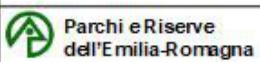


**ENTE DI GESTIONE PER I PARCHI E LA BIODIVERSITÀ -
ROMAGNA -**

Sede Legale: Via A. Moro, 2 - 48025 RIOLO TERME (RA)



Parco regionale della
**Vena del Gesso
Romagnola**



Parchi e Riserve
dell'Emilia-Romagna



Riserva Naturale Bosco
della Frattona



Riserva Naturale Onferno



Riserva Naturale Bosco
di Scardavilla

Capitolato Tecnico

**GARA A PROCEDURA APERTA PER L'AFFIDAMENTO DEL SERVIZIO DI
GESTIONE TECNICA E COORDINAMENTO DELLE ATTIVITÀ DEL
PROGETTO LIFE16 NAT/IT/000245 “LIFE 4 OAK FORESTS”**

CIG 7104848



1 PREMESSA

Le informazioni contenute nel presente documento costituiscono la base per la formulazione di un'offerta tecnico-economica per l'erogazione dei servizi di gestione tecnica e coordinamento delle attività del progetto LIFE16 NAT/IT/000245 "LIFE 4 OAK FORESTS", articolate come segue:

- Coordinamento tecnico di tutte le fasi e le azioni del progetto
- Gestione degli aspetti procedurali, amministrativi e tecnici del progetto
- Attuazione per conto dell'Ente di ogni aspetto relativa all'azione A.1. *Elaboration of the ecological nature conservation oak forest management guideline based on the reference information on natural oak forest composition and structure*
- Attuazione per conto dell'Ente di ogni aspetto relativa all'azione A.3. *Procurement of equipments, tendering and inquiring permissions*
- Attuazione per conto dell'Ente di ogni aspetto relativa all'azione B.1 *Purchase of land*
 - Attuazione per conto dell'Ente di ogni aspetto relativo all'azione C.1 *Nature conservation forests magement of the protected project areas managed by national parks according to the elaborated guideline*
- Attuazione per conto dell'Ente di ogni aspetto relativa all'azione C.2. *Collecting and storing seeds of herbaceous species characterizing each habitat in seed bank in Italy*
- Attuazione per conto dell'Ente di ogni aspetto relativa all'azione C.3. *Realization of ecotonal hedges (buffer strips) around the purchased forests in Italy*
- Attuazione per conto dell'Ente di ogni aspetto relativa all'azione E.1. *Awareness-raising for stakeholders*
- Attuazione per conto dell'Ente di ogni aspetto relativa all'azione E.2. *Awareness-raising for general public*
- Attuazione per conto dell'Ente di ogni aspetto relativa all'azione F.2. *Preparation of Project Handbook and training of project staff*

L'aggiudicatario deve svolgere il servizio presso la sede dell'Ente o nel territorio del Parco regionale della Vena del Gesso Romagnola, utilizzando i locali, le strumentazioni e i mezzi di proprietà o in disponibilità dell'Ente stesso.

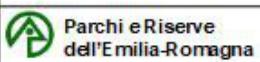
L'aggiudicatario deve prestare servizio per mesi 105 a partire dalla data di sottoscrizione del contratto, svolgendo un numero di 32 ore settimanali.

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I dettagli delle azioni A.1, A.3, B.1, C.1, C.2, C.3, E.1, E.2, F.2, nonché di tutte le azioni del progetto sono riportati in allegato al presente capitolo, all'interno del formulario completo del progetto LIFE16 NAT/IT/000245 “LIFE 4 OAK FORESTS”.

Quando non diversamente specificato, con “Capitolato” si intende il presente documento, con “Gara” si intende la Gara da effettuare a fronte del Capitolato, con “Contratto” si intende il Contratto che verrà sottoscritto a seguito dell’aggiudicazione della gara, con “fornitura” si intende il complesso delle attività e dei prodotti che il Fornitore è chiamato a compiere e a produrre per onorare il Contratto.

Nei successivi capitoli sarà descritto il contesto organizzativo, normativo e tecnico, l’oggetto, la descrizione e le caratteristiche della fornitura con il dettaglio dei servizi richiesti e i relativi livelli di servizio che il Fornitore aggiudicatario sarà tenuto a garantire.



2 CONTESTO

2.1 FUNZIONI

L'Ente è stato istituito con legge regionale 23 dicembre 2011, n. 24 e svolge le seguenti funzioni sul territorio delle Province di Rimini, Forlì-Cesena, Ravenna (Unione della Romagna Faentina), Bologna (Nuovo Circondario Imolese):

- a) la gestione dei Parchi, ivi compresi i Siti della Rete natura 2000 situati all'interno del loro perimetro;
- b) la gestione delle Riserve naturali regionali;
- c) la gestione dei Siti della Rete natura 2000 nelle aree esterne al perimetro dei parchi;
- d) l'istituzione dei Paesaggi naturali e seminaturali protetti e la relativa gestione, previa proposta della Provincia territorialmente interessata;
- e) l'istituzione e il coordinamento della gestione delle Aree di riequilibrio ecologico;
- f) l'adozione del Programma di tutela e valorizzazione della Macroarea;
- g) la valutazione di incidenza dei piani di competenza comunale nonché dei progetti e interventi approvati dalla Provincia e dal Comune e che interessano il territorio della Macroarea, fermo restando quanto previsto dall'articolo 6 della legge regionale 14 aprile 2004, n. 7 (Disposizioni in materia ambientale. Modifiche ed integrazioni a leggi regionali);
- h) il coordinamento e la gestione delle attività di educazione alla sostenibilità in materia di biodiversità e conservazione della natura, in coerenza con la legge regionale 29 dicembre 2009, n. 27 (Promozione, organizzazione e sviluppo delle attività di informazione e di educazione alla sostenibilità);
- i) l'esercizio delle funzioni amministrative in materia di fauna minore ai sensi della legge regionale 31 luglio 2006, n. 15 (Disposizioni per la tutela della fauna minore in Emilia-Romagna);
- j) l'accordo con gli Enti gestori delle Riserve naturali statali incluse nel territorio della Macroarea per le misure di pianificazione e gestione;
- k) lo sviluppo di forme di coordinamento e collaborazione con gli Enti parco nazionale e interregionali contermini;
- l) lo sviluppo di forme di coordinamento e collaborazione con le autorità competenti, per il monitoraggio e la tutela dell'ambiente marino, fino a 10 km dalla costa, limitrofo alle aree protette.

