliverables** is described in Annex I of the GA. Deliverables that do not take the form of a written report shall nevertheless be documented in a written record of the achievement of the deliverable, including any supporting material (e.g. photos, conference report, software etc.). The project Coordinator posts a set of templates for reports and presentations on the private area of *Basecamp* site.

Traceability between deliverables is established in every document in a specification section entitled "List of related documents" in which applicable and reference documents shall identified.

Documents delivered in form of reports are in source format as a PDF file. Within the Consortium acceptable source formats for reports are: Microsoft Word and OpenDoc (ODF). Figures are in PDF, EPS, WMF, TIFF PNG or JPEG format but of high quality. On the private area a folder named "Deliverables" is created, with subfolders for each WP.
Deliverables are labeled as "**Dx.y title**", where **x** represents the number of the WP, **y** the progressive number within the WP and **title** the string already baptized in the list included in the DoW. Deliverables submitted for review shall be uploaded to this folder.

A crucial step to be effective in VERYSchool - and to perform project management with high quality standards - is to analyze each process by applying benchmarks. A key benchmarking tool for performing this analysis is the process mapping. The top-down map depicted in Figure 4.2 below is a high level overview on how inputs and outputs are identified to characterize a specific objective.

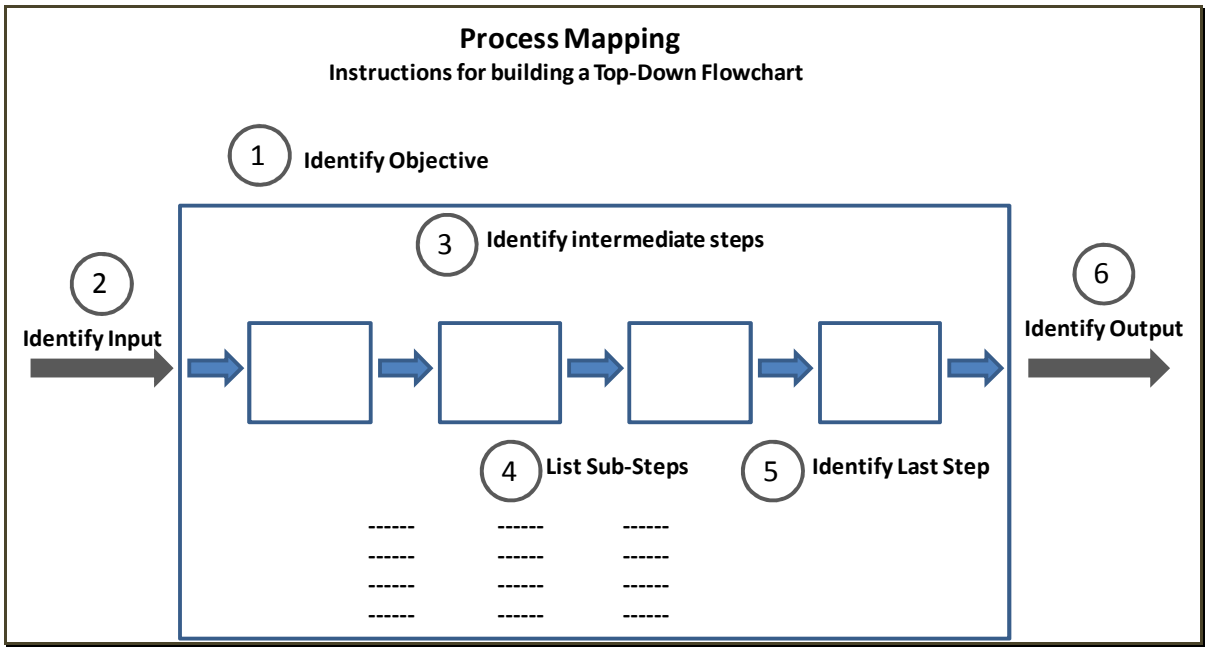


Figure 4.2 – Process Mapping.

The process mapping phase is part of the Continuous Improvement Cycle foreseen within the overall **PDCA Cycle**. The concept of continuous improvement is considered even if a small improvement in the quality and/or timing to complete one cycle of the process is required or to avoid the unproductive waste.

Approaching the process mapping, the **lead participant of a deliverable** is responsible for producing the final report as version number 1.0 of the document while each partner working in the task produces a part of the same deliverable. A copy is hosted in the private area. Incomplete deliverables shall be treated as confidential information. The **WP Leader** appoints for each deliverable at least one Party as peer reviewer no less than five weeks before the submission date for the deliverables, informing the reviewers of their appointment and the lead participant of the deliverable of who has been appointed as reviewer. The **lead participant** of the deliverable submits a draft of the deliverable to the reviewers no later than 28 days before the submission is due. **Reviewer(s)** of each deliverables shall:

- not be directly involved in producing the deliverable or not belonging to any Party with a major role in producing the deliverable,
- have the technical know-how needed to assess the work.

Reviewers are expected to provide constructive suggestions for improvement, but are not expected to rewrite the text. Written comments may be provided directly in the document, preferably through the use of reviewing comments. If changes are made to the document, "Track Changes" (or equivalent) should be enabled. The reviewing procedure takes no later than 14 days before the submission date at which point the reviewed document is submitted to the WP leader as version number 2.0.

The WP leader validates the final version of the deliverable, updates the revision number to 3.0 and submits the document to the project Coordinator no later than 10 days before the submission date.

The project Coordinators informs the **General Assembly** of the deliverable and its contents. In case no General Assembly member objects to the contents of the deliverable within two days, the deliverable is assumed to be approved. If an objection is raised, the General Assembly will prompt a solution to resolve the issue while the project Coordinator informs the EC project officer the reasons of possible delays.

Once a deliverable has been approved by the General Assembly, the project Coordinator will update the version number to 4.0 (in private area/wiki and on the cover page of the document) and submit it to the EC Project Officer. In case the dissemination level of the deliverable is public, the deliverable will also be published on the public project website. Reviewing deliverables, the General Assembly is responsible for ensuring that IPR is adequately protected. However, it is mainly the responsibility of the lead participant of a deliverable to contact the project Coordinator (who will in turn raise the issue with the General Assembly) well in advance, in case of uncertainty of approval from the General Assembly with respect to IPR.

The process mapping applied to the production of a deliverables originates the flowchart depicted in Figure 4.3 and Table 4.3 below.

