

## Joint Programming Initiative Cultural Heritage and Global Change

### Heritage Plus call

### Final report – Mandatory Format

#### 1. Coveragepage

TABLE 1: Project and contact details				
<b>Project details</b>				
Project	Heritage Plus			
Project title:	CHANGES - Changes in cultural Heritage Activities: New Goals and benefits for Economy and Society			
Project website:	<a href="http://www.changes-project.eu/">http://www.changes-project.eu/</a>			
Duration of project	start date:	1 May 2015	End date:	30 April 2017 extended to: 31 December 2017
<b>Contact details project leader (PL)</b>				
Full name <i>(including title)</i>	Prof. Stefano Della Torre			
Sex <i>(male/female)</i>	Male			
Position Held <i>(including department and institution)</i>	Head of the Department of Architecture, Built Environment and Construction Engineering, Politecnico di Milano			
Full address	Piazza Leonardo da Vinci, 32 - 20133 Milano/Italy			
Email	<a href="mailto:stefano.dellatorre@polimi.it">stefano.dellatorre@polimi.it</a>			
<b>Details other partners (Principal investigators, associate partners, other)</b>				
Partner number	Name of organisation	Type of organisation (academic, government, business, NGO, IGO, etc)	Type of contribution to Project	Country/ies represented
2	University of Leuven (KUL)	University	Principal investigator	Belgium
3	Technische Universiteit Delft (TUD)	University	Principal investigator	The Netherlands
4	Uppsala University (UU)	University	Principal investigator	Sweden
5	Foppoli Moretta e Associati consulting engineers (FM&A)	Small and medium enterprise (SME)	Principal investigator	Italy
6	Monumentenwacht Noord-Brabant	Non-profit organisation	Associate partner	The Netherlands
7	Monumentenwacht Flanders	Non-profit organisation	Associate partner	Belgium
8	Consortium Villa Reale e Parco di Monza	Public Consortium	Associate partner	Italy
9	Navarra Gestioni (Na.Gest)	Private company	Associate partner	Italy
10	Assimpredil ANCE	Association	Associate partner	Italy



## 2. Declaration by project leader (PL)

I, as the Project Leader, declare that:

- The attached annual report represents an accurate description of the work carried out in this project for this reporting period
- The project has (tick as appropriate)

<input checked="" type="checkbox"/>	Fully achieved its objectives for the period
<input type="checkbox"/>	Achieved most of its objectives for the period with relatively minor deviations *
<input type="checkbox"/>	Failed to achieve critical objectives and/or is not at all on schedule

- To my best knowledge, the financial summary that is being submitted as part of this report is in line with the actual work carried out and are consistent with the individual (financial) reporting of the project members towards their national funding agencies.
- All partners, in particular non-profit public bodies, secondary and higher education establishments, research organisations and SMEs, have declared to have verified their legal status. Any changes have been reported under the section on Management.

Period covered by this report:

**1 May 2015 - 31 December 2017**

Author of this report:

**Stefano Della Torre**

Date of submission:

**31 May 2018**

Name of project leader:

**Stefano Della Torre**

Signature of project leader:



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## 4. SCIENTIFIC PROGRESS AND IMPACT REPORT

### 4.1 EXECUTIVE SUMMARY FOR THE FULL PROJECT DURATION

CHANGES (Cultural Heritage Activities: New Goals and Benefits for Economy and Society) project aimed at producing new local models capable to include the diversity of European Cultural Heritage and skills required in built heritage activities to support Planned Preventive Conservation, Maintenance and Monitoring (PPCMM), by increased understanding of:

- conservation and valorisation as preventive measures;
- effectiveness of maintenance, involving relevant craftsmanship and expertise;
- economic mechanisms underlying built heritage conservation in the context of regional economy and the (wider) construction sector;
- impact of knowledge gain and its dissemination on smart economy for built heritage conservation, heritage management and for the construction sector.

During the **first year**, three general meetings among the partners took place, with the aim to discuss and conceptualize previous experiences (Monumentenwacht, Halland Model, Distretti Culturali) carried out by the principal investigators, as well as to share methodologies, in view of the following research activities. This analysis (WP2) gave the required input to next action-research in the different countries. It also constituted a first scientific achievement, seeing that the available literature on the three models does not provide any specific analysis in terms of societal and economic impacts (conservation quality, enhancement of capacity/skills, people/community involvement, impact on the market, impact on decision-making).

Moreover, the internal exchange platform and the project website ([www.changes-project.eu](http://www.changes-project.eu)) were created. The website represents the main dissemination tool; it provides all the information related to the project themes, objectives and results, and it is continuously updated.

During the **second year**, the work focused on the implementation of maintenance systems and the investigation into efficacy of the maintenance practices in:

- Belgium (WP3): KU Leuven collaborated with Monumentenwacht Flanders to study maintenance problems of historic buildings (listed and non-listed), to understand monitoring/reporting, to identify types of interventions in the past, to evaluate those interventions in terms of effectiveness, durability (service life) and costs, and to understand the skills and knowledge involved in this process.
- The Netherlands (WP4): TU Delft in collaboration with Monumentenwacht NoordBrabant looked into the value and the role of the latter within the Dutch Heritage Conservation philosophy/system. Case studies, interviews and a survey were carried out in order to understand the inspection and reporting methods, and how they have influenced daily maintenance practice.
- Italy (WP5): Politecnico di Milano and Foppoli Moretta e Associati consulting engineers, in collaboration with the associate partners, through the analysis of different case studies, investigated the costs of post-intervention maintenance systems integrated into the facility management, the role of conservation activities in the framework of valorisation strategies, as well as the relationships between the selected pilot projects and the surrounding cultural systems, such as the involvement of public, professionals, grass roots of organisations, etc.



The above-mentioned topics were discussed during a general meeting among all the partners that was held in Milan on May 2016. Moreover, during July 2016, a period of work exchange between the researchers coming from Belgium, The Netherlands and Italy, fostered the comparison of good practices and abilities, in reference to maintenance systems adopted in the diversified local contexts. Concerning the dissemination of the project themes and the knowledge transfer (WP8), two main events were organized throughout the second year:

- The International Conference “Cultural heritage management: conservation and valorisation in an integrated perspective”, which was held at Villa Reale in Monza (Italy) on 26 May 2016, constituted a relevant occasion to discuss and reflect upon conservation and management practices for built cultural heritage.
- The International Conference “Structural Analysis of Historical Constructions SACH 2016” was held at Kasteelpark Arenberg in Leuven (Belgium) on 13-15 September 2016. The theme of the Conference “Anamnesis, Diagnosis, Therapy, Controls” emphasized the importance of all steps of a restoration process, in order to obtain a thorough understanding of the structural behaviour of the built cultural heritage.

During **the third year**, the activities concerning the implementation of maintenance systems and the investigation into the efficacy of maintenance practices in Belgium, in the Netherlands and in Italy were completed, providing the necessary data input into the succeeding research. In detail, the investigation focused on two principal issues:

- On the one hand, the analysis of costs and benefits of planned maintenance, mainly related to the single historic property and its management, based on the data provided by the previous work of the partners. The aim was to go beyond the popular sentence that maintenance is better than cure and less expensive, and to understand the factors that affect decision-making (WP6).
- On the other hand, the analysis of policies, gained values and the legal framework of the different practical experiences of the partners, that lead to regional development as a result of historic conservation project (WP7).

The results obtained by these analyses, provided policy makers and influencers with a set of simple rules for more effective funding policies.

The activities related to the dissemination of the results and the knowledge transfer, during the third year concerned mainly the organisation of open seminars and conferences involving the project partners, students and stakeholders, as well as the publication of the project scientific outputs. The former includes:

- The International Conference on “Innovative built heritage models and preventive conservation”, which was held on 6-8 February 2017, in Leuven, where the first achieved results were presented.
- The International Conference on “Professionalism in the built heritage sector”, 5-8 February 2018, in Leuven. The conference was organised by the Raymond Lemaire International Centre for Conservation.

On this occasion, a presentation was given in order to present the final outcomes of the project, which have been uploaded on the project website.

The latter comprises the publication of the proceedings of the first international conference mentioned above, as well as the publication of a series of peer-reviewed papers.



## 4.2 PROJECT OBJECTIVES

CHANGES project aimed at producing new local models capable to include the diversity of European Cultural Heritage and skills required in built heritage activities to support Planned Preventive Conservation, Maintenance and Monitoring (PPCMM), by increased understanding of:

- conservation and valorisation as preventive measures;
- effectiveness of maintenance, involving relevant craftsmanship and expertise;
- economic mechanisms underlying built heritage conservation in the context of regional economy and the (wider) construction sector;
- impact of knowledge gain and its dissemination on smart economy for built heritage conservation, heritage management and for the construction sector.

The project was based on the previous practical experiences of the project partners, i.e. Monumentenacht in Belgium and the Netherlands, Distretti Culturali in Italy, and Halland Model in Sweden. Considering the diversity of the three models and the different contexts, the first objective to achieve was the elaboration of a theoretical model in order to highlight the core activities of each experience and the setting of a common framework necessary for their comparison and the identification of the methodologies and tools for the following research.

Subsequently, the research concerned the implementation of maintenance systems and the investigation into the efficacy of maintenance practices in terms of quality conservation, relevant craftsmanship and expertise. Different cases in Belgium, the Netherlands and Italy were analysed with the aim to collect the necessary data for the cost/benefit analysis of built heritage maintenance interventions.

Furthermore, the project sought to analyse the built cultural heritage contribution to inclusive and sustainable development. The practical experiences of the project partners and their trading zone were studied in order to understand policies, gained values, and the legal framework, which lead to regional development, as a result of a conservation project.

The results obtained by these analyses, provided policy makers and influencers with a set of simple rules for more effective funding policies.

Concerning the dissemination objectives, the creation of the project website, the organisation of international conferences, and the publication of the scientific project outputs offered opportunities to promulgate the knowledge of built heritage management models and conservation/valorisation practices. Below, the list of the main project objectives:

1. Conceptualization of the previous experiences of the partners (Monumentenwacht in Belgium and in the Netherlands, Halland Model in Sweden, Distretti Culturali in Italy), (WP2).
2. Identification of methodologies and tools for the following action research, (WP2).
3. Assessment of built heritage maintenance interventions in terms of effectiveness (quality), relevant craftsmanship and expertise (knowledge), (WP3, WP4, WP5).
4. Evaluation of built heritage maintenance interventions in terms of costs and additional external benefits, (WP6).
5. Analysis of the factors that affect decision-making, (WP6).
6. Analysis of built cultural heritage contribution to inclusive and sustainable development, (WP7).
7. Simple rules for more effective funding policies destined to policy makers and influencers, (conclusions).
8. Dissemination of project themes and knowledge transfer, (WP8).



