

United Nations Educational, Scientific and Cultural Organization

> Organisation des Nations Unies pour l'éducation, la science et la culture

## **World Heritage**

**45 COM** 

# **AMENDMENT**

| Item of the Agenda                       | WHC/23/45.COM/8B  Nominations to the World Heritage List |
|--|--|
| Amended Draft Decision                   | 45 COM 8B.32   |
| Amendment submitted by the Delegation of | Ethiopia   |
| Date of submission                       |  |

### **DRAFT TEXT**

#### C.4 EUROPE AND NORTH AMERICA

#### C.4.1 New Nominations

| Property                         | Evaporitic Karst and Caves on Northern Apennines |
|----------------------------------|--|
| ID N°                            | 1692   |
| State Party                      | Italy  |
| Criteria proposed by State Party | (viii)   |

See IUCN Evaluation Book, 2023, page 203.

**Draft Decision: 45 COM 8B.32** 

The World Heritage Committee,

- 1. Having examined Documents WHC/23/45.COM/8B and WHC/23/45.COM/INF.8B2,
- 2. <u>Refers</u> the nomination of <u>Inscribes</u> the Evaporitic Karst and Caves of Northern Apennines, on the World Heritage List on the basis of criteria (viii); Italy, back to the State Party in order to allow it to:
- 3. Adopts the following Statement of Outstanding Universal Value:

#### **Brief synthesis**

Evaporite Karst and Caves of Northern Apennines constitute the most complete, outstanding and accessible examples of the karst phenomena in gypsum and anhydrite at humid sub-tropical climate conditions. Located in northern Italy, this serial property unites together the most internationally studied areas with regard to hydrogeology, mineralogy and speleology in evaporitic karstic systems. The evaporitic rocks of this property were deposited in two distinct geological periods: the breakup of the supercontinent Pangea (c.200 million years ago) and during the ecological catastrophe

when the Mediterranean Sea largely evaporated (c.6 million years ago). The cave system developed over the last 500,000 years.

The site hosts different type of mineralogical evolution of gypsum, including its transformation into anhydrite and alabaster, and many speleothems and minerals that are peculiar to this area, thanks a complex relationship among rocks, geological evolution and climate.

The explorations and discoveries that took place in this area - described in the pioneer speleological publications - are considered as milestones in the development of the geosciences. The property includes the evaporite cave with the deepest drop in the world, the world largest epigenetic cave and the largest karst salt spring of Europe

In a very narrow belt - made of vertical cliffs emerging from the surrounding clays - it is possible to study the evolution of Mesozoic and Cenozoic evaporite deposits, with the same access easiness that led to their exploration since the pre-scientific era. Many caves have been explored since prehistoric times, and they became one of the first excavation areas of lapis specularis, the stunning transparent crystals, which replaced glass during Roman times.

Criterion (viii): EKCNAThe property comprises the most complete sulfate-halite karst systems on Earth, due to the exceptional combination of humid sub-tropical climatic conditions and a peculiar geological setting. It also includes a complete collection of epigean and hypogean karst morphologies from the dissolution surfaces in vertically exposed gypsum cliffs to the speleothems in the abysses of the caves.

In a relatively small area over 900 caves (amongst the largest, deepest and most complex of this type at global scale) represent the scientifically best worldwide scientifically documented sulfate-halite karst from the geological, speleological and hydrological points of view. An uncommon richness of rare speleothems and minerals, sometimes unique to these caves, have attracted naturalists and scientists since the 16<sup>th</sup> century and tens of evaporitic karst phenomena have been described here for the first time. The discipline of speleology was born in this area and its easy accessibility make it a leading research location even nowadays. The educational value of this property is well illustrated in the several caves that are open to the public.

#### Integrity

The property's nine component parts involve approximately 90% of evaporitic rocks of the northern Apennine chain and ensure the entire representation of karst phenomena in gypsum and anhydrite, including all the outcropping and underground karst areas, all the main karst aquifers, and all their recharge areas.