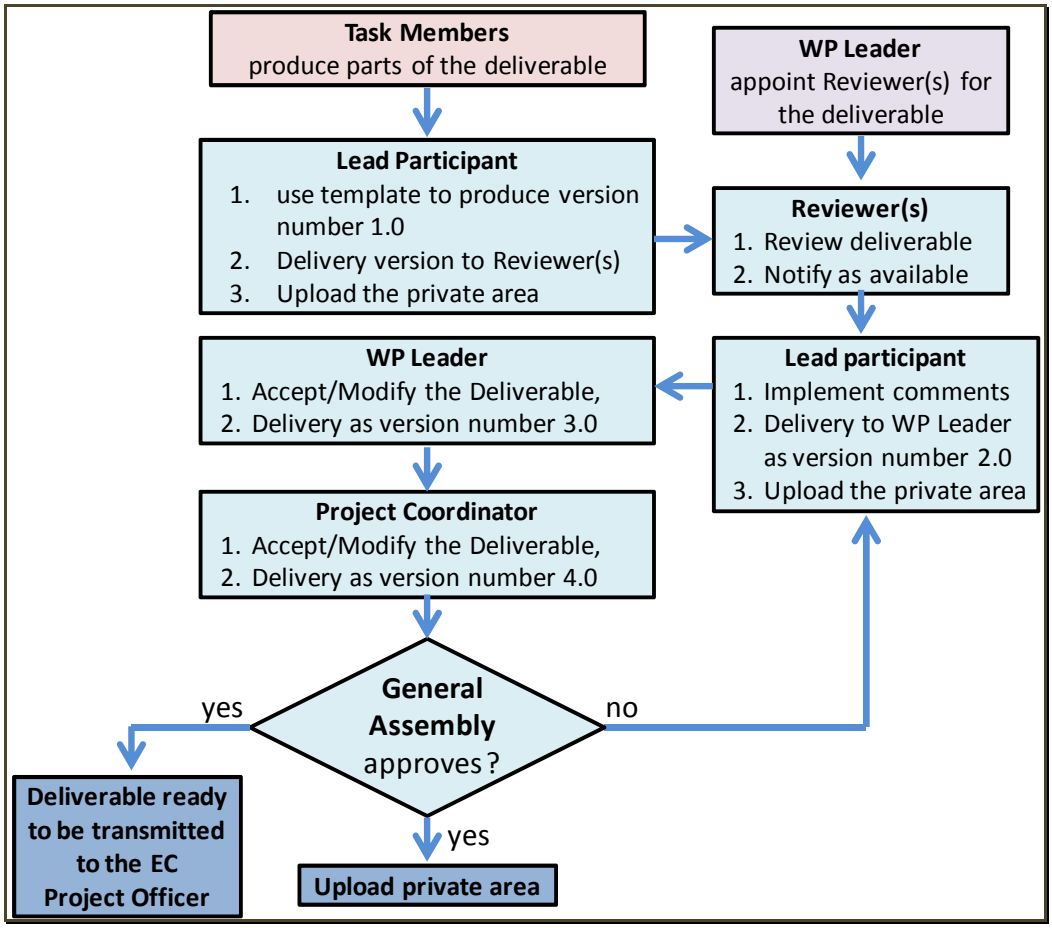


Figure 4.3 – Logical process for producing a project deliverable.

When	What	Who
-35 days	Appointment of reviewer(s) Lead participant informed of reviewer(s) Reviewer(s) informed of their appointment	WP Leader
-28 days	Deliverable as revision 1.0 submitted for review	Task Leader and Task participants
-21 days	First review submitted	Reviewer(s)
-14 days	Validates deliverable received Reviewer(s) and submits it to WP Leader as revision 2.0.	Task Leader
-10 days	Validates deliverable received by Task leader and submits to Project Coordinator as revision 3.0.	WP leader
-4 day	Updates to revision 4.0.	Project Coordinator
-2 days	Final Deliverable version approved.	General Assembly
0 day	Deliver to the EC Project Officer. Final deliverable version posted into project private area (Basecamp website).	Project Coordinator

Table 4.3: deliverable review process and scheduling reporting timing

4.5 Meetings

All partners are requested to full time attend each management and/or technical meeting, organizing their travels so that the meeting activities are not infringed. Each Party shall attend the Meeting with an appropriate number of representatives to successfully argument and contribute to all items of the Agenda. The frequency and rules concerning meetings is regulated by the progress of the work.

A **kick-off meeting** is organized at the beginning of the project.

Basically **Management** and **GA Meetings** will be organized every six-months; in total 6 PM/GA meetings are foreseen. The Coordinator is the leader of each meeting and it shall appoint a reporter who takes the minutes of the meeting. Notice of meetings is posted no less than 45 calendar days prior to the meeting via e-mail and on the project private area. An agenda will be notified to all Party via e-mail and posted on the Project private area no less than 15 calendar days prior to the meeting. Within 10 working days after the end of the meeting the Coordinator shall circulate the minutes to each Party for comments and review. The final version of these minutes will be kept by the Coordinator and forwarded to the EC Project officer. The legal **validity** so that the GA can make decisions and amend is achieved when **75% of eligible Party is present**, while **decisions** are taken by a **simple majority (1/2+1) of the votes**.

WP and cross-WP technical meetings are not regulated by the project contract but they depend on the intent to advance the state of the project. These meetings could be synchronized work package meetings, with the opportunity of going across WP boundaries and small number of parallel tracks. In principle, technical meetings should be attended by an arbitrary groupings and should be held as and when necessary to protect the project development. In such cases, the WP Leader is the leader of these meeting while notice of meetings shall be sent to the Coordinator and to the involved Party so that all presumptive participants have a reasonable time to participate, and minutes should be posted as soon after the meeting as possible. The coordinator stimulates the Party to organize additional or ad-hoc technical meetings in form of telephone and or web conferences.

Project review meetings will be held four times along the project duration, according to the scheduling included in the DOW. The four review meetings will be hosted at the place where the pilots are running. Notice of review meetings will be notified to the Party after the date has been agreed with the EC Project Officer and posted no less than 45 days prior to the meeting via e-mail and on the project private area.

Each Party is requested to accept or refuse the Curricula of the Project Reviewers appointed by the EC Project Officer. An agenda of the review meeting will be requested for approval by the EC Project officer while the final version will be posted on the project private area no less than 30 days prior to the meeting. At the project review meetings, the Coordinator summarizes the work done and progress achieved and project deviations (if there are to be mentioned) while WP Leaders will detail contents and progress covering all aspects of work done in the period. It is expected that Management and General Assembly meetings will be held in conjunction with project review meetings.

4.6 Communication

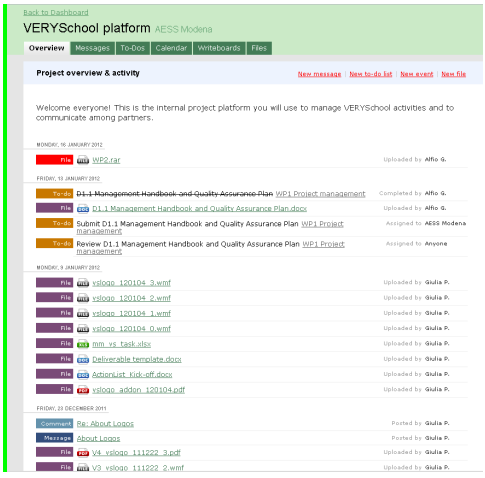
Good communication is crucial for establishing and maintaining a performance measurement system. It shall be multidirectional, running top-down, bottom-up, and horizontally within and across the Consortium, mainly by way of:

- interactive group-oriented mechanisms (meetings and focus groups), in all cases where discussion is required or a consensus needs to be reached to deal with disagreements, misunderstandings and the need for clarification
- computer technology (e-mail, video conferencing, and on-line internet/intranet systems)
- various forms of print media (newsletters, reports, and publications),
- events, such as workshops, seminars and conferences.