## 4.3 ACHIEVEMENTS OF THE PROJECT

### 4.3.1 Progress, changes and remedies

The activities related to each work package are summarized below:

**WP1:** The activities regarding the management aspects of the project concerned on the one hand, the preparation of the administrative documentations, necessary to the agreement and on the other hand, the organization of general meetings among the scientific and the management board. In detail, 6 meetings were held, so as to plan the working sessions and discuss the results during the project period. Due to delays in funding, which affected the employment procedures, the duration of the project was extended to the end of 12/2017 and the whole of the planned activities was performed and concluded successfully.

**WP2:** The work package 2 was carried out during the first year of the project. The research activity concerned the conceptualization and the comparison of the previous experiences of the partners (Monumentenwacht, Halland Model, Distretti Culturali) according to the following criteria: conservation quality, enhancement of skills, people involvement, impact on the market, impact on decision-making. The comparison required a preliminary understanding of the three models and their main differences. Therefore, a simplified chart of conservation process was drafted, which enabled to highlight the core activities of each analysed model. The analysis gave the required input to next action-research in the different countries. It also constituted a first scientific achievement, seeing that the available literature on the three models does not provide any specific analysis in terms of societal/economic impacts. Moreover, the WP2 included the discussion of the main definitions related to the conservation field: preventive conservation, conservation quality, valorisation, development/growth, capacity building, and social capital.

**WP3:** KU Leuven collaborated with Monumentenwacht Flanders to study maintenance problems of historic buildings (listed and non-listed), to understand monitoring/reporting, to identify types of interventions in the past, to evaluate those interventions in terms of effectiveness, durability and costs, and to understand the skills and knowledge involved in this process. One urban environment (Mechelen) and a rural area (South-East of Limburg) were studied to include the impact of the location context, urban or rural, on the maintenance guidelines which are formulated in the reports and on the types of interventions which were effectively carried out. 19 case studies were selected firstly, based on their ownership and secondly, based on whether or not the recommended interventions were indeed implemented.

**WP4:** In January 2016, a post-doc researcher commenced her position, and WP4 started. In cooperation with Monumentenwacht North Brabant, 16 cases were selected and were studied in detail. This included a critical review of Monumentenwacht reports, site visits with condition assessment, interviews with the stakeholders. In addition, the social and legal boundary conditions were analysed, which influence the degree of the maintenance and the interventions carried out. The data were incorporated in MDCS. Monumentenwacht's theoretic framework was matched with practice. The outcomes were used for the final evaluation of the organization as a monument care system. The findings were elaborated together with the Belgian partner, in order to analyse the differences of the MW systems in Flanders and North Brabant, and the influence of legal and cultural boundary conditions on preventive maintenance.

**WP5:** In Italy, the activities on the field were finalized to test cost/efficiency of a post-intervention maintenance system integrated into the facility management, to investigate the role of conservation



activities in the framework of valorisation strategies, as well as to study the relationship between case studies and the surrounding cultural system (involvement of public and private owners, professionals, enterprises etc.). The activities carried out by the Politecnico di Milano concerned 5 case studies and included: implementation of conservation and inspection plan and incorporation of data in the Informative System Planet (Royal villa of Monza); data gathering related to both the physical conditions of the buildings, and the management aspects (Monza Park); development of a sustainability assessment model (Sulbiate, Usmate con Velate); development of a management model and definition of the role of the contracting parties in conservation and valorisation activities (Biassono). The activities performed by FMeA comprised inspections, diagnostic analysis/NDT techniques, seismic assessment, structural and thermo-hygrometric monitoring and conservation plan implementation. 17 case studies were selected, covering different typologies (churches, castles, bridges, towers) in different territorial contexts (Valtellina, Lombardy, Alpine region).

**WP6:** The activities concerning the implementation of maintenance systems and the investigation into the efficacy of maintenance practices provided the necessary data input into the sixth work package that started in January 2017. The research focused on the analysis of costs and benefits of planned maintenance, mainly related to the single historic property and its management, based on the data provided by the previous work of the partners. The results obtained by the analysis, provided policy makers and influencers with a set of simple rules for more effective funding policies.

**WP7:** The research activities aimed at analysing the built cultural heritage contribution to inclusive and sustainable development. The practical experiences of the project partners and their trading zone were studied in order to understand policies, gained values, and the legal framework, which lead to regional development, as a result of a conservation project. This included the data gathering based on a questionnaire and swot analysis for the evaluation of the development factors.

**Conclusions:** The project confirmed through a wide comparison of data, experiences and opinions that the complex and multifaceted conservation processes are directly or indirectly controlled by financial mechanisms, which sometimes act as constraints and impair the integration of social and economic aims. The project, as investigating the impact of different models, detected some recurrent issues, as well as some factors of the success of the selected models, which comply with a theoretical framework encompassing tangible and intangible heritage and integration of aims as the way heritage can contribute to sustainable development. Referring to “Conclusions” as the most significant deliverable to be dealt with, CHANGES explored stakeholders’ attitude toward conservation through the three different models. This achievement enabled to propose a list of general rules for a more effective use of funds, making grants a tool for change, according to JPI Cultural Heritage and Global change’s research priorities. On the other hand, the project confirmed that the national contexts are still very different for many reasons, to be identified in culture, traditions, legislations, real estate and construction market. Therefore, the project conclusions have been presented as a very simplified and general list, as only this format can apply to the different national contexts. The recommendations will then be implemented referring to the local realities.

**WP8:** The activities related to the dissemination of the results and the knowledge transfer concerned the creation of the project website ([www.changes-project.eu](http://www.changes-project.eu)), the organisation of open seminars and conferences involving the project partners, students and stakeholders (4 international conferences were held in Monza – 5/2016 and in Leuven – 9/2016, 2/2017 and 2/ 2018), the participation and the contribution of the project partners in conferences coordinated by other organisations (e.g. Le Réseau des Résidences Royales Européennes et le Château de Versailles, ICOM-CC, WTA Netherlands, etc.) as well as the publication of a series of peer-reviewed papers.



### 4.3.2 Deliverables/output

TABLE 4.3.2: Deliverables							
Deliverable number	Deliverable name	Brief description of deliverable	Lead partner (country)	Planned delivery date	Date delivered	Actual/ forecast delivery date	Comments
<b>Deliverables 1 year: 1 May 2015 - 31 January 2016</b>							
1	Realization of a web exchange platform working.	Dropbox	Politecnico di Milano (IT)	June 2015	July 2015	/	Working
2	Realization of a website.	<a href="http://www.changes-project.eu">www.changes-project.eu</a>	Politecnico di Milano (IT)	/	December 2015	/	Not planned from the beginning
3	Kick-off meeting.	7 July 2015, Milan	Politecnico di Milano (IT)	May 2015	July 2015	/	/
4	WP2 Report.	Collect and share data on experiences by Monumentenwacht, Distretti Culturali and Halland Model; Joint analysis and discussion of data + distill outcomes into coherent conceptual grid; Develop methods and tools to initiate WP3-5.	Politecnico di Milano (IT)	October 2015	/	April 2016	Delay due to late funding distribution
<b>Deliverables 2 year: 1 February 2016 - 31 January 2017</b>							
5	Website update.	<a href="http://www.changes-project.eu">www.changes-project.eu</a>	Politecnico di Milano (IT)	/	December 2016	/	WP8
6	Meeting in Milan between partners and associate partners.	24-27 May 2016, Milano, Valtellina (IT): - Minutes. - Slides of the presentation.	Politecnico di Milano (IT)	May-June 2016	May 2016	/	WP1
7	Public Conference "Cultural heritage management: conservation and valorisation in an integrated perspective".	26 May 2016, Monza (IT): - Program. - Minutes. - Slides of the presentations.	Politecnico di Milano (IT)	May 2016	May 2016	/	WP8
8	Public Conference "Structural Analysis of Historical Constructions SACH 2016".	13-15 September 2016, Leuven (B): - Program. - Slides of the presentations. - Contributes to Proceedings.	University of Leuven (KUL)	September 2016	September 2016	/	WP8
9	Public Conference "Thematic Week: innovative built heritage models and preventive systems".	6-8 February 2017, Leuven (B): - Program.	University of Leuven (KUL)	February 2017	/	February 2017	WP8 The deliverable was subsequently performed during the third year, as reported below.
10	Model comparison grid (Monumentenwacht, Halland Model, Distretti Culturali).	A grid, which identifies the diversity of impacts and of skills needed for quality protection, conservation and management of built cultural heritage.	Politecnico di Milano (IT)	June 2015	June 2015	/	WP2
11	Definitions.	Definitions of the words: valorization, conservation, quality, preventive conservation, development, growth, capacity buildings, social capital, conservation, preservation.	Politecnico di Milano (IT)	June 2015	June 2015	/	WP2
12	Report on Villa Reale Conservation Plan.	The document reports information related to: - Knowledge of the historical building; - Program of the preventive and maintenance activities; - Inspections activities.	Politecnico di Milano (IT)	October 2016	/	February 2017	WP5
13	Survey fixed questionnaire.	In-depth interview with the owners of the buildings which represent the project case studies.	University of Leuven (KUL)	October 2016	October 2016	/	WP3
14	Constructive open-ended questionnaire.	Interviews with a wide spectrum of actors with strategic importance for leading, managing and implementing the project (17 decision-makers and stakeholders).	Uppsala University (UU)	December 2016	December 2016	/	WP7
15	Draft report of the survey.	This paper includes crucial enhancement of the Halland Model.	Uppsala University (UU)	February 2017	/	February 2017	WP7
16	Analysis of some case studies and incorporation of data in MDCS.	This included a critical review of Monumentenwacht reports, site visits with condition assessment, interviews with the stakeholders. In addition, the social and legal boundary conditions were analysed. The data are incorporated in MDCS (new version of MDDS).	Technische Universiteit Delft (TUD)	October 2016	/	February 2017	WP4