2.2 CONTESTO ORGANIZZATIVO

L'Ente è così strutturato.

Personale dipendente (in distacco dalla Regione Emilia-Romagna):

Direttore Tecnico, Responsabile Amministrativo e Contabile, dott. Massimiliano Costa, biologo

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Funzionario Tecnico, dott. Gabriele Cassani, forestale

Funzionario Tecnico, dott. Oscar Zani, geologo

Istruttore Direttivo Tecnico, dott. Fiorenzo Rossetti, biologo

Servizi disponibili in base a convenzione con l'Unione della Romagna Faentina e il Comune di Riolo Terme:

Servizio Tecnico per il rilascio delle autorizzazioni (nulla-osta e valutazioni di incidenza)

Servizio Amministrativo per la gestione del protocollo in entrata e la numerazione degli atti

Servizio Ragioneria per tutti gli aspetti finanziari e contabili

Servizio Informatica per l'assistenza informatica

Servizio Personale per la consulenza in materia di gestione del personale

Servizi disponibili in base a contratti di prestazioni di servizi:

Servizio di gestione del centro visite Ca' Carnè e di manutenzione delle strutture pubbliche del Parco della Vena del Gesso Romagnola.

2.3 CONTESTO NORMATIVO

Oltre alla citata L.R. n. 24/2011, costituiscono riferimenti normativi per l'attività dell'Ente:

Legge regionale n. 2/1977

Legge regionale n. 7/2004

Legge regionale n. 6/2005

Legge regionale n. 10/2005

Legge regionale n. 15/2006

Legge regionale n. 4/2007

Legge regionale n. 27/2009

Legge regionale n. 14/2016



3 DESCRIZIONE DELLA FORNITURA

3.1 AMBITO DI INTERVENTO

L'ambito di intervento del progetto riguarda il sito IT4070011 Vena del Gesso Romagnola e, in particolare, le aree occupate dall'habitat 91AA* e dall'habitat 6210*.

Habitat 91AA* Boschi orientali di quercia bianca

Boschi submediterranei adriatici (area del *Carpinion orientalis*) a dominanza di *Quercus pubescens* e *Fraxinus ornus*, indifferenti edafici, termofili e spesso in posizione edafo-xerofila tipici della penisola italiana, ma con affinità con quelli balcanici, con distribuzione prevalente nelle aree preappenniniche. All'alleanza *Cytiso sessilifolii-Quercenion pubescentis*, che raggruppa i boschi termofili di roverella delle aree appenniniche interne intramontane dell'Appennino centrale, fanno capo le associazioni *Peucedano cervariae-Quercetum pubescentis* Ubaldi 1988 ex Ubaldi 1995, *Cytiso-Quercetum pubescentis* Blasi et al. 1982, *Stellario holostae-Quercetum pubescentis* Biondi e Vagge 2004, *Knautio purpureae-Quercetum pubescentis* Ubaldi, Zanotti & Puppi 1993.

Habitat 6210* Formazioni erbose secche seminaturali e facies coperte da cespugli su substrato calcareo (Festuco-Brometalia) con stupenda fioritura di orchidee

Praterie polispecifiche perenni a dominanza di graminacee emicriptofitiche, generalmente secondarie, da aride a semimesofile, diffuse prevalentemente nel settore Appenninico, dei piani bioclimatici Submeso-, Meso-, Supra-Temperato, riferibili alla classe Festuco-Brometea, talora interessate da una ricca presenza di specie di *Orchidaceae* ed in tal caso considerate prioritarie (*). Per quanto riguarda l'Italia appenninica, si tratta di comunità endemiche, da xerofile a semimesofile, prevalentemente emicriptofitiche, ma con una possibile componente camefitica, sviluppate su substrati di varia natura. L'Habitat 6210 per il territorio italiano viene prevalentemente riferito all'ordine Brometalia erecti Br.-Bl. 1936. I brometi appenninici presentano una complessa articolazione sintassonomica, recentemente oggetto di revisione (Biondi et al., 2005), di seguito riportata. Le praterie appenniniche dei substrati calcarei, dei piani Submesomediterraneo, Meso- e Supra-Temperato, vengono riferite all'alleanza endemica appenninica *Phleo ambigui-Bromion erecti* Biondi & Blasi ex Biondi et al. 1995, distribuita lungo la catena Appenninica e distinguibile in 3 suballeanze principali: *Phleo ambigui-Bromenion erecti* Biondi et al. 2005 con *optimum* nei piani Submesomediterraneo e Mesotemperato, *Brachypodenion genuensis* Biondi et al. 1995 con *optimum* nel Piano Supratemperato e *Sideridenion italicae* Biondi et al. 1995 corr. Biondi et al. 2005 con *optimum* nel Piano Subsupramediterraneo. Le praterie appenniniche da mesofile a xerofile dei substrati non calcarei (prevalentemente marnosi, argillosi o arenacei), con *optimum* nei Piani Mesotemperato e Submesomediterraneo (ma presenti anche nel P. Supratemperato), vengono invece riferite alla suballeanza endemica appenninica *Polygalo mediterraneae-Bromenion erecti* Biondi et al. 2005 (alleanza *Bromion erecti* Koch 1926).



3.2 OGGETTO DELLA FORNITURA

I servizi richiesti, nello specifico, consistono nelle seguenti linee di attività:

3.2.1 Coordinamento tecnico di tutte le fasi e le azioni del progetto

Vedi progetto, allegato 1).

3.2.2 Gestione degli aspetti procedurali, amministrativi e tecnici del progetto

Vedi progetto, allegato 1).