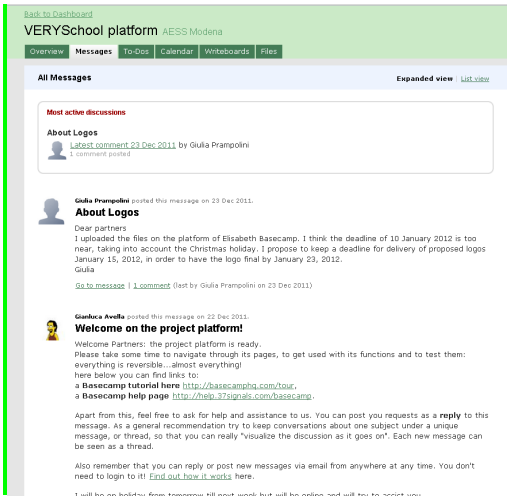
Certain non-critical announcements from the project manager will be made using the project private area. All the project partners will contribute to dissemination through their own communication channels (websites, e-newsletters, etc.), the partners will present the project results at events, conferences, working groups, in magazines and newspapers. The project partners press and media contacts will be used to promote the outcomes of the project at local, regional, national and EU level. The press will also be invited to the events. Communication and dissemination material are realized in electronic format and in English languages. All partners will take care of the translation into their local languages and print flyers for their own use.

For internal communications, file sharing, email archiving, online meetings, was chosen the Basecamp platform (http://basecamphq.com). Basecamp supports multiple languages. It's possible to use Spanish, French, Italian, German, Finnish, Portuguese, Danish, Turkish, Polish, Swedish, Greek, Russian, Hungarian, and Japanese and other languages, so all partners can use it friendly. Basecamp Platform has:

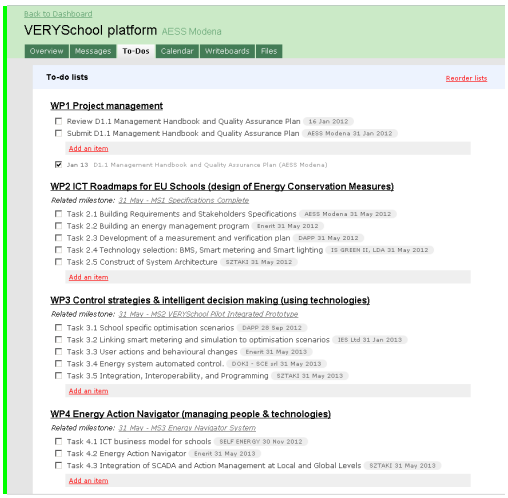
Folder Overview: This is the internal use to communicate VERYSchool activities among the Partners.



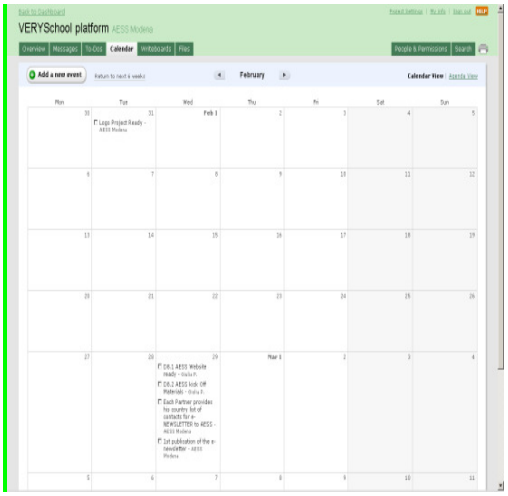
Messages folder: this is the archive of all messages between Partners; this tool allows to send messages to groups of people (member of a task) or member of work defined in WPs, or to all members of the project.



To Dos Area: this is a simple lists of items of work to complete. Tasks can be assigned to users on the Project and can have two dates. It can be used a list, grouped by WP and task.



Calendar Area: In this area you to subscribe to your milestones and events and them Appear in Your Calendar



A Milestone is a major event where the team is working on. It is used to check the development and to mark the end of the events.

An Event is an occasion like a meeting or lunch, which does not require a deliverable or a responsible party. Events are good markers for meetings or travel plans in addition to celebrations. Events within a milestone

will not be shifted until the milestone is marked "completed". Events are not a part of templates.

In Basecamp, an institutional area has been created to allow the EC PO and further the appointed EC Reviewers to have access to VERYSchool major outputs and to establish an additional link between the coordinator and the EC PO to facilitate the files and messages exchange.

4.7 Dissemination Guidelines

Beyond the goals of dissemination and awareness campaigns the Consortium shares a common understanding for being coordinated and synchronized from a point of view of collaboration, participation and summing up efforts.
The intent is to establish **a behaviour line that each partner has to follow for**:

- setting specific short and mid-term dissemination goals,
- allowing collaboration with proposed ideas,
- avoiding conflicts among activities, and
- creating collaborative groups in certain initiatives.

Under this framework, the guidelines for dissemination set a regulatory mechanisms for external communication of the VERYSchool results, by providing rules and awareness on the dissemination activities the partners can undertaken.
The objective is to keep everyone informed of the ongoing dissemination process along with the whole project duration.

1. If a dissemination opportunity is identified by a party as relevant for VERYSchool, the WP8 leader (in VERYSchool is also the project Coordinator) will be made aware by the Party will all the information to take a decision. Consortium members will be advised by the project Coordinator of the ongoing initiative.
2. If a Party wishes to submit a paper to a Call, an approval shall be requested by the project coordinator; a communication shall circulate around the Consortium at least 30 days prior to the Call is closed, so that Partners can decide to participate for a joint initiative while providing feedback and ensuring the rightness of content.
3. If a paper jointly submitted by Consortium Members has been accepted for a Conference or Publication, the Consortium shall know as well, to coordinate the attendance to Conferences and Publications, while track is maintained to avoid duplication of initiatives in similar Events.

4.8 Dissemination Plan

The goal of dissemination activities is to achieve the widest possible awareness and external communication of the Energy Action Management Navigator, achieved both as S&T concept and integrated technologies in VERYSchool.
Hereafter a first planning and description of dissemination goals and channels, target groups and partner's approach is included as a draft of short/medium-term business and goals of the Consortium as a whole. This dissemination plan shall be seen as reference material to the project consortium, while efforts shall be developed in three levels:

- scientific and educational dissemination,
- public dissemination;
- commercial dissemination.

Dissemination tools will be: posters, brochure, papers, presentations and promotional multimedia video, all of them available in the project website, while channels will be Workshops, Seminar/Conferences, Journals, Newspaper, Magazines, local/National Radio or TV.

In the following, a tentative to schedule the most significant tools and channels for the dissemination activities is presented; this listing is not a must-do list of activities but merely an identification of interesting activities that the consortium considers worthwhile in moving forward. A great emphasis is given to the tentative to update the initial version of the dissemination plan during the first year of the project.
All the dissemination activities target Users and Stakeholders, for interacting with VERYSchool in different ways.

a. **Managers** and **Decision Makers** who mostly use managerial and educational information:
   - *Stakeholders*, *Public Administrators*, *Energy* and *Facility Manager*, who overview cost savings and reward efforts to best energy class schools and broadcast best practices on energy management to schools rated lower in energy class.
   - *School Managers*, who take energy decisions and provide governance to get the energy management process started or to be more effective on the current operational energy scenario.

b. **Technicians** and **Maintenance staff** who mostly use the operative information to be effective in establishing the Energy Management Programme.

c. **Teachers** who can present best practices and new technologies, while producing awareness on efficient scenarios and habits and **Students** and **Practitioners**, who want to learn about best practices on energy efficiency.