Deliverables 3 year: 1 February 2017 - 31 December 2017							
17	Preliminary interview with the local heritage agency (Belgium).	The interview allowed to select case studies, on the basis of their ownership (public vs private ownership) and on whether or not the recommended interventions were implemented.	University of Leuven (KUL)	October 2016	December 2017	/	WP3
18	Report on the state of the art on maintenance practices (Belgium).	The state of the art departed from the added value of preventive conservation practices and identified how maintenance practices should ideally be conducted within this framework.	University of Leuven (KUL)	October 2016	December 2017	/	WP3
19	In-depth interviews with the owners (Belgium).	It identified maintenance objectives of the owners.	University of Leuven (KUL)	October 2016	December 2017	/	WP3
20	Report on the approach of the owners (Belgium).	It reported on the monitoring/reporting and the types of executed interventions.	University of Leuven (KUL)	October 2016	December 2017	/	WP3
21	Report on an evaluation of interventions and reflection on skills (Belgium).	It included the evaluation of the effectiveness, durability of the interventions, and identification of skills and knowledge.	University of Leuven (KUL)	October 2016	December 2017	/	WP3
22	Enquiry among owners who are members of the Monumentenwacht organisation in North Brabant (The Netherlands).	It confirmed the hypotheses and provided interesting information to better understand the conservation philosophy and practice in the Netherlands.	Technische Universiteit Delft (TUD)	October 2016	December 2017	/	WP4
23	Consideration on the condition assessment (The Netherlands).	It focused on the physical conservation of the selected properties.	Technische Universiteit Delft (TUD)	October 2016	December 2017	/	WP4
24	Workshop for the inspectors of Monumentenwacht North Brabant (The Netherlands).	A workshop was organized in September 2017 for the inspectors of Monumentenwacht North Brabant.	Technische Universiteit Delft (TUD)	October 2016	December 2017	/	WP4
25	Information session for owners of North Brabant (The Netherlands).	An information session was held in December 2017 for the owners of North Brabant, in order to show the importance of investigations (in situ – laboratory).	Technische Universiteit Delft (TUD)	October 2016	December 2017	/	WP4
26	Information session for inspectors (The Netherlands).	An information session for inspectors was held, whereby TU Delft-TNO scientists explained the state of the art around matters like application of plasters on salt loaded walls, rising damp, etc.	Technische Universiteit Delft (TUD)	October 2016	December 2017	/	WP4
27	Data collection of selected case studies (Italy - unit 1).	Documentations on buildings and their state of conservation were previously collected.	Politecnico di Milano (IT)	October 2016	December 2017	/	WP5
28	Condition assessment of the buildings identified, focusing on their state of conservation (Italy - unit 1).	It referred to the buildings' physical conditions and to the conservation quality assessment.	Politecnico di Milano (IT)	October 2016	December 2017	/	WP5
29	Elaboration of the conservation plan for some of the selected case studies (Italy - unit 1).	The conservation plans were implemented also through an information system defining conservations activities to be carried out on the selected building.	Politecnico di Milano (IT)	October 2016	December 2017	/	WP5
30	Definition of strategies for conservation and valorization activities for some of the selected case studies (Italy - unit 1).	One of the outcomes is the elaboration of strategies aimed at ensuring conservation and valorization activities, not only upon built cultural heritage, but also upon landscape heritage.	Politecnico di Milano (IT)	October 2016	December 2017	/	WP5
31	Preliminary study and analysis of selected case studies (Italy - unit 2).	They included: - Historical research for the interpretation of the historical evolution of the construction. - Geometric survey matched with the survey of crack and deformation pattern. - Detailed inspections of the artefacts, to acquire accurate knowledge and to plan the maintenance activities.	Foppoli Moretta e Associati consulting engineers (FMa)	October 2016	December 2017	/	WP5
32	Activities of structural diagnosis on selected buildings (Italy - unit 2).	They included: - Structural identification of the building and its construction details. - Characterisation of mechanical properties of materials and their deterioration. - Characterisation of soil-foundation relationship.	Foppoli Moretta e Associati consulting engineers (FMa)	October 2016	December 2017	/	WP5
33	Implementation of maintenance systems (Italy - unit 2).	They included: - Monitoring of the structural and environmental changes. - Elaboration of conservation plans.	Foppoli Moretta e Associati consulting engineers (FMa)	October 2016	December 2017	/	WP5
34	Analysis of costs and benefits of preventive conservation practices.	Verification of expenses and estimation of suggested maintenance works.	Politecnico di Milano (IT)	April 2017	December 2017	/	WP6
35	Reflection on economic and societal impacts and externalities of valorisation strategies through swot analyses of historic conservation projects.	It is aimed at understanding the regional development impact of these projects and how conservation policies play an important role in such development.	Uppsala University (UU).	April 2017	December 2017	/	WP7
36	Website update.	<a href="http://www.changes-project.eu">www.changes-project.eu</a>	Politecnico di Milano (IT)	April 2017	December 2017	/	WP8
37	Public Conference "Thematic Week: innovative built heritage models and preventive systems".	6-8 February 2017, Leuven (B): - Presentation of CHANGES first outcomes.	University of Leuven (KUL)	/	February 2017	/	WP8. The conference proceedings were published on January 2018.
38	Joint programming initiative on cultural heritage workshop: funded research projects parade.	20-21 February 2017, Brussels (B): - Presentation of CHANGES project.	Politecnico di Milano (IT)	/	February 2017	/	WP8
39	Public Conference "Thematic Week: Professionalism in the Built Heritage Sector".	5-8 February 2018, Leuven (B): - Presentation of CHANGES deliverables.	University of Leuven (KUL)	/	February 2018	/	WP8



#### 4.3.3 Contribution to JPI-CH

<b>Contribution to</b>	<b>Contribution by (deliverable number (s))</b>	<b>Brief description of what is contributed and how</b>
General JPI-CH visibility	2	<b>Realization of a website:</b> Website ( <a href="http://www.changes-project.eu/">http://www.changes-project.eu/</a> ).
	5	<b>Website update:</b> It constituted a significant way to disseminate information about the JPI Program.
	7	<b>Public Conference "Cultural heritage management: conservation and valorisation in an integrated perspective":</b> The conference was opened to the local stakeholders and all the people interested in it.
	8	<b>Public Conference "Structural Analysis of Historical Constructions SACH 2016":</b> The conference was opened to the local stakeholders and all the people interested in it.
	9	<b>Public Conference "Thematic Week: innovative built heritage models and preventive systems":</b> The conference was opened to the local stakeholders and all the people interested in it.
	38	<b>Joint programming initiative on cultural heritage workshop: funded research projects parade.</b>
	39	<b>Public Conference "Thematic Week: Professionalism in the Built Heritage Sector":</b> The conference was opened to the local stakeholders and all the people interested in it.



SRA challenges	Developing reflective society	5	<b>Website update:</b> It constituted a significant way to disseminate information about the JPI Program.	
		7	<b>Public Conference "Cultural heritage management: conservation and valorisation in an integrated perspective":</b> The conference was opened to the local stakeholders and all the people interested in it.	
		8	<b>Public Conference "Structural Analysis of Historical Constructions SACH 2016":</b> The conference was opened to the local stakeholders and all the people interested in it.	
		9	<b>Public Conference "Thematic Week: innovative built heritage models and preventive systems":</b> The conference was opened to the local stakeholders and all the people interested in it.	
		39	<b>Public Conference "Thematic Week: Professionalism in the Built Heritage Sector":</b> The conference was opened to the local stakeholders and all the people interested in it.	
		17	<b>Preliminary interview with the local heritage agency (Belgium):</b> The interview allowed to reflect on possible case studies and effective implementation of recommended interventions.	
		24	<b>Workshop for the inspectors of Monumentenwacht North Brabant (The Netherlands):</b> Inspectors of Monumentenwacht North Brabant could take part, in order to be trained on assessment and monitoring.	
		25	<b>Information session for owners of North Brabant (The Netherlands):</b> The owners of North Brabant could take part, in order to understand the importance of investigations (in situ – laboratory).	
	26	<b>Information sessions for inspectors (The Netherlands):</b> Inspectors could take part. TU Delft-TNO scientists explained the state of the art around matters like application of plasters on salt loaded walls, rising damp, etc.		
	3	<b>Kick-off meeting:</b> It involved associate partners (also during the following meetings and planned activities).		
	6	<b>Meeting in Milan between partners and associate partners:</b> It represented the occasion to involve local stakeholders.		
	19	<b>In-depth interviews with the owners (Belgium):</b> It allowed the identification of owners' maintenance objectives.		
		Connecting people with heritage		



		22	<b>Enquiry among owners who are members of the Monumentenwacht organisation in North Brabant (The Netherlands):</b> It fostered the exchange of information concerning conservation philosophy and practice in the Netherlands.
Creating knowledge		10	<b>Model comparison grid</b> (Monumentenwacht, Halland Model, Distretti Culturali).
		11	<b>Definitions.</b>
		18	<b>Report on the state of the art on maintenance practices (Belgium).</b>
		20	<b>Report on the approach of the owners (Belgium):</b> It illustrated the maintenance approach adopted by the owners.
		21	<b>Report on an evaluation of interventions and reflection on skills (Belgium):</b> It evaluated the effectiveness, durability of the interventions, and identification of skills and knowledge.
		23	<b>Consideration on the condition assessment (The Netherlands):</b> It illustrated the physical conservation of the selected properties.
		34	<b>Analysis of costs and benefits of preventive conservation practices:</b> It allowed a first verification of expenses and estimation of suggested maintenance works.
		35	<b>Reflection on economic and societal impacts and externalities of valorisation strategies through swot analyses of historic conservation projects.</b>
Safeguarding cultural heritage resource		12	<b>Report on Villa Reale Conservation Plan (Italy).</b>
		13	<b>Survey fixed questionnaire (Belgium).</b>
		14	<b>Constructive open-ended questionnaire (Sweden).</b>
		15	<b>Draft report of the survey (Sweden).</b>
		16	<b>Analysis of some case studies and incorporation of data in MDCS (The Netherlands).</b>
		27	<b>Data collection of selected case studies (Italy - unit 1).</b>
		28	<b>Condition assessment of the buildings identified, focusing on their state of conservation (Italy - unit 1).</b>
		29	<b>Elaboration of the conservation plan for some of the selected case studies (Italy - unit 1).</b>
		30	<b>Definition of strategies for conservation and valorization activities for some of the selected case studies (Italy - unit 1).</b>
		31	<b>Preliminary study and analysis of selected case studies (Italy - unit 2).</b>
32	<b>Activities of structural diagnosis on selected buildings (Italy - unit 2).</b>		
33	<b>Implementation of maintenance systems (Italy - unit 2).</b>		



#### ***4.3.4 Future activities, if relevant***

The project conclusions have been presented as a very simplified and general list, as only this format can apply to the different national contexts. The recommendations will then be implemented referring to the local realities.