3.2.3 Attuazione per conto dell'Ente di ogni aspetto relativa all'azione A.1. *Elaboration of the ecological nature conservation oak forest management guideline based on the reference information on natural oak forest composition and structure*

The elaboration of the oak forest management guideline first of all serves the project participants in the nature conservation management of the characteristic oak forests. Its aim is that the oak forests' nature conservation management is based on the natural forests' characteristic and a uniform approach and implement a uniform interpretation of treatment interventions. Beside the uniform treatment approach a specific treatment approach for the different oak forests will be developed. However, hardly any oak dominated forest sites can be found in Europe, where the past and present human intervention was/is missing or is minimal. Only scattered information is available on their location and on their composition, structure and dynamics. To understand the natural composition and structure of the selected oak forest habitats, a comprehensive review and data analysis regarding these information is indispensable. Two beneficiaries are responsible about these works MTA OK (A1.2) and WWF (A1.3). During this survey work a lots of work must be done within a short period since the results of these surveys will provide the background for the management guidelines and lack of capacity. The ecological oak forests' nature conservation management guideline will be elaborated by five sub-actions:

Sub-action: A1.1: Establishing natural oak forest references by collecting and examining scientific papers (01.10.2017-30.09.2018)

Collection and review of scientific literature concerning European old-growth and virgin oak forest remnant sites will be accomplished. These data should be amended by data of other temperate deciduous forests, mainly with data from the eastern USA. (Although that forest zone is compositionally much more diverse than the European, from several aspects it can be considered as its analogy. Many more virgin and old-growth forest sites can be found in North-America, than in Europe, offering relevant sources of information for the natural oak forest reference.) The review and data analysis would cover approximately 150 scientific papers and 20 comprehensive works (books, book chapters). First version of the reference of natural oak forest structure and composition will be set on the basis of the literature review and data analysis. The collected information will be analysed and summarized firstly for the four oak forest habitats of the project. Data relevant for the conservation management actions (C.1.) will also be synthetized (amount and quality of dead wood, number and species of tree individuals, diameter and height distributions, cover and species of shrubs, number of old and large tree individuals, number and size of canopy gaps, etc.).

Sub-action: A1.2: Collect and analyse the scientific data on the natural remnants of oak dominated forests of Europe (01.10.2018-31.03.2021)



The second method to define the reference of natural oak forest structure and composition is the site visit, survey and analyses of the few natural remnants of oak dominated forests of East- South- and Central-Europe (Slovakia, Romania, Ukraine, Czech Republic, Poland, etc.). During the field visits the most relevant 8 stands are going to be selected. These virgin and old-growth stands, as reference sites are going to be surveyed and their data analysed according to the monitoring protocol of the forest stand module (A2) approximately on 10- 20 hectare in each stand. The same monitoring protocol will be used in D1 action to monitor the efficiency of C1 action. Data gathered this way will contribute to the reference defined for the natural composition and structure of oak forests on the basis of the literature review. Collection and outline of the important information for the nature conservation and the planned conservation management action (C1) of the four Natura2000 oak forests will be in the focus of the field trips, the forest survey and data analysis of the selected 8 reference sites.

Sub-action: A1.3: Sub-action A1.3: Surveying the old-growth oak forests of Hungary and in Italy (01.10.2017- 31.03.2019)

Survey of remaining old-growth forest stands in Hungary and Italy (at least, the older growth that is possible to find, in western Sicily) will also be carried out, to get data on their current state and management history, which can be used in other actions of the project. With this sub-action we can get more complex picture on the natural characteristics of the region's oak forests, e.g. average number of tree species, their age structure, horizontal pattern, volume and distribution of dead wood, etc. which serves as a starting point in elaborating ecosystem based forest conservation management guideline (A1.3) & handbook (E1.3)

Sub-action: A1.4: Examination of the nature conservation treatments carried out until now in Hungary and in Italy (01.10.2017-30.09.2018)

There are some protected forests which were allocated for nature conservation in the past and were managed accordingly. All activities were recorded in the management plans. Collecting and studying the old documents we may recognise some management techniques which had been forgotten. Comparing the used methods with the current conditions of these forests we may understand the efficiency of the different methods used. We will collect and study all available documents and we will evaluate them in comparison with the forests in question. As a result of these studies it will be decided which method should be incorporated into the future management techniques (C1).

Sub-action: A1.5: Elaboration of the forest management guideline (version “0”: 01.09.2017. - 31.11.2017; version 1: 01.10.2018-31.03.2019; up to date version 2: 01.04.2021-30.06.2021;)

The guideline will include:

1. Concept of nature conservation forest management
2. Professional background of the nature conservation forest management
3. Legal background of the nature conservation forest management
4. Description and illustration of tree species composition and forest structure references based on the findings of A1.1 and A 1.2 actions. Lists of characteristic flora and fauna of the priority oak habitats.
5. The method and technology for the creation of known habitats, providing quantitative and qualitative parameters for the nature conservation treatments. The 0 version will be drafted at the begining of the project. The fist version will be based on A1.1 action and will be updated by A1.2 action. Each version will be parts of the Project Handbook as soon as ready. It will be finalised taking into account the results of C1 action justified by D1. and will be published in a book in four languages (E1.3).



3.2.4 Attuazione per conto dell'Ente di ogni aspetto relative all'azione A.3. *Procurement of equipments, tendering and inquiring permissions*

GPP will be applied. Cost-effective subcontractors and suppliers will be selected according to the national and EU regulations and in compliance with the outlined project budget and technical parameters.

Procurement of services and equipment will be done through tendering according to the official procurement regulations. In the procurement process we will create packages of items for procurement in packages.

The costs of the tender process are accounted for in this action. All the Hungarian national parks beneficiaries were involved and are involved in different LIFE Nature project. The costs of legal advisor for public procurement were calculated according to the market price taken from the real costs paid by the former projects.

Some activities need permission from the forestry authorities. The work and costs related to this permission is also accounted for in this action. There is a Forest Management plan for every forest stand prepared by the Forest Management Service. If we want make any changes for example replacing the invasive black locust what was not planned than we have to ask a forest use permit what cost some money. We have to ask this permission in case of every forest stand where any modification is needed.