4.8.1 Scientific and Educational Dissemination

The goal of the scientific and educational dissemination is for bringing the S&T part of the project available to Communities oriented to energy-efficiency measures (stakeholders, Public Administrators, Managers, technicians, teachers, etc.) and to promote a multi-disciplinary vision of ICTs as cross-section with human-technology for being optimally organized in the Energy Management. This type of dissemination covers the elaboration and production of scientific and technical articles, papers, posters and oral presentations under relevant international conferences, symposiums and workshops. The main criterion for the target selection of this dissemination will be the subject, taking into account journals and conferences with high-relevance in the domain of energy efficient buildings, ICTs and human-technology interaction and those that have a strong impact on scientific community and society.
Table 4.4 lists identifies some technical and scientific journals (but is not limited to).

Journal	Description
Energy Efficiency	http://www.eceee.org/ee_journal ECEEE promotes the understanding and application of energy efficiency in society and assists its target groups – from policy makers to programme designers to practitioners – with making energy efficiency happen.
IEEE Transactions on Sustainable Energy	http://www.ieee.org/portal/cms_docs_pes/pes/subpages/bullseye-folder/December09/Dec-PES_News-Sustainable_Energy.pdf cross disciplinary and internationally archival journal aimed at disseminating results of research on sustainable energy that relates to, arises from, or deliberately challenges perspective on the future of sustainable energy.
Energy Journal	http://www.rff.org/rff/News/Features/The-Energy-Journal.cfm RFF is a no-profit and no-partisan organization with headquartered in Washington D.C. it conducts independent research on environmental, energy, natural resource and environmental health issues. Its research scope comprises programs in nations around the world.
Energy and Buildings	http://www.elsevier.com/wps/find/journaldescription.cws_home/504083/description#description An international journal devoted to investigations of energy use and efficiency in buildings with new proven practice aimed at reducing energy needs of a building and improving indoor environment quality.

Journal	Description
KGH (Heating, Air Conditioning and Refrigeration) (in Serbian)	http://www.kgh-drustvo.rs/drustvo/casopis.html The journal "KGH" is a technical - scientific journal for air-conditioning, heating and refrigeration published quarterly (February, May, September and November). In publishing of journals now participate more than 100 co-publishers - companies from Serbia and abroad, which recognize in this journal good support for marketing their products and services.
FME Transactions (in English)	http://www.mas.bg.ac.rs/transactions/ The journal FME Transactions publishes original papers (reviewing and contributed papers, and short communications) from all fields of Mechanical Engineering.
Management Decision	http://www.emeraldinsight.com/products/journals/journals.htm?id=md A journal presenting the best in management thought and practice for the commercial and intellectual advantage of managers and their advisors. Management Decision was founded at the time of the first wave of growth and development of business schools in the Western world, and has tracked thought on strategy, policy and decision making through that time.
World Journal of Science, Technology and Sustainable Development	http://www.worldsustainable.org/index.php/journals/wjstsd WJSTSD is a multidisciplinary international refereed journal on issues of sustainable development through efficient and effective technology transfer, as challenge for developing countries. It promotes concepts and objectives related to integrated approaches of technology transfer within an urban and rural development context, to feed with an ever-increasing world population and manage the land, , food, fibre and energy production with increasing demands for conservation and alternative use of natural resources.
International Journal of Energy Research	http://eu.wiley.com/WileyCDA/WileyTitle/productCd-ER.html The Journal is a multidisciplinary platform for energy research. It aims to reach researchers, scientists, engineers, technology developers, planners and policy makers working in the areas of energy management, production, conversion, conservation, systems, technologies and applications, and their impact on the environment and sustainable development.
International Journal of Renewable Energy Technology (IJRET)	http://www.inderscience.com/browse/index.php?journalCODE=ijret *Inderscience* is a publisher of high quality peer-reviewed international journals, including energy, environment and sustainable development.
Building and Environment	http://www.journals.elsevier.com/building-and-environment/ Publishes original papers and review articles on research, technology, and tool development related to building science and human interaction with the built environment, as well as their applications to building design and operation.
Energy Policy	http://www.journals.elsevier.com/energy-policy/ The journal (USA) is established worldwide as the authoritative journal addressing those issues of energy supply, demand and utilization that confront decision makers, managers, consultants, politicians, planners and researchers. The scope embraces economics, planning, politics, pricing, forecasting, investment, conservation, substitution and environment.
Journal of Building Performance Simulation (JBPS)	http://www.ibpsa.org/; http://www.tandf.co.uk/journals/tbps Is the official journal of the International Building Performance Simulation Association (IBPSA), a non-profit international society of computational building performance simulation dedicated to improving the design, construction, operation and maintenance of new and existing buildings worldwide. The wide scope of JBPS embraces research, technology and tool development related to building performance modelling and simulation, as well as their applications to design, operation and management of the built environment.
Building Simulation and Optimisation	http://www.bso12.org BSO12 provides a forum for the exchange of knowledge on the development and application of building performance simulation to the optimum design and operation of buildings.
Information Technology in Construction	International Conference on Computer and Automation Engineering (Annual) http://www.itcon.org/ The aim is to report on research and innovative industrial development concerning the application of information technology throughout the life-cycle of the design, construction and occupancy of buildings and related facilities. The focus is on presenting research results dealing with or having relevance across disciplines and/or life-cycle stages.

Table 4.4: Potential technical and scientific journals

Table 4.5 lists the potential identified conferences, workshops and symposiums (but is not limited to).

Name	Who	When	Where
BioEcoLab and Domotics Laboratories 1. Within the "Week of bio-architecture and home and building automation" devoted sessions to VERYSchool project and energy management in school, addressing ISO 50001 and IPMVP. 2. seminars for Technicians addressing the energy management in school buildings.	AESS	2012, 2013, 2014	Modena (IT)
The Modern Information Technology in the Innovation Processes of the Industrial Enterprises-MITIP (special session on Energy Management)	SZTAKI	2012, (2013,2014)	Budapest (HU)
IAEE European Energy Conference	SZTAKI	2013, 2014	TBC
South East International Congress and Exhibition EE&RES	EAP	2012, 2013, 2014	Sofia (BG)
Energy Forum and Energy Day Varna	EAP	2012, 2013, 2014	Varna (BG)
Sustainable Energy Authority of Ireland (SEAI)	ENERIT	2014	Dublin(IR)
ISO 50001 Standardisation Body – National Standards Association of Ireland (NSAI)	ENERIT	2014	Dublin(IR)
E2B - European Construction Technology Platform (ECTP) Events	DAPP	2013, 2014	TBC
E2B "Innovation" Dissemination Portal	DAPP	2012, 2013, 2014	Web
Methodology workshops on measurement assessments (IPMVP)	DAPP	Scheduled by DG INFSO	Brussels
Energy Efficiency in Buildings (E2B) platform & network	DAPP	TBC	Web
Global Smart Cities Association Events	GENOA	2012, 2013, 2014	TBC
Workshop ADENE (Portuguese Energy Agency)	SELF	2013, 2014	Portugal
Portuguese Association of ESCOs (APESE)	SELF	2012, 2013, 2014	Portugal
Portuguese Association of Energy Agencies	IsG	2013/2014	Portugal
Portuguese Association of Private Schools	IsG	2013/2014	Portugal
Technology Strategy Board UK, Knowledge Transfer Networks: Environmental Sustainability	IES	TBC	UK
Technology Strategy Board UK, Knowledge Transfer Networks: ICT	IES	TBC	UK
Technology Strategy Board UK, Knowledge Transfer Networks: Modern Built Environment	IES	TBC	UK
Italian Banking Association (periodic meetings of Renewable Energies Working Group)	ISPE	TBC	Rome (IT)
Public Administration Forum (FORUM PA)	ISPE	May 2012	Rome (Italy)
Seminar on EU funding opportunities organized by Banka Koper&ISPE for Slovenian SMEs	ISPE	2012	Koper (Slo)
KGH (HVAC&R) International Congress and accompanying exhibition	UBFME	2012, 2013, 2014	Belgrade (SR)

Table 4.5: Potential conferences, workshops and symposiums

VERYSchool Consortium will organize 6 dedicated Workshops. Representatives of Public Administrations, School Managers, Energy and Facility Managers, Standardization Bodies, Certification Entities, Energy Efficiency Policy Makers, teachers and Students can be invited. Table 4.6 summarizes the tentative scheduling of these events under the responsibility of Consortium Member.