#### 4.4 PROJECT MEETINGS and INTERNAL COLLABORATION

TABLE 4.4: Project internal collaboration and meetings			
List of internal meetings			
Date	Location	Participants	Weblink to periodic reports/minutes (if applicable)
<b>Internal meetings 1 year: 1 May 2015 - 31 January 2016</b>			
07 July 2015	Milano (IT)	<ul style="list-style-type: none"> <li>- S. Della Torre, G. Utica, S. Bossi, A. Lai, A. Pili, C. Boniotti (Polimi);</li> <li>- K. Van Balen, N. Van Roy (KUL);</li> <li>- C. Gustafsson (UU);</li> <li>- S. Naldini (TUD);</li> <li>- D. Foppoli (FMeA);</li> <li>- R. Moioli (Consorzio Villa Reale e Parco di Monza);</li> <li>- M. De Adamich (AssimpredilANCE).</li> </ul>	<a href="http://www.changes-project.eu/index.php/all-news-2/">http://www.changes-project.eu/index.php/all-news-2/</a>
23-25 September 2015	Visby (SE)	<ul style="list-style-type: none"> <li>- S. Della Torre (Polimi);</li> <li>- K. Van Balen, A. Vandesande, N. Van Roy (KUL);</li> <li>- C. Gustafsson, A. Ijla (UU);</li> <li>- S. Naldini, H. Heinemann (TUD);</li> <li>- D. Foppoli (FMeA);</li> <li>- R. Moioli (Consorzio Villa Reale e Parco di Monza).</li> </ul>	<a href="http://www.changes-project.eu/index.php/all-news-2/">http://www.changes-project.eu/index.php/all-news-2/</a>
09 November 2015	Milano (IT)	<ul style="list-style-type: none"> <li>- S. Della Torre, G. Utica, S. Bossi, A. Konsta, A. Lai, A. Pili, C. Boniotti (Polimi);</li> <li>- D. Foppoli (FMeA);</li> <li>- R. Moioli (Consorzio Villa Reale e Parco di Monza).</li> </ul>	
26 November 2015	Milano (IT)	<ul style="list-style-type: none"> <li>- S. Della Torre, G. Utica, S. Bossi, A. Konsta, A. Lai, A. Pili, C. Boniotti (Polimi);</li> <li>- D. Foppoli (FMeA);</li> <li>- L. Lamperti, R. Moioli (Consorzio Villa Reale e Parco di Monza);</li> <li>- A. Magnoni (Na.Gest.);</li> <li>- M. De Adamich (AssimpredilANCE).</li> </ul>	
11-13 January 2016	Delft (NL)	<ul style="list-style-type: none"> <li>- S. Della Torre (Polimi);</li> <li>- D. Foppoli (FMeA);</li> <li>- K. Van Balen, A. Vandesande, N. Van Roy (KUL);</li> <li>- C. Gustafsson, A. Ijla (UU);</li> <li>- S. Naldini, H. Heinemann (TUD);</li> <li>- R. Moioli (Consorzio Villa Reale e Parco di Monza).</li> </ul>	<a href="http://www.changes-project.eu/index.php/all-news-2/">http://www.changes-project.eu/index.php/all-news-2/</a>



Internal meetings 2 year: 1 February 2016 - 31 January 2017			
09 February 2016	Sulbiate (IT)	- S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - A. Crespi (Major of Sulbiate); - M. G. Riva (Head of public works office); - F. Fantin (Impresa Fantin).	
10 February 2016	Biassono (IT)	- M. Cazzaniga (Head of Public service office Municipality of Biassono); - M. Maffioli (Impresa I.M.G.); - S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - M. Paleari (Head of Cultural office - Municipality of Biassono).	
11 February 2016	Consorzio Villa Reale e Parco di Monza - Monza (IT)	- S. Della Torre (Polimi); - L. Lamperti, R. Moiola (Consorzio Villa Reale e Parco di Monza).	
16 February 2016	Usmate con Velate (IT)	- E. Riva (Major of Usmate); - A. Valli (Head of Public works office - Municipality of Usmate); - S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza).	
17 February 2016	Italiana Costruzioni S.p.a. - Milan (IT)	- A. Pili, A. Lai (Polimi); - A. Magnoni (Na.Gest.).	
22 February 2016	Villa Reale - Monza (IT)	- A. Pili (Polimi); - L. Mattavelli (Na.Gest.).	
26 February 2016	Villa Reale - Monza (IT)	- A. Pili (Polimi); - E. Zanotti (Restorer).	
02 March 2016	Villa Reale - Monza (IT)	- A. Pili, A. Lai (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - A. Magnoni (Na.Gest.).	
16 March 2016	Biassono (IT); Sulbiate (IT)	- S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - A. Crespi (Major of Sulbiate); - M. G. Riva (Head of public works office- Municipality of Sulbiate); - M. Cazzaniga (Head of public works office - Municipality of Biassono).	
30 March 2016	Villa Reale - Monza (IT)	- A. Pili (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - E. Rosso (Na.Gest.).	
06 April 2016	Villa Reale - Monza (IT)	- A. Pili, A. Lai (Polimi); - E. Rosso (Na.Gest.).	
20 April 2016	Consorzio Villa Reale e Parco di Monza - Monza (IT)	- S. Della Torre (Polimi); - R. Scanagatti, L. Lamperti, R. Moiola, (Consorzio Villa Reale e Parco di Monza).	
26 April 2016	Italiana Costruzioni S.p.a. - Milan (IT)	- A. Pili, A. Lai (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - E. Rosso (Na.Gest.); - E. Benatti (Team System); - A. Mongelli (Natisoft).	
03 May 2016	Villa Reale - Monza (IT)	- R. Moiola (Consorzio Villa Reale e Parco di Monza); - E. Rosso (Na.Gest.).	
10 May 2016	Milano (IT)	- A. Pili, A. Lai, A. Konsta, C. Boniotti, S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza).	
11 May 2016	Sulbiate (IT)	- S. Bossi (Polimi); - A. Crespi (Major of Sulbiate); - M. G. Riva (Head of public works office- Municipality of Sulbiate); - R. Moiola (Consorzio Villa Reale e Parco di Monza).	



12 May 2016	Usmate (IT)	- A. Valli (Head of Public works office - Municipality of Usmate); - S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza).	
24-27 May 2016	Milano (IT)	- S. Della Torre, S. Bossi, A. Pili, A. Konsta, A. Lai, C. Boniotti (Polimi); - K. Van Balen, A. Vandesande, N. Van Roy (KUL); - C. Gustafsson, A. Ijla (UU); - S. Naldini, H. Heinemann (TUD); - D. Foppoli, A. Armanasco (FMaA); - R. Moiola (Consorzio).	<a href="http://www.changes-project.eu/index.php/all-news-2/">http://www.changes-project.eu/index.php/all-news-2/</a>
20 June 2016	Italiana Costruzioni S.p.a. - Milan (IT)	- A. Pili, A. Lai (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - A. Magnoni, E. Rosso (Na.Gest.).	
22 June 2016	Villa Reale - Monza (IT)	- A. Pili (Polimi); - E. Rosso (Na.Gest.).	
12 July 2016	Villa Reale - Monza (IT)	- A. Pili (Polimi); - E. Rosso (Na.Gest.).	
15 July 2016	Consorzio Villa Reale e Parco di Monza - Monza (IT)	- F. M. Berti, R. Moiola (Consorzio Villa Reale e Parco di Monza); - A. Konsta (Polimi).	
19 July 2016	Biassono (IT)	- M. Cazzaniga (Head of Public service office - Municipality of Biassono); - S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - M. Paleari (Head of Cultural office - Municipality of Biassono).	
20-22 July 2016	Leuven, Mechelen (B)	- N. Van Roy, A. Vandesande (KUL); - H. Heinemann (TUD); - R. Moiola (Consorzio Villa Reale Parco di Monza);	
27 July 2016	Usmate (IT)	- E. Riva (Major of Usmate); - A. Valli (Head of Public works office - Municipality of Usmate); - S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza).	
29 July 2016	Subiate (IT)	- S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - A. Crespi (Major of Subiate); - M. G. Riva (Head of public works office).	
10 October 2016	Biassono (IT)	- M. Cazzaniga (Head of Public service office - Municipality of Biassono); - L. Casiraghi (Major of Biassono); - F. Arcioni (Como next); - S. Bossi (Polimi); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - M. Paleari (Municipality of Biassono).	
23 August 2016	Villa Reale - Monza (IT)	- A. Pili, A. Lai (Polimi); - E. Rosso (Na.Gest.); - E. Benatti (Team System).	
16 January 2017	Delft (NL)	- N. Van Roy (KUL); - H. Heinemann (TUD).	
26 January 2017	Biassono (IT)	- M. Cazzaniga (Head of Public service office - Municipality of Biassono); - L. Casiraghi (Major of Biassono); - R. Moiola (Consorzio Villa Reale e Parco di Monza); - M. Paleari (Municipality of Biassono).	