We consider direct treaties to select suppliers by three quotations up to the national limit in line with internal rules.

3.2.5 Attuazione per conto dell'Ente di ogni aspetto relative all'azione B.1 *Purchase of land*

40 ha land need to be purchased in IT4070011 SCI. Details of lands needs to be purchased is given below:

Name of the area	Size of the area (ha)	Planned to purchase (ha)
Località Gesso	17.95	2.00
Monte Penzola	44.47	3.00
Riva di San Biagio	102.64	15.00
Monte Mauro	275.06	20.00

Conditions for land (forest) purchase:

1. The land will be EU priority forest habitat.
2. These areas are within a Natura 2000 site.
3. The area will be restored as protected natural forest.
4. In Italy these forest areas are privately owned.
5. The land (forest) purchased will be reserved long-term for uses consistent with the implementation of the EU Birds and Habitats Directives. The sales contract will include a guarantee that the land is assigned definitively (without time limitation) to nature conservation purposes consistent with the objectives of the EU Birds and Habitats Directives.
6. In Italy the land will be purchased by MAR the project coordinating beneficiary which is a public body with nature conservation tasks.
7. MAR has the necessary competence and experience in land purchase for nature conservation purposes, since it has purchased already some tens hectares, and the planned target is realistic within the time framework of the project.



8. In Italy there is an official document called VAM Valori Agricoli Medi, meaning Medium Agricultural Land Value, that is approved every year by the Province/Region. Italian IT4070011 is in the Region Emilia-Romagna, Province of Ravenna, Regione Agraria (Agrarian sector) n. 1 (Municipalities on the hills). The land to purchase is in general classified as Bosco ceduo governato (Managed coppice forest), even if they are not really well managed and the value per hectare is 4,620.00 €. The surveyor has to make the final evaluation of the land value, to submit at national level at the Agenzia del Demanio (State Property Agency), as provided by the Law n. 228/2012.

3.2.6 Attuazione per conto dell'Ente di ogni aspetto relative all'azione C.1. *Nature conservation forest management of the protected project areas managed by national parks according to the elaborated guideline*

This is the main and most important part of the project which is covering all the 2066 ha. The national parks managed nature conservation oak forests will be restored by the following sub-actions which sometimes overlapping:

C1.1: Reconstruction of the natural forest structure of the project areas

C1.2: Reduction of game impact in the project areas

C1.3: Suppression of invasive species present in the project area

C1.4: Producing and replanting seedlings of the species characterizing the priority habitats

C1.5: Ex-situ breeding of some saproxilic insects using the Eremita LIFE project's results

C1.1: Reconstruction of the natural forest structure of the project areas (01.11.2018 - 30.06.2025)

The biodiversity of the nature conservation oak forest of the project areas is poor due to the centuries long commercial forest management. The structure of these forests will be restored on 2066 ha. The work will be done according to the nature conservation oak forest management guideline developed under action A1.5. The following treatments will be considered, (Details in Annex A1.1a) however their priority, timing, localisation & intensity will be specified by the management guideline, based on the findings of sub-actions A1.1 & A1.2.

1. Maintenance & replanting of native species;
2. Maintenance of small groups of pioneer species & securing their regeneration;
3. Maintenance & replanting of native bush species;
4. Habitat specific & general herbaceous species;
5. Removing alien bush species;
6. Removing alien tree species;
7. Diversification of the age & size of the trees;
8. Creating a variety of canopy closure within the forest where closed and less closed parts are mixed up;
9. Maintaining or creating smaller or bigger (some hundred m²) size sunny glades;
10. Rehabilitation and maintenance of larger glades, control of invasive species;
11. Reconstruction and maintenance of natural interior or exterior forest edges;
12. Sparing & creating aggregated dead trees (tree stamp, broken crown, felt and standing dead trees), and partly dead trees;
13. Securing the spread of different kind of dead trees in the forests;
14. Creating and maintaining dead parts of leaving trees and slowly dying trees;



15. Creating & maintaining large dead tree in water;
16. Maintenance of very large and old trees;
17. Maintaining dying old and large forests;
18. Ensuring the vertical diversity and vertical density of the forests;
19. Restoring & maintaining wetlands springs, marches, creeks, lakes. in the forests;
20. Securing the presence of different habitats and structural elements, temporarily artificial leaving and breeding facilities too;
21. Securing undisturbed sections, patches;
22. Creating park forests for nature conservation education.

C1.2: Reduction of game impact in the project areas. (01.03.2019 - 30.09.2025)

Game is overpopulated in Hungary and in Italy beside the influential hunter's lobby it is impossible to reduce their number. Too much game prevents the natural regeneration of the forests. Therefore some parts of some areas must be fenced around to assure the successful regeneration of the forest. Where invasive trees will be replaced by native oak seedling or where acorn will be sown will be fenced around. There will be larger areas fenced around with stronger and more stable fence where invasive forest parts will be converted to native ones or where the natural regeneration of larger areas must be secured. About 95 ha will be fenced around. There will be some smaller temporary fences around some small areas or a group of trees. This fence will also provide evidence as to how the forest can naturally regenerate when the overpopulated game is closed out.

C1.3: Suppression of invasive species present in the project area (01.10.2018 - 31.12.2025)

In Italy. About 5.9% of the project areas are (30 ha) occupied by the invasive species. MAR will harvest invasive species occupying about 30 hectares and the wood will be left in place for saproxilic insects and for insectivore birds, as experienced within the LIFE Gypsum.