Partner	Scheduling	Place	Level	Type of Attendees	Attendees
AESS	2nd half 2012	Modena (Italy)	National	Public administrators, school managers, energy and facility managers, ICT technology providers, service and outsourcing companies, dealing with energy efficiency in schools	~ 80
EAP	19-20 Jan 2012	Pleven (Bulgaria)	National	*Specialized seminar Energy Management Systems ISO 50001*. Public administrators, pilot school, energy managers, ESCOs, energy auditing and green energy services companies.	~ 80

Partner	Scheduling	Place	Level	Type of Attendees	Attendees
EAP	30 Mar 2012	Plovdiv (Bulgaria)	Regional	*Energy Management in School Buildings*. Public administrators, stakeholders in school management and renovation, energy managers, ICT technology providers, green services companies, ESCOs	~ 100
EAP	1st half 2013	Plovdiv (Bulgaria)	National	Public administrators, school managers, energy and facility managers, ICT technology providers, service and outsourcing companies, dealing with energy efficiency in schools.	~ 150
Genoa	2nd half 2013	Genoa (Italy)	National	Public administrators, school managers, energy and facility managers, ICT technology providers, service and outsourcing companies, standardization bodies, dealing with energy efficiency in schools.	~ 200
AESS	1st half 2014	Modena (Italy)	National	Public administrators, school managers, energy and facility managers, ICT technology providers, service and outsourcing companies, certification entities, dealing with energy efficiency in schools	~ 80
UBFME	1st half 2014	Belgrade (Serbia)	National and International	school managers, public administrators, education department, energy managers, EE policy makers	~ 60
ISPE	2nd half 2014	Milan or Rome (Italy)	European	school managers, ESCO and financial experts and experts dealing with financing issues in supporting energy efficiency investments in schools	~ 150
AMEM	2nd half, 2014	Ankara (Turkey)	National	Energy Efficiency Policy Makers, Engineers of AMEM "Maintenance and Installation" Department, AMEM Energy Managers, School Managers, Teachers and Students	~ 150

Table 4.6: tentative of scheduling for the organization of VERYSchool workshops

Furthermore, some VERYSchool Consortium Members can join dissemination events with other European and National Workshops, which address common topics, especially ICT for energy efficiency in buildings and Energy Management Programme.

Besides, the VERYSchool project also aims to create learning opportunities. Educational dissemination targets universities, specialization courses and schools. The main effort will focus on the development of an e-learning training module about the integrated operation of energy-efficient technologies in combination with people behaviour and organization management.
The training module will be structured as an educational tool for end-users of the Energy Action Management Navigator and also for practitioners. This module will focus on explaining and showing the integrated operation of Energy Management in the three dimensions People-Technology-Organization as required by the standard ISO-50001. The tool will be based on a set of presentations and multimedia material where the most relevant issues of the VERYSchool results will be demonstrated.

4.8.2 Public Dissemination

The main goal of public dissemination is to foster awareness and to share knowledge on Energy Management through advanced ICTs tool at European, National and International level. The methodology proposed with VERYSchool for the school building sector can easily find a wider application into other Building segments. The public dissemination will be open to Public Administrators, Managers and relevant ICT stakeholders and to the whole Society.

The VERYSchool project identifies relevant websites of third parties (such as Local Agencies or Associations) where could be interesting to include project awareness through project references, publications or press notes. The following list shows some of the most relevant websites.

<u>European and International</u>.

- VERYSchool section on the new EU "BuildUp" portal (http://www.buildup.eu)
- DG INFSO: Energy Efficiency of the ICT Sector (http://ec.europa.eu/information_society/activities/sustainable_growth/ict_sector/index_en.htm)
- DG INFSO: Smart Sustainable Cities (http://ec.europa.eu/information_society/activities/sustainable_growth/cities/index_en.htm)
- DG INFSO: Energy Efficient Buildings (http://ec.europa.eu/information_society/activities/sustainable_growth/buildings/index_en.htm)
- Managenergy Kids Corner - http://www.learn-energy.net
- Global Smart Cities Association (http:// www.gsca.eu/)
- The European Research Consortium for Informatics and Mathematics (http://www.ercim.eu)
- Industry & Environment Media (http://www.ema-online.org)
- European Alliance for Innovation - EAI (http://www.eai.eu) [6]
- European Alliance to Save Energy (http://www.euase.com/) [5]
- European Federation of Energy and Environmental Agencies FEDARENE (http://www.fedarene.org/)
- Earth Day Network - Green Schools Leadership Center (http://www. earthday.net/)
- Educational tool for sustainable development (http://www.sustain.no/)

National

- Agenzia per la Promozione della Ricerca Europea – APRE (http://www.apre.it/) [5]
- Federazione Italiana per l'uso Razionale dell'Energia – FIRE (http://www.fire-italia.it/) [5]
- Innovazione, Italian website on technology and innovation (http://www.lobbyinnovazione.it/index.php/) [5]
- StartUp Business, Italian web platform aimed to stimulate innovation (http://it.startupbusiness.it/) [5]
- Genoa Smart City Association (http://www.majorcities.eu/knowledgebase/2011-Prato--Genova-Smart-City-Association--Enterprises--Research--Institutions-together-for-a-Smart-Path_2642)
- Serbian Chamber of Engineers (http://www.ingkomora.org.rs/)
- Serbian Society for HVAC&R (http://www.kgh-hvac.org.rs/)

Presence in **internet forums** and **social and community networks** is considered very relevant for levering awareness about VERYSchool concepts on energy efficiency and energy action management navigator. The aim of the Consortium would be to set up a VERYSchool working group profile and distribute invitations to join the group. Consequently, the group will be used to post information about the project development and results, getting feedback from subscribers, and promote VERYSchool among business professionals working in the areas closed to the scope of the project. This will be beneficial to:

- greatly enhance the visibility of VERYSchool,
- gather interests at large scale,
- significantly enhance the new business contacts and trusted connections.

Table 4.7 identifies some relevant social network groups on LinkedIn for the VERYSchool project:

Group	Description
Standards	ISO 50001/Superior Energy Performance/Global Superior Energy Performance (658 Members). This group discusses the features, status, and implementation of Energy Management Systems under the new ISO 50001 standard and the Superior Energy Performance Programs. ISO 50001 Energy Management Systems Certification (450 Members). This group enables information sharing among professionals interested in the design, implementation and auditing of ISO 50001 energy management systems.

[6] ISPE has direct contacts with these organizations (is member or sponsor), so ISPE will ask for posting news on these websites.