Internal meetings 3 year: 1 February 2017 - 31 December 2017			
02 February 2017	Biassono (IT)	- M. Cazzaniga (Head of Public service office - Municipality of Biassono); - L. Casiraghi (Major of Biassono); - R. Moioli (Consorzio Villa Reale e Parco di Monza); - M. Paleari (Municipality of Biassono).	
06-08 February 2017	Leuven (B)	- S. Della Torre, S. Bossi, A. Pili, A. Konsta, C. Boniotti (Polimi); - K. Van Balen, A. Vandesande, N. Van Roy (KUL); - C. Gustafsson, A. Ijla (UU); - S. Naldini, H. Heinemann (TUD); - D. Foppoli (FMeA); - R. Moioli (Consorzio Villa Reale e Parco).	<a href="http://www.changes-project.eu/index.php/all-news-2/">http://www.changes-project.eu/index.php/all-news-2/</a>
10 February 2017	Subiate (IT)	- R. Moioli (Consorzio Villa Reale e Parco di Monza); - Tenants spinning mill.	
17 February 2017	Subiate (IT)	- R. Moioli (Consorzio Villa Reale e Parco di Monza); - A. Crespi (Major of Subiate); - M. G. Riva (Head of public works office).	
20-21 February 2017	Brussels (B)	- S. Della Torre (Polimi); - K. Van Balen, A. Vandesande (KUL).	
14 March 2017	Subiate (IT)	- R. Moioli (Consorzio Villa Reale e Parco di Monza); - Tenants spinning mill.	
13 June 2017	Villa Reale - Monza (IT)	- S. Della Torre (Polimi); - L. Lamperti, C. Beretta (Consorzio Villa Reale e Parco di Monza).	
22 September 2017	Zillis (CH)	- S. Della Torre (Polimi); - D. Foppoli (FMeA); - R. Moioli (Consorzio Villa Reale e Parco).	
October	Subiate (IT)	- R. Moioli (Consorzio Villa Reale e Parco di Monza); - City Council Municipality of Subiate. - M. G. Riva (Head of public works office).	
October	Subiate (IT)	- R. Moioli (Consorzio Villa Reale e Parco di Monza); - Tenants spinning mill.	
09-12 October 2017	Halland Region (SE)	- S. Della Torre (Polimi); - K. Van Balen, A. Vandesande, N. Van Roy (KUL); - C. Gustafsson (UU); - S. Naldini, H. Heinemann (TUD); - D. Foppoli (FMeA); - R. Moioli (Consorzio Villa Reale e Parco di Monza).	<a href="http://www.changes-project.eu/index.php/all-news-2/">http://www.changes-project.eu/index.php/all-news-2/</a>
19 January 2018	Milano (IT)	- S. Della Torre (Polimi); - C. Gustafsson (UU); - R. Moioli (Consorzio Villa Reale e Parco di Monza).	
05-08 February 2018	Leuven (B)	- S. Della Torre (Polimi); - K. Van Balen, A. Vandesande, N. Van Roy (KUL); - C. Gustafsson (UU); - S. Naldini (TUD); - D. Foppoli (FMeA); - R. Moioli (Consorzio Villa Reale e Parco di Monza).	



Collaboration / communication amongst consortium member		
Type of <b>exchange</b> <i>(choose from list of options below)</i>	Type of <b>organizations</b> involved	<b>Countries</b> involved
technologies, tools	<ul style="list-style-type: none"> <li>- Politecnico di Milano;</li> <li>- TU Delft;</li> <li>- KU Leuven;</li> <li>- Uppsala University;</li> <li>- FMeA consulting engineers;</li> <li>- Monumentenwacht Flanders;</li> <li>- Monumentenwacht Noord-Brabant;</li> <li>- Na.Gest;</li> <li>- Consorzio Villa Reale e Parco di Monza.</li> </ul>	Italy, Belgium, The Netherlands, Sweden.
researchers	<ul style="list-style-type: none"> <li>- Politecnico di Milano;</li> <li>- TU Delft;</li> <li>- KU Leuven;</li> <li>- Uppsala University.</li> </ul>	Italy, Belgium, The Netherlands, Sweden.
students	<ul style="list-style-type: none"> <li>- Politecnico di Milano;</li> <li>- TU Delft;</li> <li>- KU Leuven.</li> </ul>	Italy, Belgium.
joint publications	<ul style="list-style-type: none"> <li>- Politecnico di Milano;</li> <li>- TU Delft;</li> <li>- KU Leuven;</li> <li>- Uppsala University;</li> <li>- FMeA consulting engineers;</li> <li>- Consorzio Villa Reale e Parco di Monza.</li> </ul>	Italy, Belgium, The Netherlands, Sweden.



## 4.5 IMPACT: DISSEMINATION, NETWORKING AND KNOWLEDGE TRANSFER

### 4.5.1 Networking activities (external) and stakeholder involvement.

TABLE 4.5.1: Networking and stakeholder involvement					
Brief description of <b>networking activity</b> / how <b>stakeholders have been involved</b> in the project	Please indicate whether the activity is <b>open to any interested stakeholder</b> (yes/no) *	<b>Stakeholders</b> involved ( <i>more than one category is allowed</i> ) a. Policy makers and influencers b. Cultural Heritage research community c. Parallel (European/international) projects, initiatives and organisations d. Industry, SMEs and Civil Society	Indicate the <b>outcome / impact / opportunity for (transnational) collaboration</b>	Indicate the <b>number of stakeholders**</b> reached in each category	Indicate the number of stakeholders** reached, that are based <b>outside the EU</b> , for each category *
<b>WP3:</b> <b>Meetings with local and Flemish heritage agency (B).</b>	no	a. Policy makers and influencers	- Contextualization of the answers of the buildings' owners.	Approximately 2 each time	0
<b>WP3:</b> <b>Meetings with Monumentenwacht organisations (B).</b>	no	a. Policy makers and influencers	- Exchange of documentation. - Organization of a group discussion. - Exchange of knowledge and experiences between the academic field and part of the local cultural heritage research community.	Approximately 1 each time	0
		b. Cultural Heritage research community		Approximately 1 each time	0
<b>WP3:</b> <b>Meetings with the owners of selected properties (B).</b>	no	d. Industry, SMEs and Civil Society	- Organization of a focus group. - Validation and contextualization of the detected tendencies. - Site visits. - Bonding and informal discussion between the private owners.	Approximately 1 each time	0



<b>WP4:</b> <b>Meetings with owners, inspectors, users, advisors from the Dutch Cultural Heritage agency, restoration architects, and contractors (NL).</b>	no	a. Policy makers and influencers	<ul style="list-style-type: none"> <li>- Validation and contextualization of the detected tendencies.</li> <li>- Site visits.</li> <li>- Bonding and informal discussion between the private owners.</li> </ul>	Approximately 1 each time	0
		d. Industry, SMEs and Civil Society		Approximately 1 each time	0
<b>WP4:</b> <b>Workshop for the inspectors of Monumentenwacht North Brabant (NL).</b>	no	d. Industry, SMEs and Civil Society	- Transfer of knowledge and indications of good practices.	Approximately 1	0
<b>WP4:</b> <b>Information session for owners of North Brabant (NL).</b>	no	d. Industry, SMEs and Civil Society	- Illustration of the importance of investigations.	Approximately 1	0
<b>WP4:</b> <b>Information session for inspectors (NL).</b>	yes	d. Industry, SMEs and Civil Society	- Transfer of knowledge and indications of good practices.	Approximately 1	0
<b>WP5:</b> 8 September 2016, Monza (IT) <b>Villa Reale open conference (IT).</b>	yes	a. Policy makers and influencers	<ul style="list-style-type: none"> <li>- Sharing of experience.</li> <li>- Creation of new contacts.</li> <li>- Exchange of knowledge.</li> </ul>	Approximately 5	0
		b. Cultural Heritage research community		Approximately 10	0
		d. Industry, SMEs and Civil Society		Approximately 10	0
<b>WP5:</b> 21 September 2016, Sulbiate (IT) <b>Press conference Spinning mill (IT).</b>	yes	a. Policy makers and influencers	<ul style="list-style-type: none"> <li>- Newspaper articles.</li> <li>- Web news.</li> </ul>	Approximately 5 and press readers	0
		d. Industry, SMEs and Civil Society		Approximately 10 and press readers	0



<b>WP5:</b> 24 September 2016, Sulbiate (IT) <b>Spinning mill opening (IT).</b>	yes	a. Policy makers and influencers	- Dissemination of project activities.	Approximately 5	0
		d. Industry, SMEs and Civil Society		Approximately 10	0
<b>WP5:</b> 29 November – 1 December 2017, Versailles (F) <b>International Conference "Preventive Conservation in Historic Houses and Palace-Museums: Assessment Methodologies and Applications".</b>	yes	b. Cultural Heritage research community	- Exchange of knowledge. - Dissemination of project activities.	Approximately 20	0
<b>WP5:</b> <b>Meetings with public administration, in relation to the case studies located in the Municipalities of Biassono, Sulbiate and Usmate Velate and to the case of Villa Reale in Monza (IT).</b>	no	a. Policy makers and influencers	- Exchange of knowledge and experiences between the academic field and the public administrations. - Development of best practices. - Reflections upon the building process. - Fostering the participation to other competition aimed at funding activities.	Approximately 2 each time	0
<b>WP5:</b> <b>Meetings with the representatives of the Monza and Brianza Distretto Culturale (IT).</b>	no	a. Policy makers and influencers	- Exchange of knowledge and experiences between the academic field and the public administrations.	Approximately 10 each time	0
<b>WP5:</b> <b>Meetings with the private subjects in charge for the management of the Spinning mill in Sulbiate (IT).</b>	no	a. Policy makers and influencers	- Interviews. - Definitions of indicators for the evaluation of the conservation process and management model.	Approximately 1	0
		d. Industry, SMEs and Civil Society		Approximately 4	0



<b>WP5:</b> <b>Meetings with the potential private partners for the case study of Biassono (IT).</b>	no	a. Policy makers and influencers	- Dissemination of the project. - Support to Biassono Municipality.	Approximately 1	0
		d. Industry, SMEs and Civil Society		Approximately 4	0
<b>WP7:</b> <b>Meetings with decision-makers and stakeholders (SE).</b>	no	a. Policy makers and influencers	- Interviews with a wide spectrum of actors with strategic importance for leading, managing and implementing the Halland Model. - Analysis of the Halland Model results.	Approximately 10	0
		d. Industry, SMEs and Civil Society		Approximately 10	
<b>WP8:</b> <b>Website of the project.</b>	yes	a. Policy makers and influencers	- Presentation of the project to any interested person.	Not defined.	Not defined.
	yes	b. Cultural Heritage research community		Not defined.	Not defined.
	yes	c. Parallel (European/international) projects, initiatives and organisations		Not defined.	Not defined.
	yes	d. Industry, SMEs and Civil Society		Not defined.	Not defined.
<b>WP8:</b> 26 May 2016, Monza (IT) <b>International Conference “Cultural heritage management: conservation and valorisation in an integrated perspective”.</b>	yes	a. Policy makers and influencers	- Dialogue between different directors and managers of built cultural heritage. - Sharing of experiences. - Creation of new collaboration at a international level (e.g. strengthen the network between the European Royal Residences).	Approximately 10	0
	yes	b. Cultural Heritage research community		Approximately 10	Approximately 1
	yes	d. Industry, SMEs and Civil Society		Approximately 10	Approximately 1