C1.4: Producing and replanting seedlings of the species characterizing the priority habitats (01.10.2018 - 30.06.2025)

The restoration of the structure on the habitat 91AA* (Action C.1.1) needs also the reintroduction or the restocking of the species that characterize the habitat at local level, according to the EU, Italian, Regional manuals and to the IT4070011 Management Plan. The re-introduction of plant species is a re-introduction at single forest level, not at site level: none extinct species will be re-introduced within the site, because there aren't extinct species of the 91AA* habitat in the site, according to the Management Plan. The re-introduction of plant species is foreseen in the forests that are bought to be restored, being close to habitat 91AA*, but needing some interventions (e.g. alien species removal) and missing some characteristic elements, that will be reintroduced to complete the vegetation and to restore definitively the priority habitat with all its typical plant species. The restocking is for all the species, to increase the population after the forest managing activities. So, in this case we don't deal with real re-introduction in the site. In order to have guaranteed specimens of the local stocks and to find species impossible to obtain in nurseries, we will create a specific 91AA* plant nursery for the species characterizing the habitat. MAR has already a botanical garden, where it is possible to nurse plants, just opening new cultivated sector on the owned land. Species for the plant nursery at IT4070011 level are: *Quercus pubescens*, *Fraxinus ornus*, *Carpinus orientalis*, *Ostrya carpinifolia*, *Coronilla emerus*, *Anthericum ramosum*, *Asparagus acutifolius*, *Cornus sanguinea*, *Crataegus monogyna*, *Epipactis helleborine*, *Ligustrum vulgare*, *Rosa sempervirens*, *Rubia peregrina*, *Osyris alba*. The bush can be used also for the restoration of buffer areas around the forests, to preserve the micro climate of the forest and to stop chemical from surrounding agricultural areas (Action C3). Using the structure of the existing botanical garden, the activities



will be: evaluation of the populations from which to collect seeds or small plants (according to the species characteristics); preparation of new cultivated sector on 0.5 ha owned land; collection of 30 specimens or seeds to cultivate (about 30 species listed among the ones most characterizing the 91AA* habitat at local level); cultivation of 30 seedlings for each species.

C1.5: Ex-situ breeding of some saproxilic insects in Italy using the Eremita LIFE project's results (15.03.2019. - 15.04.2026.)

The biodiversity oak habitat 91AA * is poor especially lacking some characteristic insects like Cerambyx cerdo and Lucanus cervus. The LIFE Eremita project currently developed an ex-situ beetles breeding technique. The restocking of saproxilic insects is foreseen everywhere in the managed forest, because these three species are very rare everywhere in the site, according to the Management Plan, to increase the number after the forest managing activities. The three saproxilic species are: *Osmoderma eremita** (already breed within the LIFE Eremita project); *Cerambix cerdo*; *Lucanus cervus*; for the last two species we have to obtain the permission under the EU Habitat Directive, that we already obtained for *O. eremita*, to catch the wild individuals to start the breeding. The insects will be breed in the structure organized during the LIFE Eremita, to give continuity to the project already in progress. (The LIFE Eremita, involving seven partners from Emilia-Romagna (the Region, two National Parks, four Regional Parks' managers), aims to protect four species of insects, including two saproxilic beetles (**Osmoderma eremita* and *Rosalia alpina*). It provides for the ex-situ breeding of the priority species and the drafting of a breeding protocol and reintroduction / restocking guidelines, to be used in future projects and suitable to be extended to further species.) Because MAR operates one of the breeding, in the context of After-LIFE activities is planned to continue breeding and restocking of (**Osmoderma eremita* and it is considered important, since the object of the LIFE 4 Oak Forests, extending the breeding, using the same techniques experienced by the LIFE Eremita, two other species that characterize the oak habitat 91AA *: *Cerambyx cerdo* and *Lucanus cervus*. The breeding technique of *Osmoderma eremita* is completely different by the ones of *Cerambyx cerdo* and *Lucanus cervus*: *Osmoderma eremita* is breed inside big wooden boxes, filled with sawdust, chippings and organic material, to copy the natural living conditions: because this species' larvae lives inside the natural cavities of the trunks, where they accumulate the sawdust and faces of many other saproxilic insects, which become the food of the larvae of *Osmoderma eremita*. Within the LIFE 4 Oak Forests a new breeding technique will be used for new species that are not treated by the LIFE Eremita: the larvae of *Cerambyx cerdo* and *Lucanus cervus* live inside the wood, digging their own holes, while eating directly fresh wood. So, we have to develop a new breeding way or to use some of the already experimented ones, needing new place inside the existing breeding and, most of all, many different tools, materials and food. Using the structure of the LIFE Eremita, the three species will be breed.

3.2.7 Attuazione per conto dell'Ente di ogni aspetto relative all'azione C.2. *Collecting and storing seeds of herbaceous species characterizing each habitat in seed bank in Italy*

The habitat 91AA* is characterized at local level by a precise list of entourage herbaceous species, listed by the national manual and the regional manual of interpretation of the habitats of the Directive 92/43 / EEC and, more specifically by the management plan of the site IT4070011. The conservation of the habitat 91AA* and the guarantee of its replicability for conservation purposes also pass through the preservation of the seeds of these species in a seed bank. The project involves the precise identification of the characteristic plants, possibly increasing since the lists mentioned in the documents the identification of populations; the seed collection (about 50 species listed among the ones characterizing the 91AA* habitat at local level) in the



different seasons (according to the plants biology); the preparation of seeds for storage; the cataloging and the inclusion in the cold storage of the germ-plasm bank. The seeds collected within this action are used for the seed banking. In the action C1 it is foreseen the use of seeds of only a limited number of species for the production of plants. The aim of this action C2 is to create a “seed bank of the 91AA* plant species”, at Northern Apennine level, in order to preserve the local ecotypes, if needed for future interventions or to reintroduce possible extinct species considering the foreseen unfavourable effects of global warming.