Group	Description
	ISO 50001 - Energy Management Standard (157 Members). This group promotes discussion that are fully visible, searchable, and shareable on the Web. ISO 50001 Energy Management Systems Implementation (104 Members). This group exchanges information about the piloting and use of the new ISO 50001 draft standard on Energy Management Systems (EnMS). IPMVP Best Practice Exchange (171 Members). Discussion topics surrounding how energy/carbon projects are best prioritized, monitored and their results verified to assist organizations make investment decisions.
Energy Management	The ESCO Network (2247 Members). Networking community for Energy Services & Energy Management Professionals in the ESCO industry. It is a unique platform where industry professionals gather to discuss the opportunities and strategies to further promote the ESCO industry in Europe. The Virtual Energy Forum (1819 Members). Online-only event focused on how leading companies can adopt better energy management practices to cut costs, while at the same time adopting clean energy alternatives.. AESP - Association of Energy Services Professionals (1790 Members). Member-based association dedicated to improving the delivery and implementation of energy efficiency, energy management and distributed renewable resources. Energy Efficiency and Rational Use of Energy (3352 Members). Italian Experts Group dealing with Energy efficiency and Rational use of Energy: (EM) Energy Manager, (EME) Energy Management Experts, (ESCO) Energy Service Companies.
ICT, Business, Decision Makers, Public Authorities,	Energy Efficiency Professionals (4201 Members). The group is a source of information and a forum for discussion about policy, programs and technology in the Energy Efficiency (and Demand Response) industry. Sustainable Energy Development (4018 Members). This is a group for professionals to advance sustainable/renewable/green energy solutions through innovative research, education, technology, consulting, policy development. ICT for Energy Efficiency and Saving (351 Members). This community's goal is sharing IT software products, case study, sales strategies and information regarding green IT solutions, available now on the market or to be created in the future, able to increase energy efficiency and saving. ICT4E2B Forum (94 Members). ICT4E2B Forum Group aims at identifying needs, challenges and opportunities for further research and integration of ICT systems for Energy Efficiency in Buildings. ICT4EE Forum (67 Members). The aim of the ICT for Energy Efficiency (ICT4EE) Forum is to link digital technology more closely to EU climate and energy policies and economic development. Energy & Utilities Network (71769 Members). An informal networking group for those with a career dedicated to the energy and utilities industries across the world. The group is for those people working in the industry over the long term to enable industry evolution, best practice & sustainability. Behavior Energy and Climate Change (BECC) (667 Members). Interdisciplinary network of policy makers, researchers and business leaders. Members may post discussion questions, ask for advice or share relevant new research, policies, projects or news. GREEN TECH (1527 Members) Discussions and Networking for professionals interested in Environment, Renewable Energy Technologies, Climate Change Management, Sustainability, Green Procurement, Power, Recycling, Materials. Keywords: GREEN Business & Technology, Clean & Green IT, ECO friendly innovations. World Green Business Association (2942 Members) The WGBA attracts eco-friendly businesses that either have a green product or service. Green, business, marketing and other relevant information is periodically distributed to members.

Group	Description
School Managers, Public Authority	School Business Managers (1001 Members) A group dedicated to sharing best practice and furthering the aims of the School Business Management profession. ESCP Europe Business School (844 Members) Students, Teachers and Managers of European School of Management: Paris, London, Berlin, Madrid, Torino. Energy Efficient Schools and Colleges Network (209 Members) Energy Efficient Schools and Colleges Network is a group of professionals, connected through LinkedIn, who are interested in sharing best practices in securing funding, sustainability, and incorporating energy efficient design and technologies in school buildings and college campuses.
Smart Cities	SMART CITIES and CITY 2.0 (1565 Members) Smart Cities and Cities 2.0 is a Group with a Focus on the new growing Smart Cities and networked services around these Smart Cities. Smart Cities Industry Summit Series (635 Members) This group focuses in enabling mobility for the citizen across health, transport, energy, wireless technology and software innovation, cloud, and consumer devices. Green Cities (2826 Members) This network is dedicated to support the efforts for creating greener urban environments. Convenes professionals working in the field of energy, water management, building science, landscape, engineering, and advocates for cleaner cities. GREEN CITIES: Smart Growth & Sustainability for the DENSE URBAN context. (4134 Members) Smart Growth and Sustainability, Green Design, Green Infrastructure, Compact Development.
Green building	Think Green (16193 Members) Support for the environment and a sustainable future. Vocabulary includes: carbon economics, clean tech, climate change, conservation, CSR, recycling, renewable energy, sustainability, waste management. Green Building (4968 Members) This group addresses the issue of increasing the efficiency while reducing building impacts on human health and the environment, through better siting, design, construction, operation, maintenance. CleanTech (25965 Members) The Group is attached to www.cleantech.org. It is a virtual incubator for clean technologies, green business, energy and sustainability. Sustainable construction and planning (10.389 Members) Linking expertises in sustainable construction and planning who seek to minimize the negative environmental impact of buildings by enhancing efficiency and moderation in the use of materials, energy, and development space.
Building Management Systems	Energy Industry Information Technology (1079 Members) Energy-Related Information Technology Group on LinkedIn: energy reporting, building automation, systems emissions, ERP control, controls reports, carbon report, intelligent buildings, energy management, software, smart production. BEMS / BMS / building management controls / energy controls network (614 Members). This group is set up for all BMS professionals including BMS company owners, BMS contract managers, BMS estimation managers, BMS Sales consultants, BMS service engineers, BMS commissioning engineers, BMS projects managements, BMS panel wiremen, BMS electricians, Open protocol control companies etc. Building Management System Specialists (969 Members) This group is set up to build a network of BMS specialists in Europe, to inform on new project opportunities, and discuss new products coming to market.
Facility Management	Facilities Management Group (12495 Members). This group serves the professional needs of Facility Management professionals. It promotes the common interests of its members, exchange of thoughts and ideas, continuing education, and

Group	Description
	seeks to improve understanding of the role of facilities management professionals. Integrated Facility Management (4650 Members). This group is for exchanging Integrated Facility Management knowledge, tips, jobs, career, Q&A on a Global level. Keywords: Real Estate, Energy, Maintenance, Control, Landscaping, Health Safety & Environment, Security. Facility Management Strategic Sourcing (1120 Members) This is a group for professionals interested in facility management strategic sourcing. Property and Facility Management Innovators (PFMI) (4042 Members) This group share innovative ideas on methods, practices, products, technologies, web tools, software and Must have, new, hot or innovative concepts for the professional Property Manager and Facility Manager and the Vendors that serve this industry.
HVAC	HVAC Equipment Designers (821 Members) This group focuses in HVAC, hot water, boilers, furnaces, gas or oil equipment design. HVAC Design Engineers (2918 Members) The group establishes a platform for all HVAC Design Engineers. Smart HVAC Products (1194 Members) The Smart HVAC Products Group brings HVAC professionals together to discuss new and innovative products in the HVAC industry. HVAC, Refrigeration, and Appliance Professionals (668 Members) This group was created as a networking and information sharing site for all professionals in the HVAC, Refrigeration, and/or Appliance Industries. HVAC Specialist and Management (3220 Members) For all HVAC components and Services specialists.
Lighting	Energy Efficient Lighting (4732 Members) This group provides discussions and happenings in the world of lighting efficiency. LED lighting, linear fluorescent, induction, and all other existing and emerging technologies. Electrical & Lighting Product Marketing Forum (3372 Members) Group of professionals involved in the marketing, sales or promotion of Products, Services & Tools used for Electrical Power. Keywords: Lighting, Lighting and Building Controls, Energy Efficiency, Renewable Energy. Eco Lighting Solutions (335 Members) Eco Lamp group is an area to share about green lighting solutions. Energy Efficient LED Lighting (657 Members) Solid-state technology of LEDs to provide lighting solutions, targeting opportunities, exploring lighting fixtures in new constructions and retail avenues with LED retrofits.