<p><b>WP8:</b> 13-15 September 2016, Leuven (B) <b>International Conference “Structural Analysis of Historical Constructions SACH 2016”.</b></p>	yes	b. Cultural Heritage research community	<ul style="list-style-type: none"> <li>- Exchange of knowledge.</li> <li>- Creation of collaborations between researchers, that are studying built cultural heritage, coming from different universities.</li> </ul>	Approximately 100	Approximately 10
<p><b>WP8:</b> 6-8 February 2017, Leuven (B) <b>Public Conference “Thematic Week: innovative built heritage models and preventive systems”.</b></p>	yes	b. Cultural Heritage research community	<ul style="list-style-type: none"> <li>- Presentation of the project and related outcomes to researchers from other universities.</li> </ul>	Approximately 20	3
		c. Parallel (European/international) projects, initiatives and organisations	<ul style="list-style-type: none"> <li>- Exchange of knowledge between CHANGES partners, other universities, and members of the European project HeritageCare.</li> </ul>	5	0
<p><b>WP8:</b> 5-8 February 2018, Leuven (B) <b>Public Conference “Thematic Week: Professionalism in the Built Heritage Sector”.</b></p>	yes	b. Cultural Heritage research community	<ul style="list-style-type: none"> <li>- Presentation of the project and related outcomes to researchers from other universities.</li> </ul>	Approximately 20	3
		d. Industry, SMEs and Civil Society	<ul style="list-style-type: none"> <li>- Exchange of knowledge between CHANGES partners, other universities and enterprises.</li> </ul>	Approximately 5	0
<p><b>Meeting with the partners of the European project INCEPTION - Inclusive Cultural Heritage in Europe through 3D semantic model.</b></p>	no	c. Parallel (European/international) projects, initiatives and organisations	<ul style="list-style-type: none"> <li>- Cooperation for further applications.</li> </ul>	1	0



#### 4.5.2 List of scientific publications.

TABLE 4.5.2 Scientific publications										
Peer reviewed publications <i>(starting with the most important ones)</i>										
Number	Title	Main author	Title of journal or series	Issue number, date or frequency	Publisher	Place of publication	Year of publication	Relevant pages	Permanent identifiers <sup>[1]</sup>	Open access <sup>[2]</sup> publication <i>(yes/no)</i>
1	Shaping Tools for Built Heritage Conservation: from Architectural Design to Program and Management. Learning from 'Distretti culturali'.	Della Torre S.	Reflections on Cultural Heritage Theories and Practice	1	Garant	Antwerp - Apeldoorn	2015	93-101		No
2	Heritage Impact: Looking for Models to Understand the Impact of Externalities	Della Torre S.	Reflections on Cultural Heritage Theories and Practice	2	Garant	Antwerp - Apeldoorn	2016	23-30		No
3	Planned preventive conservation and the structural performances of buildings.	Della Torre S.	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven	/	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	147-150		No



4	Digital tools supporting conservation and management of built cultural heritage.	Della Torre S.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	101-106		No
5	The management process for built cultural heritage: Preventive systems and decision making.	Della Torre S.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	13-20		No
6	Museums – an incubator for Sustainable Social Development and Environment Protection in Sweden.	Gustafsson C.	International Journal of Development and Sustainability	5(9)	ISDS Journals		2016	446-462	<a href="https://isdsnet.com/iids-v5n9-3.pdf">https://isdsnet.com/iids-v5n9-3.pdf</a>	Yes
7	Cognitive Keynesianism: Heritage conservation as a platform for structural anti-cyclic policy. The case of the Halland Region, Sweden	Gustafsson C.	Journal of Cultural Heritage	27	Elsevier		2017	10-19	<a href="https://www.sciencedirect.com/science/article/pii/S1296207417301759">https://www.sciencedirect.com/science/article/pii/S1296207417301759</a>	Yes
8	Museums – A Catalyst for Sustainable Economic Development in Sweden.	Gustafsson C.	International Journal of Innovative Development & Policy Studies	5(2)	Seahi Publications		2017	1-14	<a href="http://www.konstvet.uu.se/FileManager/Upload/Dokument/MuseumsC_Gustafsson_A_Ijala-A%20Catalyst_InternationalJournalofInnovativeDevelopment.pdf">http://www.konstvet.uu.se/FileManager/Upload/Dokument/MuseumsC_Gustafsson_A_Ijala-A%20Catalyst_InternationalJournalofInnovativeDevelopment.pdf</a>	Yes



9	Building conservation as a catalyst for regional sustainable development. Halland model as planning and acting sphere.	Gustafsson C.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	161-166		No
10	Towards sustainable restoration: Learning from the past, a challenge.	Naldini S.	Structural Analysis of / Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven		CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	401-404		No
11	Monumentenwacht and Preventive Conservation: Changes.	Naldini S.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	117-124		No
12	Community involvement in heritage.	Van Balen K. (ed.)	Reflections on Cultural Heritage Theories and Practice	1	Garant	Antwerp - Apeldoorn	2015			No
13	Heritage Counts	Van Balen K. (ed.)	Reflections on Cultural Heritage Theories and Practice	2	Garant	Antwerp - Apeldoorn	2016			No



14	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls.	Van Balen K. (ed.)	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven		CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016			No
15	Innovative Built Heritage Models.	Van Balen K. (ed.)	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018			No
16	Inspections and NDT for the characterization of historical buildings after seismic events: 2010 Emilia earthquake.	Foppoli D.	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven	/	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	1497-1504		No
17	Cultural heritage as a resource for regional sustainable development: The example of the Valtellina Cultural District in Italy.	Foppoli D.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	167-174		No



18	A sustainable management process through the preventive and planned conservation methodology: the Conservation Plan of the complex of St. Anthony.	Bossi S.	Proceedings of the 5th International Conference on Heritage and Sustainable Development Heritage 2016, 12-15 July 2016, Lisboa	1	Green Lines Institute for Sustainable Development	Barcelos	2016	687-695		No
19	The participation of the restoration companies into the Preventive and Planned Conservation (PPC): Strengths and weaknesses of the strategies after ten years monitoring.	Bossi S.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	53-60		No
20	Historical analysis and diagnostic investigations in the knowledge acquisition path for architectural heritage.	Cantini L.	Structural Analysis of / Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven		CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	166-172		No
21	Preventive actions for architectural heritage against seismic risk. The Italian experience.	Cantini L.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	83-91		No



22	The role of Monumentenwacht: 40 years theory and practice in the Netherlands.	Heinemann H.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	107-115		No
23	Risk management and built heritage: Experiences, reflections and perspectives.	Konsta A.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	73-81		No
24	Preventive and Planned Conservation and Economies of Scale. Conservation Process for 12 Churches.	Moioli R.	Reflections on Cultural Heritage Theories and Practice	1	Garant	Antwerp - Apeldoorn	2015	103-116		No
25	From tradition to innovation: Plaster at risk under severe climate conditions.	Moioli R.	Structural Analysis of / Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven		CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	185-192		No
26	Valuing the Impact. Reflections and Examples on Single Buildings and their Contexts.	Moioli R.	Reflections on Cultural Heritage Theories and Practice	2	Garant	Antwerp - Apeldoorn	2016	197-209		No



27	Royal Park of Monza: a knowledge based strategy for a preventive conservation approach and for a systemic vision of the site management.	Moioli R.	ICOM-CC 18th Triennial Conference Preprints, Copenhagen, 4–8 September 2017	/	ICOM-CC	Paris	2017	art. 1912		No
28	Complex properties management: preventive and planned conservation applied to the Royal Villa and Park in Monza.	Moioli R.	Journal of Cultural Heritage Management and Sustainable Development	Special issue dedicated to “preventive and planned conservation approaches applied to built heritage”	Emerald Publishing	Bingley (UK)	2018	to be defined	to be defined	Yes
29	The Spinning Mill in Sulbiate: A place for changes.	Moioli R.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	151-159		No



30	Preventive Conservation in Monza Royal Villa: strategies and tools for a long term planning.	Moioli R.	Proceedings of the International Conference "Preventive Conservation in Historic Houses and Palace-Museums: Assessment Methodologies and Applications", held at the Palace of Versailles from 29 November to 1 December 2017				Forthcoming			No
31	An operational preventive conservation system based on the Monumentenwacht model.	Vandesande A.	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven		CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	217-224		No
32	Towards a Sustainable Development Rationale for Heritage Management and Research	Vandesande A.	Reflections on Cultural Heritage Theories and Practice	2	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	11-19		No
33	Preventive conservation applied to built heritage: A working definition and influencing factors.	Vandesande A.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	63-72		No



34	Quality management of structural repair of traditional timber roof structures.	Van Roy N.	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven	/	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	209-216		No
35	Reliability monitoring of the rainwater disposal system for historic buildings.	Van Roy N.	Proceedings of the 4th WTA International PhD Symposium, 13-16 September 2017, Delft	/	WTA	Nederland – Vlaanderen	2017	47-54		No
36	Implementation of maintenance systems: investigation on efficacy of maintenance practices in Belgium.	Van Roy N.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	125-133		No
37	Advanced techniques for monitoring of settlement-induced deformations and crack growth in historical masonry.	Verstrynghe E.	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven	/	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	645-652		No



38	Historical structures for modern times, secured by respectful engineering support and restoration practice.	Verstrynghe E.	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven	/	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	1756-1763		No
39	Multi-scale approaches for the assessment of time-dependent mechanical damage in masonry.	Verstrynghe E.	Structural Analysis of Historical Constructions. Anamnesis, diagnosis, therapy, controls. Proceedings of the 10th International Conference SAHC, 13-15 September 2016, Leuven	/	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2016	54-64		no
40	Public private partnership and change management for built cultural heritage.	Boniotti C.	Reflections on Cultural Heritage Theories and Practice	3	CRC Press / Balkema of the Taylor&Francis Group	Leiden	2018	45-51		No



Other scientific publications (ordered by type and within type by importance)										
Number	Title	Main author	Type of publication	Target group	Publisher	Place of publication	Year of publication	number of (relevant) pages	Permanent identifiers [1]	Open access [2] publication (yes/no)
1	Heritage Conservation and Socio-Economic Development. In: Grosso, P. (2018) 2018 - European Year of Cultural Heritage. Cartaditalia. Vol II	Gustafsson C.	Chapter in book				2018	267-289	<a href="https://europa.eu/cultural-heritage/tools/cartaditalia-european-year-cultural-heritage-edition_en">https://europa.eu/cultural-heritage/tools/cartaditalia-european-year-cultural-heritage-edition_en</a>	Yes
2	Cultural Heritage and Innovation. 2nd European Congress. European Cities and their Heritage. Faces of History in European Cities. Berlin 8-9 December 2016.	Gustafsson C.	Chapter in book				2017			No
3	Lavori in corso per il piano di conservazione della Reggia di Monza.	Della Torre S.	Proceedings of the Conference Built Heritage Information Modelling/Management – BHIMM - Modellazione e gestione delle informazioni per il patrimonio edilizio esistente, 21-22 June 2016, Politecnico di Milano	/	Edizioni Imready	Galazzano	2017		<a href="https://www.ingenio-web.it/6999-lavori-in-corso-per-il-piano-di-conservazione-della-reggia-di-monza">https://www.ingenio-web.it/6999-lavori-in-corso-per-il-piano-di-conservazione-della-reggia-di-monza</a>	Yes