3.2.8 Attuazione per conto dell'Ente di ogni aspetto relative all'azione C.3. *Realization of ecotonal hedges (buffer strips) around the purchased forests in Italy*

Insecticide used for agriculture on the lands around the forests have a direct impact on Insects and insectivore species such as bats and birds, entering easily in the forest ecosystem when the edge of the forest is open to the outside, because of cutting the surrounding bush. The lack of protection causes also a change in the micro-climate of the forest, the wind access and increased drainage of forest soil. The realization of ecotonal hedges of shrubs, made with species characteristics of the habitat 91AA * (produced under Action C.1.4) is aimed at preventing the entry into the forest structure and forest ecosystem and food chain of the agricultural pollutants and air currents which, also in natural conditions, they would just stop from this shrub vegetation (absent here because artificially removed to make space to crops or to give them more light or to an incorrect forest management). The Action provides the reforestation with 1,500 plants / ha, with the manual opening hole of 40x40x40 cm and placement of deciduous seedlings with bare root, providing in particular the opening of the holes and topping with compression of the soil adjacent to the roots of plants, the sizing, the clipping the roots, any deposit in a rational trap and transport of seedlings and any other operation necessary to give the work performed in a workmanlike manner. These hedges will be built around the purchased forests, where they are directly in contact with agriculture land or meadows, on a length of about 3.000 metres, wide 10 metres (3 hectares).

3.2.9 Attuazione per conto dell'Ente di ogni aspetto relative all'azione E.1. *Awareness-raising for stakeholders*

Sub-action E1.1: Presentations and field demonstrations for the stakeholders working on similar sites and for forestry teachers and students.

In Italy: Two 2 days workshops to be organised w/ field trips for 15 specialists in each. The target audience will be the Region's & Parks' specialists managing nature conserv. forests, teachers & students of institutions focusing on nature conserv. In the workshop diff. in nature conserv. forest management & forestry will be introduced w/ special reference to the dead wood. 1st day presentations, 2nd day exercise for participants (to mark the locations of different nature conservation treatment on the field.)

Sub-action E1.2: Publication of the developed management guideline and the results of these ecological nature conservation management according to the monitoring.

The ecological nature conserv. oak forests management guideline developed under A1.5 action & the result of its applic. in the project areas will be published in 700-700 copies in English, Hungarian, & Italiaen. This publication will incl. the management guideline dev. by the project team how to manage oak forest allocated for nature conserv. under the management of the nat. parks (about 21500 ha) & the results. Target audience: rangers, foresters, zoologists, botanists of the national parks, teachers and students of forestry & nature



conserv. faculties, forestry authorities, foresters of SFE who are managing protected forests, NGOs, private forest owners & media.

Sub-action E1.3: Publication of guidelines for forest habitat development on potential oak habitats.

Publication of guideline for forest habitat development on potential oak habitats, how to create more natural oak forests on abandoned agriculture lands in potential oak forest habitats. Even if they are planted for commercial purpose it can be done in a more nature friendly way. This guideline intends to support this kind of approach. Target audience: landowners, forestry authorities, forestry- & land advisers, teachers & students of forestry schools, NGOs & media. 500 Italian copies will be published for forest management planners, land owners & forest inspectors how to develop the potential oak forest habitats.

Sub-action E1.4: Publication abt the ecosystem services (WWF brochure)

Based on the studies executed in action D2 & other scientific sources, 2 publications are planned aiming awareness raising & education: 1. An info-graphic will be compiled abt informations on different functions of well preserved, natural forests, combining short, easy-to-understand expl. & creative graphical tools. It will be completed during 2019, & will be dissem. electronically only, primarily on the project's & WWF Hungary's web, social media & also through digital newsletter systems of our partner org. In 2025-2026 a separate WWF booklet is edited on ecosystem services of forests & methods can be applied to survey them. Since it is a rapidly developing field of science, exact content of the brooklet will be determined later, based on the results of the survey. An English version of the booklet is also planned which will be translated to Italiaen & will be published online, in a digital format.

Sub-action E1.5: Networking

Main obj. of this sub-action is to cooperate w/ other European projects, use their Natura 2000 management exp., & share ours w/ others. We are abt to coop. w/ those projects who are dealing w/ Natura 2000 forests & searching for the best ways of complex forest conserv. management. Results related to the influence of forest management on tree species composition & stand structure could be important for us. Also we would like to coop. w/ projects whose focus is the analysis of ecosystem serv. in forests. Our results can be applied primarily in relation to the conservation management of dry & moist deciduous forests of Central- & SEurope. Besides we will try to build network w/ other orgs working in natural oak for. Networking for knowledge transfer on conceptual & pract. quest of reconstr. of natural oak forest cond. oak forests management guideline (A1.1 & A1.2) & nature conserv. management of forests for the elaboration of oak forests management guideline (A1.3&E1.2) etc. MTA OK will participate in 2 conferences annually during the project period.

Sub-action E1.6: International conference to evaluate, share results & experience of the project

2 days internat. conference followed by excursion will be organised in the end of the project period to evaluate the work & achievem. of the project, to promote internat. co-operation & further conserve efforts. Participants will be inv. through internat. mailing list, websites, partners & by co-operating experts. Invitations will be sent to experts of networking partners too. Expected number of participants: approx. 70 from A, BG, CZ, HR, EU, D, H, I, PL, RO, SR, SLO, SK & UA.

Sub-action E1.7: Involvement, awareness raising of stakeholders & decision makers

In Italy: The FMO & Natura 2000 Office of RER will be involved, by at least 2 meetings/year, to agree the project aims, the methodology, to receive suggestions & to share the results, in order to apply them to the regional laws & rules. Owners of the forests will be involved also, being most of all farmers, using the forest for personal use or for commerical firewood. We are planning 9 meetings/year, first to present the project &



involve stakeholders, then to discuss w/ them project activities & results, then to involve them within the project concrete activities to apply in their properties & at the end, to widespread the good practices.