Table 4.7: Relevant groups select for VERYSchool project

4.8.3 Commercial and Industrial Dissemination

This type of dissemination will be focused on promoting the project results to players of energy management (ESCO, Energy Agencies, financial organization) as well as to producers and manufacturers of ICT systems. Specific dissemination material will be developed in order to draw the attention about the benefits and advantages of using the VERYSchool results (typically the Energy Action Management Navigator with both the hardware and software platforms), making the Community aware on this high level of service and solution. Regarding Stakeholders, it is important to underline how with a set of simple actions they can promote energy (and associated cost and carbon emission) saving through a more consistent coordination of people behavior, user's action, technology automated control and organization's rules.

Within VERYSchool, the **Value Action Plan** (**VAP**) (as deliverable of WP8: Dissemination & Replication) is the tool designed as dedicated investigation of how the Consortium will posture to replicate beyond the end of

the project for promoting the Energy Action management Navigator to the European School environment: buildings, technologies, management, people, decision-making, business cases, learning.

In general terms, it is intended that VAP will include:

- Market analysis - who to reach and how to most effectively reach them
- Methodology - how to bring the solution most effectively to clients
- Business models - revenue sharing and agreements amongst the partners
- IPR - the treatment of foreground
- Life-cycle system aspects (cost, maintenance, and performance guarantees)
- After project commercial agreements and alliances

Furthermore, VAP will also include a Guide '**Financing Energy Smart Schools'**, as a tool for decision makers in schools, looking for resources to implement their energy efficiency projects: it will support them in identifying the available financing options (internal financing/debt financing /energy savings performance contracts), with a special attention to innovative instruments such as 'Green Revolving Funds' and to existing best practice in Europe and abroad.

In particular, actions jointly made through the **Education and Awareness Campaign** (scientific and public dissemination) and the **Value Action Plan**:

- the proposed methodology targeted on benchmarks will support designers and planners in a school environment to elaborate technical and business plans for a systematic and qualified approach;
- designers and architects could adopt standard solutions as replication of models and technologies adopted in more complex situations;
- energy managers in public and private school buildings would be able to plan standard technical solutions achieving cost-effective solutions;
- the European industry on ICT-enabled energy efficiency technologies, at the intersection of energy, control, computing, communication, design tools and construction will be largely enhanced, inheriting the benchmark control method for industrial and commercial building sectors.

The **wider deployment**, exploitation and use will be focused to build up a customised solution and competitive products, supported by an organised and strategic plan to have networks for addressing Stakeholders and ICT professional group and giving them access to the methodology, market analysis, installation, use, and best practice guidelines to assist the wide-level adoption of VERYSchool across Europe.

The VERYSchool Consortium recognizes that an effective way to communicate with Stakeholders is a wide use of **mass media**, e.g. radio, television, newspapers, magazines, on-line press. Table 4.8 defines possible publications about the VERYSchool project in different media.

Type (are: *National Radio or TV, or local Radio or TV, Newspaper or On-line monthly magazine*)	Press name & country	Date
Online Magazine	Connessioni (Italy)	2012
National Journal	IlSole24Ore (Italy), special addendum on buildings and Innovation	2013,2014
National Journal	Il RestodelCarlino (Italy), with strong regional component	2013,2014
National TV	RAI3 (Italy), with strong regional component	2013
Regional TV	TRC (Italy), satellite TV	2014
ERCIM NEWS	The European Research Consortium for Informatics and Mathematics http://www.ercim.org/	2013
National TV	TV Europa (Bulgaria)	2013
National TV	NBT (Bulgaria), with strong regional component	2013
National TV on environment	VTV (Bulgaria)	2013
Magazine	Energy Magazin (Bulgaria)	2013

Type (are: *National Radio or TV, or local Radio or TV, Newspaper or On-line monthly magazine*)	Press name & country	Date
Regional Newspaper	Maricta (Bulgaria)	2013, 2014
National Newspaper	24 hours (Bulgaria)	2013
National Newspaper	Education at the Irish Times. Educational supplement national newspaper.	2013
National e-journal	T.H.E. Journal-transforming education through technology website (www.thejournal.com)	2014
National Newspaper	Electronic newsletter: New Tech Post (ireland)	2014
National newspaper	Sunday Business Post	2013
State owned TV network	RTP 2 (Portugal)	2013
Specialized Electricians Magazine	O Electrecista (Portugal)	2014
Business Daily Magazine	Jornal de Negócios	2013
Internal publication targeted to the international subsidiary banks network of Intesa Sanpaolo Group.	What's up [7] (Albania, Romania, Slovenia, Bosnia Herzegovina, Serbia, Hungary, Russia, Slovakia, Ukraine, Czech Republic).	2012, 2013, 2014
National Newspaper	Serbia. Serbian Chamber of Engineers publishes its periodical Gazette "Glasnik IKS" four times a year and delivers it to each of the 23.000 Chamber members. (in Serbian).	2012, 2013, 2014
National Newspaper	"Politika" (http://www.politika.rs/), the oldest Serbian daily newspaper, (in Serbian)	2014
National Newspaper	Milliyet (Turkey)	2012
National Newspaper	Hurriyet (Turkey)	2013
Monthly National Energy Magazine	Yeni Enerji (Turkey)	2013
National TV	TRT (Turkey)	2014

Table 4.8: Media press intended publications

VERYSchool, as result-oriented project, devotes a consistent part of its development to **Pilots activities**. For doing so, a pilot scheme is included in the work plan as strategic objective, where the VERYSchool Energy Action Management Navigator (integrated technologies and methodologies) will be demonstrated, evaluated and validated against standards norms (ISO 50001) and protocol (IPMVP). The pilot scheme will be shown, mainly through multimedia material, in energy-related events, public contexts and also European research projects.

Through domain-specific **fairs**, **conferences** and **events**, VERYSchool will disseminate the project results from a commercial and industrial perspective. The main target will be School Manager, Decision-Makers, ESCO and Financial Organizations that can support the implementation of energy saving measures through an optimal energy management. The list of relevant conferences, workshops and symposiums is shown in Table 4.9:

Name	**Description**	**Where/When**
Sustainable Energy Week	The EU Sustainable Energy Week showcases the latest innovations in energy efficiency and renewable energy technology, policy and practice through a varied programme of events and happenings across Europe.	Brussels 2012, 2013,2014
ICT Events	Conferences, Exhibitions, Networking and the most important forum for discussing research and innovation organised by the EC.	2012, 2013, 2014

[7] This is an house branch, but it is considered very interesting because it reaches banking professionals from 10 banks based in Central and Eastern Europe.