4	Trends in cultural heritage - a global overview.	Gustafsson C.	Report		Cultural Diplomacy Platform. Goethe Institute.		2016	20 pages		No
5	Kreativa Kraftfält i Fyrbodalen.	Gustafsson C.	Report in Swedish			Uddevalla	2016	75 pages		No
6	Kreativa Kraftfält i Göteborgsregionen.	Gustafsson C.	Report in Swedish			Västra Götalandsregionen. Göteborg	2016	74 pages		No
7	Museers betydelse för inkluderande, hållbar och innovations-driven utveckling.	Gustafsson C.	Report in Swedish		Riksutställningar		2016	35 pages		No
8	Kreativa Kraftfält i Fyrbodalen och Göteborgsregionen.	Gustafsson C.	Report in Swedish			Västra Götalandsregionen. Göteborg	2017	36 pages		No



#### 4.5.3 List of other scientific outputs.

TABLE 4.5.3 Other scientific output							
Type of output <i>(choose from list of options below)</i>	Brief description of type of output and focus/ topic	Date <i>(mm/yy)</i>	Authors/ developers <i>(organizations and, if relevant, persons)</i>	Country(ies involved)	(end)users/ target group	Open access <sup>[1]</sup> publication <i>(yes/no) *</i>	Issuing institute and/or code <i>(if applicable)</i>
New processes, new frameworks, new protocols for research, for conservation.	<b>Project deliverable WP2: Conceptualization of previous experiences.</b> The work package 2 was aimed at sharing and reflecting on three relevant experiences of built cultural heritage conservation and valorisation: the Monumentenwacht organisation in the Netherlands and the Flanders, the Halland Model in Sweden and the Distretti Culturali project in Italy.	12/17	- <b>Principal Investigator 1:</b> Prof. Stefano Della Torre, Politecnico di Milano, Department of Architecture, Built Environment and Construction Engineering. - <b>Principal Investigator 2:</b> Prof. Koen Van Balen, KU Leuven, Building Materials and Building Technology Division. - <b>Principal Investigator 3:</b> Prof. Silvia Naldini, Technische Universiteit Delft, Heritage & Design. - <b>Principal Investigator 4:</b> Prof. Christer Gustafsson, Uppsala University. - <b>Principal Investigator 5:</b> Engineer Dario Foppoli, Foppoli Moretta e Associati consulting engineers.	- Italy. - Belgium. - The Netherlands. - Sweden.	- Policy makers and influencers. - Cultural Heritage research community. - Civil Society.	<b>Yes:</b> <a href="http://www.changes-project.eu/wp-content/uploads/2016/01/WP2-CHANGES_Conceptualization-of-previous-experiences.pdf">http://www.changes-project.eu/wp-content/uploads/2016/01/WP2-CHANGES_Conceptualization-of-previous-experiences.pdf</a>	



<p>New processes, new frameworks, new protocols for research, for conservation.</p>	<p><b>Project deliverable WP3: Implementation of maintenance systems: investigation on efficacy of maintenance practices in Belgium.</b> Within the work package 3, KU Leuven collaborated with Monumentenwacht Flanders to study maintenance problems of historic buildings (listed and non-listed), to understand monitoring/reporting and types of past interventions, to evaluate them in terms of effectiveness, durability and costs and to identify the skills and knowledge involved in this process. An urban environment (Mechelen) and a rural area (South-East of Limburg) were analyzed in order to include the impact of the location context, urban or rural, in reference to the maintenance guidelines formulated in the reports and the types of interventions effectively carried out.</p>	<p>12/17</p>	<p>- <b>Principal Investigator 2:</b> Prof. Koen Van Balen, KU Leuven, Building Materials and Building Technology Division. - <b>Associate partner:</b> Monumentenwacht Flanders.</p>	<p>- Belgium.</p>	<p>- Policy makers and influencers. - Cultural Heritage research community. - Civil Society.</p>	<p><b>Yes:</b> <a href="http://www.changes-project.eu/wp-content/uploads/2016/01/WP3-CHANGES_investigation-on-efficacy-of-maintenance-practices-in-Belgium.pdf">http://www.changes-project.eu/wp-content/uploads/2016/01/WP3-CHANGES_investigation-on-efficacy-of-maintenance-practices-in-Belgium.pdf</a></p>	
<p>New processes, new frameworks, new protocols for research, for conservation.</p>	<p><b>Project deliverable WP4: Implementation of maintenance systems: investigation on efficacy of maintenance practices in The Netherlands.</b> The work package 4 was developed by TU Delft in cooperation with Monumentenwacht Noord-Brabant in a specific Dutch context. The topic investigated was related to the effectiveness of conservation interventions carried out in sixteen selected case studies in two different regions. The assessment of the theory and the modus operandi of Monumentenwacht led to some hypotheses on its value and role within the Dutch Heritage Conservation system/philosophy (as expressed by the RCE, Cultural Heritage Agency of the Netherlands).</p>	<p>12/17</p>	<p>- <b>Principal Investigator 3:</b> Prof. Silvia Naldini, Technische Universiteit Delft, Heritage &amp; Design. - <b>Associate partner:</b> Monumentenwacht Noord-Brabant.</p>	<p>- The Netherlands.</p>	<p>- Policy makers and influencers. - Cultural Heritage research community. - Civil Society.</p>	<p><b>Yes:</b> <a href="http://www.changes-project.eu/wp-content/uploads/2016/01/WP4-CHANGES_investigation-on-efficacy-of-maintenance-practices-in-The-Netherlands.pdf">http://www.changes-project.eu/wp-content/uploads/2016/01/WP4-CHANGES_investigation-on-efficacy-of-maintenance-practices-in-The-Netherlands.pdf</a></p>	



<p>New processes, new frameworks, new protocols for research, for conservation.</p>	<p><b>Project deliverable WP5: Implementation of maintenance systems: investigation on efficacy of maintenance practices in Italy.</b> Thanks to associate partners, the Politecnico di Milano and the Foppoli Moretta e Associati consulting engineers implemented research on the Royal Villa in Monza, where a huge conservation and valorisation project is ongoing, and on other case studies that are part of the Cultural District project, a wide area program co-financed by Cariplo Foundation mixing heritage and creativity for a local development strategy. Activities developed within the work package 5 were directed to study the condition assessment of the buildings, define maintenance works, evaluate their costs and meet local stakeholders, making them aware of benefits.</p>	<p>12/17</p>	<ul style="list-style-type: none"> <li>- <b>Principal Investigator 1:</b> Prof. Stefano Della Torre, Politecnico di Milano, Department of Architecture, Built Environment and Construction Engineering.</li> <li>- <b>Principal Investigator 5:</b> Engineer Dario Foppoli, Foppoli Moretta e Associati consulting engineers.</li> <li>- <b>Associate partner:</b> Consortium Royal Villa and Park of Monza.</li> <li>- <b>Associate partner:</b> Navarra Gestioni (Na.Gest).</li> <li>- <b>Associate partner:</b> Assimpredil ANCE.</li> </ul>	<ul style="list-style-type: none"> <li>- Italy.</li> </ul>	<ul style="list-style-type: none"> <li>- Policy makers and influencers.</li> <li>- Cultural Heritage research community.</li> <li>- Civil Society.</li> </ul>	<p><b>Yes:</b> <a href="http://www.changes-project.eu/wp-content/uploads/2016/01/WP5-CHANGES_Investigation-on-efficacy-of-maintenance-practices-in-Italy.pdf">http://www.changes-project.eu/wp-content/uploads/2016/01/WP5-CHANGES_Investigation-on-efficacy-of-maintenance-practices-in-Italy.pdf</a></p>	
<p>New processes, new frameworks, new protocols for research, for conservation.</p>	<p><b>Project deliverable WP6: Economic analysis of costs and benefits of preventive conservation practices (monitoring and maintenance systems).</b> Data gathered in the work packages 3, 4 and 5, related to maintenance and monitoring activities executed upon built cultural heritage, provided the basis for a cost-benefit analysis. The comparison between the management approaches adopted by the different partners allowed to go beyond the popular conviction that maintenance is less expensive than cure and to understand which are the conditions which affect the decision making. The objective was to overcome qualitative models, introducing evaluation methods closer to reality.</p>	<p>05/18</p>	<ul style="list-style-type: none"> <li>- <b>Principal Investigator 1:</b> Prof. Stefano Della Torre, Politecnico di Milano, Department of Architecture, Built Environment and Construction Engineering.</li> <li>- <b>Principal Investigator 2:</b> Prof. Koen Van Balen, KU Leuven, Building Materials and Building Technology Division.</li> <li>- <b>Principal Investigator 3:</b> Prof. Silvia Naldini, Technische Universiteit Delft, Heritage &amp; Design.</li> <li>- <b>Principal Investigator 4:</b> Prof. Christer Gustafsson, Uppsala University.</li> <li>- <b>Principal Investigator 5:</b> Engineer Dario Foppoli, Foppoli Moretta e Associati consulting engineers.</li> </ul>	<ul style="list-style-type: none"> <li>- Italy.</li> <li>- Belgium.</li> <li>- The Netherlands.</li> <li>- Sweden.</li> </ul>	<ul style="list-style-type: none"> <li>- Policy makers and influencers.</li> <li>- Cultural Heritage research community.</li> <li>- Civil Society.</li> </ul>	<p><b>Yes:</b> <a href="http://www.changes-project.eu/wp-content/uploads/2016/01/WP6-CHANGES_Economic-analysis-of-costs-and-benefits-of-preventive-conservation-practices.pdf">http://www.changes-project.eu/wp-content/uploads/2016/01/WP6-CHANGES_Economic-analysis-of-costs-and-benefits-of-preventive-conservation-practices.pdf</a></p>	