3.2.10 Attuazione per conto dell'Ente di ogni aspetto relativa all'azione E.2. *Awareness-raising for general public*

Sub-action E2.1: Secure public support for conservation efforts by different materials

We are creating different study materials for the public to understand the dynamic processes of natural forests & also management activities which are about to improve the natural conditions. Description of oak forests as habitats highlight the importance of species composition, different structural elements such as dead wood, root plates, cavities etc. 8 forums will be organised for general public (3 in 5 sites in Hungary & 5 in Italy). Our main purpose is to get the responsible general public to understand what conditions are to be provided to an oak forest to preserve its biodiversity for a long time. To present the ecosystem services are also important part of those education materials. Among education materials there is a 5 minutes animation film that shows how forest conserv. managem. transf. struct. & composit. of forest to create habitats for different species – incl. Natura 2000 species. Animation films provide an opportunity to present almost all elements of a forest at the same time. An interactive game is planned for younger generations, which can be used as a material in schools. It will be used for understanding the life of oak forest, & the importance of management, just like the ecosystem services of such an ecosystem. A picture book (atlas) is also planned for the most natural, old oak forest stands in Hungary, which will give a comparative overview on their location, extent, climate, site characteristics, natural & social values. The illustrated atlas not only gives an insight to information related to oak forests, but also fosters visiting them to get. "Forest mania" is a classic exercise book: it shares the knowledge w/ stories, drawing tasks & other creative elements. The exercise book can be used as a teaching material, especially for kids in primary schools. Main outcomes: In Hungary: one short movie (5 minutes), an interactive teaching material / game, 300 forest atlas of Hungary, 500 Forest Mania exercise book + online access In Italy: Every tool will be adapted to the habitat 91AA* for the Italian situation, except for the picture book (atlas), 3 roll-ups abt the LIFE project, one w/ management activities, one abt 91AA* habitats, one w/ 2 symbolic species of target habitat, 2000 pcs educational & emotional booklet abt habitat 91AA* & the ecosystem service

Sub-action E2.2: Design and operate project web site

A project web will be designed, set up & maintained in English, Hungarian & Italian. The web site will incl. A project overview, aims & objectives, locations of activities, layman's report, news section, PDF versions of project publications reports, general information on oak forests & links to relevant web. External web designer will work w/ project's communication manager to design the content & visual appearance. The web designer will call upon Partners' joint experience & knowledge to maximise benefits resulting from development & use of such web. Further advice & guidance will be sought from EU External Advisers to ensure that EU requirements are met in both short & long term. A draft structure design model is inserted here. We expect 50,000 visitors over the project period to visit the site.

Sub-action E2.3: Erecting notice boards at project sites

Erect & maintain notice boards in project areas along main public roads. 23 boards in Hungary & 6 in Italy will be located at strategic & appropriate places accessible & visible to the public. LIFE logo, partners' logos & cofinanciers logo will appear on all boards. Besides these boards there will be some special introduction boards installed in the project areas to introduce the different treatments for the professional visitors. In Italy



setting of 5 didactic panels abt project activities, 91AA* habitat, the 91AA* species, the forests' ecosystem services, the importance of management, along the trail internal to the visitor centre area (40 hectares of forest around the visitor centre).

Sub-action E2.4: Informing media abt project's aims, activities & achievements

Permanent media work is planned during the project. It provides inform. & influences decision makers in favour of the project. Different levels of the media will be used incl. local, regional, national & internat. Press & also electronic media. Tools are to be chosen according to tasks, in order to reach the largest proportion of the society. Press conferences in the beginning & at the end of the project are special events combined with field trips, which are perfect occasions for local & foreign journalists to know more about the Natura 2000 oak forests as habitats & to see some of the important plant & animal species. Media work comprises the following elements: 1) Opening press conference & field trip for the local & domestic media, which aims to present the overall goals of the project (problems to be solved, objectives). Closing press conference & field trip to present the results achieved. Both with 30 participants. Planned time for press conferences is 2018 & 2026 respectively both in Hungary & Italy. 2) Press materials to be sent to the media, review of media appearances related to all important events – interesting for wider public. 3) Popular articles, interviews 4) Media watch & annual report every year Sub-action E.2.5: Awareness campaign abt numerous ecosystem services provided by natural forests in Italy Awareness campaign abt: the importance of natural forests; the management of forests; the natural beauty of native forests, as a part of our traditional landscape; importance of dead wood for the life of the forests, their ecosystem & biodiversity; the numerous ecosystem services provided by natural forests (prevention of hydrogeological risk, hiking, birdwatching, mushroom collecting, truffles collecting, further forest product collecting). The campaign is made by: organization of 5 workshops abt the above topics; org. 5 workshops abt ecosystem services are for professionals, technicians of the public authorities, environmental associations, etc.; org. of 15 excursions; org. of 8 “forest day”, during the “Park week” abt the above topics, w/ games for kids, talks, presentations, walks in the forest, dinner w/ forest products by the visitor centre, etc. Both audiences will be informed (at different level) abt the habitats preserved by the LIFE, the ecosystem services & abt environmental opportunities of active forestry management & abt that cut through the woods, under certain conditions & in appropriate manner, may mean improve value & biodiversity of the forest & its ecosystem services.

E2.6: Layman's report

1000 pcs layman's report (8-12 pages) will be prepared on the status of protected forests, the objectives, activities & achievements of the project. It will be presented in English, Hungarian, Italian in paper & electronic format & will be distributed in meetings & will be available in PDF format on the project web.

3.2.11 Attuazione per conto dell'Ente di ogni aspetto relative all'azione F.2. *Preparation of Project Handbook and training of project staff*

A beneficiary specific Project Handbook will be prepared by the project management for each beneficiary as a guide book for project implementation. It will include:

- EC Grant Agreement
- Partnership Agreement
- Actions of the Project Proposal
- Concerned site maps
- Work plan and Budget



- Project management, organisation and reporting
- Project actions and responsible organisations
- Deadlines and responsibilities
- Technical guidelines including the project management guidelines and the nature conservation forest management guidelines "version 0"
- Communication guidelines
- Financial and administration guidelines
- Financial annexes

Project participants will attend a compulsory initial training in order to learn about project schedule, working practices, use of instruments, methods of data management and storage, information flow, administration, financial administration and reporting. The Project Handbook will be introduced in details. The training will be organised in Hungary in consideration with the number of participants from the both country. Lectures will be held during the first day, while practical field demonstrations are scheduled for the second. Topics for the administrative lecture session: - requirements demanded by the LIFE-administration extending beyond national financial regulations; - expenditure registration and book-keeping; - detailed review of reporting obligations; - discussion on the specific technical issues of rendering accounts; - adoption of the programme schedule.