Name	Description	Where/When
Energy Day (AESS)	A convention on "Energy Innovation & Territory" to bet on a new way of communication among public administrators, engineers, University and School, on sustainable energy and new green technologies, with the intention to build a network of expertise that aims to rethink relationships within the territory in a form that is more sustainable and enriched of "good practices".	Modena (Italy) 2012, 2013, 2014
M'illumino di meno (AESS)	Initiative launched by the Italian Radio bradcast "Caterpillar" to increase consumer awareness on energy consumption and the waste, while supporting the adoption of renewable "clean energy" and to spread "good habits", not only for today.	Modena (Italy) 2012, 2013, 2014
Energy day (UBFME)	During EU Sustainable Energy Week - Organizer: Society of thermal engineers of Serbia	2013
National Conference and Exhibition of Bulgarian Energy Agencies (EAP).	In partnership with International fair of Plovdiv.	2012, 2013, 2014
Energy Day (EAP)	Plovdiv and Burgas	2012, 2013, 2014
EcoBuild (IES)	EcoBuild is the UK's largest exhibition for sustainable buildings and products. IES attend this event each year and plan to dissemination VERYSchool project results that are available for the event.	2012; 2013; 2014
4th National Energy Efficiency Forum & Fair (AMEM)	This is the biggest event related energy efficiency in Turkey. All companies, universities, public bodies, NGO's takes part.	2012; 2013; 2014

Table 4.9: Fairs, conferences and events identified for the industrial and commercial dissemination

4.9 The Project website

A dedicated project website will be established early in the project lifecycle to provide wide dissemination of VERYSChool methodology, use of ICT, Pilot activities, results and validation methods, papers, and general information about the project. AESS will develop and host the project website in English, providing uninterruptedly maintenance and refinement during the project lifecycle. Anyhow, dedicated versions will be arranged with national languages of each participating Partner. The Project website is located at http://www.veryschool.eu. It also will provides a private area to host all public deliverables and to be used for all collaboration in VERYSchool. It will contain:

- *Institutional area*: the CIP-ICT-PSP Programme, work plan and Partnership description;
- *Newsletter area*: The VERYSchool Informer.
- *Event area*: Project and related energy efficiency events.
- *Educational area*: Resources, references, and best practices.
- *Press area*: Papers, presentation, brochure, and press releases.
- *Useful links*: a list of specific web sites (CIP-ICT-PSP and EC-FP7 Programmes, national and local projects, in each country page).
- *A link to the EU portal BuildUp.*
- *Download area*: Public deliverables.

Internal communication between partners, mail exchange, deliverables, temporary files, reports will be managed throughout Basecamp, describe in the paragraph related to communication.

4.10 E-Brochure, E-Newsletters

e-Brochure

VERYSchool will produce two e-brochures in electronic format and in English. The first version, within month 5, will contain the relevant project information to introduce the Energy Action management Navigator concept associated to the project objectives and Pilots demonstration and validation activities.

The second version, at month 32, will contain experimental results, validation methods, experience gained and lessons learned through the Pilots activities to make aware the Stakeholders and Final Users (along the whole chain) of the Energy Action Management Navigator application. Each partner will translate the content of both the e-Brochures in their own national language and print them in a sufficient number of copies to make the dissemination plan effective in terms of knowledge sharing and in reference to the target and the number of users that aims to involve.

e-NewsLetter

VERYSchool will produce one e-newsletter each 6 months, in electronic format and in English. National language translation of each periodic e-Newsletter will be performed by the Partners. The e-newsletters will be posted in the project website and all publications can be downloaded from here.

4.11 Dissemination goals and performance indicators

The success indicators that VERYSchool considers as a target reference are mentioned in Table 4.10:

Indicator	Success Criteria			Remarks
	Until M12	Until M24	Until M36	
Number of papers published in journals	≥ 5	≥ (5 +) 10	≥ (15 +) 15	worldwide
Number of Schools made aware of VERYSchool	≥ 50	≥ (50 +) 100	≥ (150 +) 350	National/international
Number of conferences, expositions, congresses and shows	≥ 3	≥ (3 +) 4	≥ (7 +) 7	National/international
Number of attendees at VERYSchool workshop	≥ 260	≥ (260 +) 350	≥ (610 +) 440	National/international
Number of visits to the VERYSchool website	≥ 3000	≥ 6000	≥ 10000	National/international
Media publication	≥ 2	≥ (2 +) 8	≥ (10 +) 10	National/international. Project partners use their mechanisms for dissemination the VERYSchool project (e.g. Press Releases, Social Networks, Company E-Magazines.

Table 4.10: VERYSchool performance indicators

4.12 Ground for Exploitation Agreement

The objective of this section is to establish the ground for discussions over the basic concept for exploitation agreement among partners, future contractual definition of the commercial exploitation, and the intellectual property of the studies, analysis, prototype development and project results. Future deliverables of WP8 will include refined versions of the Consortium Agreement, in order to have a final version ready to be applied when the results of the project are concluded and ready for a possible commercialization.

In the final phase of the project, a marketing exploitation will be carried out. Such activities will make the Energy Action Management Navigator more feasible and advanced from the standpoint of production and support of the final solution. This will be done by differentiating between two key figures, the Consortium for Development and Consortium for Marketing. As a result, the proposed concept for economic distribution scheme includes two phases:

a. Phase A: the margin of wholesale dealer price consortium;

b. Phase B: the participation in a final consortium for marketing, for those agents who are interested in commercially developing the project.

As preliminary marketing scheme it is considered that any member of the consortium project sells to the consortium at SPD (Sale Price to Distributor) and the Consortium (or members so agree) is an entity distributor / marketer with a number of business expenses to be shared by the signatories to the marketing agreement. The difference between SPP (Sale Price to the Public) - (SPD + Marketing Expenses) will be the mark-up of the operation to be distributed among the signatories to the marketing agreement in the percentages of participation of the marketing consortium. Working with the sales price to distributor allows:

- Defined control allocation and market prices;
- Eliminate inefficiencies in production / operations of one of the consortium partners: if one partner is ineffective in their development / production, this deficiency would not be passed to the final price of the system;
- Relaxes the participation of all stakeholders in two areas:
  - generation of commercial product from the Project developed;
  - entry into the consortium marketer if the agent is interested in working more in the final marketing;
- If the Marketing Consortium failed to reach an agreement with the agents on a reasonable Distributor Price to allow an estimate of adequate margins in marketing, it would be free to negotiate with a third agent that provides the Project Element that cannot close a deal.

In this way, the VERYSchool project will get a flexible scheme where the marketing is simplified and gives the current consortium partners the freedom to undertake their participation in the consortium marketer or not, obtaining performance by the dealer price of the consortium and / or final marketing margins.

5 Next Steps or Future Work

This Management Handbook may be updated during the whole project development to cover exceptional events or situation not included in this preliminary stage.

6 Implications for other Work packages

All work packages utilize this handbook as guidance.

7 List of related documents

ICT PSP GRANT AGREEMENT Number 297313, signed between the European Commission and AGENZIA PER L'ENERGIA E LO SVILUPPO SOSTENIBILE (AESS) who represent also the VERYSchool Beneficiaries, including Annexes which form an integral part of the Grant Agreement

Annex I	Description of work and indicative breakdown of the budget and the financial contribution of the *Union* between beneficiaries
Annex II	General conditions
Annex III	Form A – accession of *beneficiaries* to the *grant agreement*
Annex IV	Form B – request for the accession of new legal entities to the *grant agreement*

CONSORTIUM AGREEMENT signed among the Beneficiaries of VERYSchool Consortium on November 30, 2011.

THE PERFORMANCE-BASED MANAGEMENT HANDBOOK, a six-volume publication of U.S. Department of Energy (DOE) – September 2001.

8 Conclusions

The handbook will be a resource throughout the lifetime of the project. It will be managed by Agency for Energy and Sustainable Development (AESS) and updated on a regular basis.

The “live” version will be made available via project private area (Basecamp site) where members can access the current version.