<p>New processes, new frameworks, new protocols for research, for conservation.</p>	<p><b>Project deliverable WP7: Analysis of economic and societal impacts and externalities of valorisation strategies including conservation activities.</b> Since CHANGES team has a very deep experience in conservation projects developed in the different countries of the participants (Belgium, Italy, Sweden and the Netherlands), and each experience has its strong and opportunity outcomes as well as some barriers, the work package 7 sought to understand the regional development impact of these projects and how conservation policies play an important role in such development.</p>	<p>12/17</p>	<p>- <b>Principal Investigator 1:</b> Prof. Stefano Della Torre, Politecnico di Milano, Department of Architecture, Built Environment and Construction Engineering. - <b>Principal Investigator 2:</b> Prof. Koen Van Balen, KU Leuven, Building Materials and Building Technology Division. - <b>Principal Investigator 3:</b> Prof. Silvia Naldini, Technische Universiteit Delft, Heritage &amp; Design. - <b>Principal Investigator 4:</b> Prof. Christer Gustafsson, Uppsala University. - <b>Principal Investigator 5:</b> Engineer Dario Foppoli, Foppoli Moretta e Associati consulting engineers.</p>	<p>- Italy. - Belgium. - The Netherlands. - Sweden.</p>	<p>- Policy makers and influencers. - Cultural Heritage research community. - Civil Society.</p>	<p><b>Yes:</b> <a href="http://www.changes-project.eu/wp-content/uploads/2016/01/WP7-CHANGES_Analysis-of-economic-and-societal-impacts-and-externalities-of-valorisation-strategies.pdf">http://www.changes-project.eu/wp-content/uploads/2016/01/WP7-CHANGES_Analysis-of-economic-and-societal-impacts-and-externalities-of-valorisation-strategies.pdf</a></p>	
<p>New coordination mechanisms. Decision support tools.</p>	<p><b>Project deliverable: Conclusions.</b> CHANGES project explored actual results and stakeholders' attitude toward conservation pursued through different models in different countries. CHANGES outcomes end up in providing policy makers and influencers with simple rules for more effective funding policies.</p>	<p>05/18</p>	<p>- <b>Principal Investigator 1:</b> Prof. Stefano Della Torre, Politecnico di Milano, Department of Architecture, Built Environment and Construction Engineering. - <b>Principal Investigator 2:</b> Prof. Koen Van Balen, KU Leuven, Building Materials and Building Technology Division. - <b>Principal Investigator 3:</b> Prof. Silvia Naldini, Technische Universiteit Delft, Heritage &amp; Design. - <b>Principal Investigator 4:</b> Prof. Christer Gustafsson, Uppsala University. - <b>Principal Investigator 5:</b> Engineer Dario Foppoli, Foppoli Moretta e Associati consulting engineers.</p>	<p>- Italy. - Belgium. - The Netherlands. - Sweden.</p>	<p>- Policy makers and influencers. - Cultural Heritage research community. - Civil Society.</p>	<p><b>Yes:</b> <a href="http://www.changes-project.eu/wp-content/uploads/2016/01/CHANGES_Conclusions.pdf">http://www.changes-project.eu/wp-content/uploads/2016/01/CHANGES_Conclusions.pdf</a></p>	



#### 4.5.4 Dissemination and knowledge transfer.

TABLE 4.5.4: Dissemination and knowledge transfer activities and tools

Type <i>(choose from list of options below)</i>	Brief description of <b>medium and topic</b>	Brief description of <b>overall impact/benefit</b>	<b>Stakeholders and audience</b> (direct stakeholders, private sector, public sector, the general public etc)	Estimation of <b>number of persons</b> reached
Websites	<b>Project website</b> <a href="http://www.changes-project.eu/">http://www.changes-project.eu/</a>	- Dissemination of project themes, means, goals and results.	General public	Period: January 2016 - May 2018 Page Views: 71,669 Visits: 34,246
Websites	<b>Presentations from general meetings</b> <a href="http://www.changes-project.eu/index.php/all-news-2/">http://www.changes-project.eu/index.php/all-news-2/</a>	- Knowledge sharing.	General public	Period: January 2016 - May 2018 Page Views: 71,669 Visits: 34,246
Websites	<b>Deliverables:</b> <b>The main project activities and results were reported in different reports, uploaded on the project website.</b> <a href="http://www.changes-project.eu/index.php/deliverables/">http://www.changes-project.eu/index.php/deliverables/</a>	- Knowledge sharing. - Dissemination of the project and best practices.	General public	Period: January 2016 - May 2018 Page Views: 71,669 Visits: 34,246
Appearance in printed media	<b>Press review</b> <a href="http://www.changes-project.eu/index.php/all-news-2/">http://www.changes-project.eu/index.php/all-news-2/</a>	- Dissemination of the project and best practices.	General public	Period: January 2016 - May 2018 Page Views: 71,669 Visits: 34,246



Live presentations	26 May 2016, Monza (IT): <b>International Conference "Cultural heritage management: conservation and valorisation in an integrated perspective"</b> .	<ul style="list-style-type: none"> <li>- Dialogue between different directors and managers of built cultural heritage.</li> <li>- Sharing of experiences.</li> <li>- Creation of new collaboration at a international level (e.g. strengthen the network between the European Royal Residences).</li> </ul>	General public, direct stakeholders, private sectors, public sector	More than 130
Live presentations	13-15 September 2016, Leuven (B): <b>International Conference "Structural Analysis of Historical Constructions SACH 2016"</b> .	<ul style="list-style-type: none"> <li>- Exchange of knowledge.</li> <li>- Creation of collaborations between researchers, that are studying built cultural heritage, coming from different universities.</li> </ul>	General public, direct stakeholders, private sectors, public sector	More than 200 (excluding readers of conference proceedings)
Live presentations	6-8 February 2017, Leuven (B) <b>Public Conference "Thematic Week: innovative built heritage models and preventive systems"</b> .	<ul style="list-style-type: none"> <li>- Exchange of knowledge.</li> <li>- Creation of collaborations between researchers, that are studying built cultural heritage, coming from different universities.</li> </ul>	General public, direct stakeholders, public sector, private sector	More than 30 (excluding readers of conference proceedings)
Live presentations	29 November – 1 December 2017, Versailles (F) <b>International Conference "Preventive Conservation in Historic Houses and Palace-Museums: Assessment Methodologies and Applications"</b> .	<ul style="list-style-type: none"> <li>- Dissemination of the project and best practices.</li> <li>- Exchange of knowledge.</li> </ul>	General public, private sector, public sector.	More than 20 (excluding readers of conference proceedings)
Live presentations	5-8 February 2018, Leuven (B) <b>Public Conference "Thematic Week: Professionalism in the Built Heritage Sector"</b> .	<ul style="list-style-type: none"> <li>- Exchange of knowledge.</li> <li>- Creation of collaborations between researchers, that are studying built cultural heritage, coming from different universities.</li> </ul>	General public, direct stakeholders, public sector, private sector	More than 30 (excluding readers of conference proceedings)



## 5. FINANCIAL SUMMARY

### 5.1 Total of funds received

TABLE 5.1: Total of funds received during full project duration						
Date of grant (tranche)	Partner*	Funding agency + country	Reporting period 1 Amount (€)** 1 May 2015 - 31 December 2015	Reporting period 2 Amount (€)** 1 January 2016 - 31 December 2016	Reporting period 3 Amount (€)** 1 January 2017 - 31 December 2017	Total of funds received (€)**
20/11/2017	Project leader: Politecnico di Milano	MIUR/MIBACT (Italy)	€ -	€ -	€ 199.498,00	€ 199.498,00
	Partner 2: University of Leuven (KUL)	BELSPO (Belgium)	€ -	€ 67.668,18	€ 30.666,10	€ 98.334,28
01/08/2015; 31/12/2016	Partner 3: Technische Universiteit Delft (TUD)	NWO (The Netherlands)	€ -	€ 131.210,00	€ -	€ 131.210,00
2015; 29/04/2016; 30/08/2016; 13/12/2016; 2017	Partner 4: Uppsala University (UU)	RAA (Sweden)	€ 50.000,00	€ 49.108,13	€ 47.602,96	€ 146.711,09
	Partner 5: Foppoli Moretta e Associati consult	MIUR/MIBACT (Italy)	€ -	€ -	€ -	€ -
	Etc / other		€ -	€ -	€ -	€ -
<b>Total of funds received by project during reporting periods</b>			<b>€ 50.000,00</b>	<b>€ 247.986,31</b>	<b>€ 277.767,06</b>	<b>€ 575.753,37</b>

## 5.2 Summary expenditure statement

<b>TABLE 5.2: Total expenditure of received grants during full project duration 1 May 2015 - 31 December 2017</b>	
<b>Item description</b>	<b>Amount (€)</b>
<b>Project Employment costs</b>	<b>€ 618.628,32</b>
Projectleader	€ 216.811,94
Partner 2	€ 82.819,58
Partner 3	€ 216.684,32
Partner 4	€ 83.140,40
Partner 5	€ 19.172,08
etc / other	€
<b>Project Equipment costs</b>	<b>€ 4.587,50</b>
Projectleader	€ -
Partner 2	€ -
Partner 3	€ -
Partner 4	€ -
Partner 5	€ 4.587,50
etc / other	€
<b>Project publications costs</b>	<b>€ 7.065,00</b>
Projectleader	€ -
Partner 2	€ 7.000,00
Partner 3	€ 65,00
Partner 4	€ -
Partner 5	€ -
etc / other	€
<b>Project Travelling costs</b>	<b>€ 28.773,39</b>
Projectleader	€ -
Partner 2	€ 3.832,02
Partner 3	€ 8.290,42
Partner 4	€ 16.650,95
Partner 5	€ -
etc / other	€
<b>Project Other costs</b>	<b>€ 108.161,50</b>
Projectleader	€ 15.000,00
Partner 2	€ -
Partner 3	€ 1.021,10
Partner 4	€ -
Partner 5	€ 92.140,40
etc / other	€
<b>Project Overheads Financial, Scientific, Admi</b>	<b>€ 122.889,20</b>
Projectleader	€ 61.791,41
Partner 2	€ 4.682,68
Partner 3	€ -
Partner 4	€ 46.924,18
Partner 5	€ 9.490,93
etc / other	€
<b>TOTAL EXPENDITURE</b>	<b>€ 890.104,91</b>
<b>Total expenditure Projectleader</b>	<b>€ 293.603,35</b>
<b>Total expenditure Partner 2</b>	<b>€ 98.334,28</b>
<b>Total expenditure Partner 3</b>	<b>€ 226.060,84</b>
<b>Total expenditure Partner 4</b>	<b>€ 146.715,53</b>
<b>Total expenditure Partner 5</b>	<b>€ 125.390,91</b>