Topics for the technical lecture session: Presentation of technical guidelines. A written report will be produced, containing the time, venue and rules for implementing the consolidated project actions. At the end of the training, participants will adopt the programme schedule, description of the work-methodology and the administrative and data management regulations.

Il Contraente a pena di applicazione delle penali e /o rilievi indicati nel presente capitolato, deve attuare ogni azione amministrativa, di coordinamento e supervisione necessaria alla realizzazione delle attività descritte in precedenza e del progetto in generale., adottando tecniche e modalità adeguate all’oggetto della prestazione.

Quanto eventualmente non contenuto nei paragrafi precedenti, trova riferimento nell’allegato progetto complessivo, allegato 1).

3.3 DURATA

La durata delle attività relative alla fornitura è di 105 (cento cinque) mesi a decorrere dalla “data di inizio attività”, prevista per il 01/07/2018.

3.4 MODALITÀ DI EROGAZIONE DEL SERVIZIO

Il servizio sarà erogato presso la sede dell’Ente di gestione per i Parchi e la Biodiversità-Romagna e presso le seguenti strutture dell’Ente:

- Centro visite Rifugio Ca’ Carnè;
- Giardino delle Erbe di Casola Valsenio;



Centro visite La Casa del Fiume.

nonché, in generale, all'interno del sito IT4070011 Vena del Gesso Romagnola.

Il Contraente utilizzerà locali, strumentazioni, mezzi dell'Ente.

Il Contraente sarà dotato di un marcatempo magnetico, atto a rilevare e documentare la presenza presso le sedi di lavoro, essendo il servizio classificato come “*additional staff*”.

Al Contraente saranno riconosciute n. 28 giorni di ferie ordinarie + 4 giorni di recupero delle festività sopprese per un totale di 32 giorni di astensione retribuita per ogni anno solare.

Il montante dovuto di 32 ore settimanali potrà essere reso dal contraente secondo una ampia flessibilità oraria giornaliera, fino ad un massimo di 10 ore al giorno e comunque compatibilmente con le necessità organizzative dell'Ente, col quale andrà comunque sempre concordata la programmazione delle attività, almeno con cadenza mensile.

Il montante dovuto di 32 ore settimanali potrà essere reso dal Contraente operando da sede diversa da quelle dell'Ente (telelavoro) fino ad un massimo di due giornate ogni settimana, nelle quali dovrà, comunque, registrare le presenze attraverso il programma di rilevazione delle presenze utilizzato dall'Ente, disponibile online.

Le attività del Contraente dovranno essere improntate a un'assoluta attenzione alla riservatezza e nel rispetto delle leggi e dei regolamenti dell'Ente. L'Ente si riserva di modificare le modalità di esecuzione descritte, di introdurre nuove modalità, di definire/modificare gli attuali standard, anche in corso d'opera, dandone congruo preavviso al Contraente, in particolare per adeguare la fornitura alle eventuali varianti che dovessero essere applicate al progetto, anche su richiesta del monitor e della Commissione Europea. In aggiunta, tali modalità di esecuzione potranno essere congiuntamente riviste e potranno essere concordate opportune semplificazioni o variazioni in funzione di specifiche esigenze.

All'attivazione del contratto, l'Ente illustrerà in dettaglio le attività, già descritte nel presente Capitolato, che saranno affidate al Contraente e, in particolare, lo stesso parteciperà alla formazione prevista dal progetto stesso. In tale occasione, verranno segnalate eventuali variazioni, sia nei contenuti che nei tempi, eventuali diverse modalità di esecuzione, standard e ogni altro aspetto utile all'esecuzione delle attività stesse e ad una loro corretta pianificazione. Si sottolinea che al Contraente è richiesto, durante l'esecuzione dei servizi oggetto del presente Capitolato, il rispetto degli standard e delle linee guida adottate dall'Ente.

Responsabile diretto delle attività del Contraente sarà il Direttore dell'Ente.

3.5 CRONOPROGRAMMA

Vedi allegato 2)



3.6 PIANIFICAZIONE E CONSUNTIVAZIONE DELLE ATTIVITÀ

Le modalità di gestione della pianificazione e della consuntivazione si riferiscono a tutte le attività previste nella fornitura.

L'aggiudicatario si adatterà alla pianificazione stabilita dal *project handbook* e redigerà periodiche relazioni, secondo le scadenze di rendicontazione stabilite dal progetto, utilizzate per la verifica dello stato di avanzamento dei lavori e per la redazione dei report da trasmettere al monitor e alla Commissione Europea.

Il Fornitore si impegna a consegnare ogni documento relativo all'esecuzione della fornitura e alla realizzazione del progetto all'Ente, in originale.

3.7 PENALI E RILIEVI

Le penali e i rilievi sono le azioni di sanzione o avvertimento da parte dell'Ente conseguenti il non rispetto delle indicazioni contenute in tutta la documentazione contrattuale. Tali azioni possono essere emesse per qualunque non conformità ai dettami contenuti nella documentazione contrattuale e in tutti i suoi allegati.

I rilievi consistono in comunicazioni formali al Contraente che non prevedono di per sé l'applicazione di penali, ma costituiscono un avvertimento sugli aspetti critici della fornitura e, se reiterate per due volte consecutive sul singolo servizio, possono dar seguito a penali nella misura dell'1% dell'importo contrattuale previsto per il servizio stesso, nonché ad altri meccanismi sanzionatori così come determinato nel contratto.

I rilievi sono emessi dal Direttore dell'Ente e sono formalizzati attraverso una nota di rilievo. Qualora il Contraente ritenga di procedere alla richiesta di annullamento del rilievo dovrà sottoporre all'Ente un documento corredata da elementi oggettivi e opportune argomentazioni entro 3 giorni lavorativi dalla ricezione della nota di rilievo. Trascorso tale termine il rilievo non sarà più annullabile.

Elenco degli allegati

1. Progetto
2. Cronoprogramma