The state of conservation of the karst biotic and abiotic systems is excellent. The continuity of the karst hydrological system, above and below ground, is well preserved in all the component sites. The fruition of the few caves open to the public takes place with speleological modalities, without alterations of the natural conditions and habitats.

Settlement pressures are absent, although some component sites are close to metropolitan areas. Agriculture — where present - is limited and extensive, and the management of the existing woods is conservative, aimed at increasing their wilderness. Within the property the mining exploitation of gypsum, which has affected these areas since Roman times, is now prohibited.

#### **Protection and management requirements**

All evaporitic karst areas of the property are identified and strictly protected by a specific geological and speleological heritage protection act, in accordance with Eeuropean, national and regional regulations.

The great majority (96%) of EKCNAthe property is protected by European Community directives and is part of the Natura 2000 Network. Most of the property (71%) is protected by a national park and by two regional parks. The remaining areas are nature reserves and protected landscapes, preserved by law. The surrounding areas are subject to the territorial and landscape planning of the Emilia-Romagna Region that establishes the rules for the management of the territory.

At the time of inscription the management system consists of two bodies: the Appennino Tosco-Emiliano National Park and the Emilia-Romagna Region. The latter directly supervises the management bodies of the regional protected areas. These management bodies have a management plan, a specific budget and a dedicated staff (technical and administrative) to manage and control the different protected areas.

A World Heritage-oriented management structure is currently being established and the management strategy is expected to take 18 months to finalise. This strategy includes a governance agreement that mutually commits the current management bodies (EKCNA Programme Agreement), the setting up of a WH-dedicated coordination office (EKCNA Office) and a shared action plan to ensure an effective long-term protection of the property's natural values and attributes.

Key management issues include the protection of the attributes and values of the geological heritage, conservation measures for habitats and species of Community interest, knowledge and communication of the natural environments. The karst hydrological system is also a very relevant management topic in these highly dynamic environments. Other management themes include education, enhancement, quality of visitor experience, and finally environmental restoration and conversion of abandoned and disused quarries for educational purposes.

A long-term monitoring system has been set up, using ground- and underground-based observations, for improved evaluation of the chemical and ecological state of karst aquifers, seismo-tectonic movements, and climate cave conditions. Key aspects of the property's flora and fauna are also monitored.

- 4. RequestsWelcomes the State Party's commitment not to extend to confirm that the permit for quarrying in the Monte Tondo quarry will not be extended, and to commence restoration activity as soon as practical. :a) Modify the boundaries of the nominated property to ensure that the proposed attributes of potential Outstanding Universal Value are fully included,:
  - b) Fully align the legal protection of the nominated property to the boundaries of the nominated property ensuring there are no gaps in legal protection within the boundaries of the nominated property,
  - c) Fully align the legal protection of the nominated property's buffer zones to ensure there are no gaps in legal protection within any of the buffer zones,
  - d) Confirm that the permit for quarrying in the Monte Tondo quarry will not be extended, and commence restoration activity as soon as practical:
- 3<u>5</u>. <u>Recommends</u> the State Party to fully establish the planned management structure for the serial nominated property, and to consider:
  - Submitting a minor boundary modification to includeenlarge a component parttwo component parts located in Alta Valle Secchia and in Vena del Gesso Romagnola – Monte Mauro.
  - <u>ba</u>) Developing a single unified protection system for the nominated component parts of the serial nominated property,

- **c**b) Ensuring that the zonation of the Appennino Tosco-Emiliano Biosphere Reserve aligns with the protection and management regime needed for the nominated property,
- <u>de</u>) Preparing a visitor management plan that identifies areas of expected high levels of visitation, and the carrying capacity of the nominated property.
- <u>6. Requests the State Party to submit to the World Heritage Centre by 1 December 2024 a report on the implementation of the above-mentioned recommendations.</u>