



Checklist Explanatory Notes to define an aspiring UNESCO Global Geopark (aUGGp)

Q3 - Does your aUGGp boundary correspond to pre-existing limits? (i.e., administrative / state boundaries or protected area, etc.)

An aUGGp territory must reflect both its geographical and local cultural identity, providing a clear territorial view of the area. If you are unsure whether your territorial area qualifies, please consult the UGGp Secretariat at UNESCO before preparing your application.

The combination of different kinds of pre-existing limits (i.e., administrative and protected area) is acceptable.

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The combination of different kinds of pre-existing limits (i.e., administrative and protected area) is acceptable.

1. For exclusively terrestrial aUGGps:

An aUGGp boundary cannot be arbitrarily connected with a geological or a geographical context (Fig. 3.1). UGGps are sustainable development areas and must consider their existing local territorial identity (Fig. 3.2). The definition of an aUGGp territory needs to take into account pre-existing boundaries such as:

- Administrative limits (region, province, communes, etc.)
- Existing legal protection area boundaries (National Park, National Reserve, etc.)
- Other official territorial boundaries.
- Some territories have to deal with specific issues like industrial exploitation, or municipalities that explicitly do not want to be part of the aUGGp project; and in these cases, the aUGGp has to provide an explanation and justification.

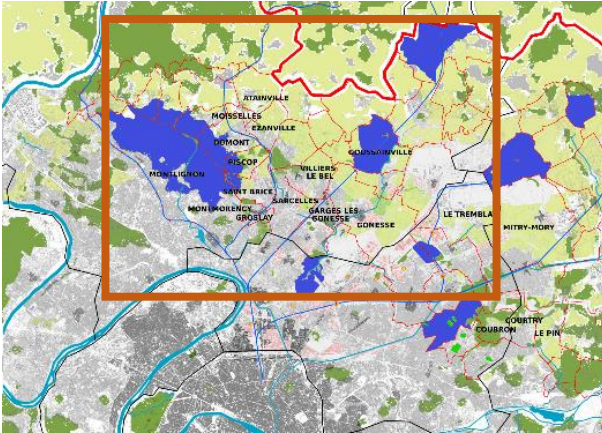


Fig. 3.1. **Wrong** aUGGp boundary not taking into account administrative and cultural limits.

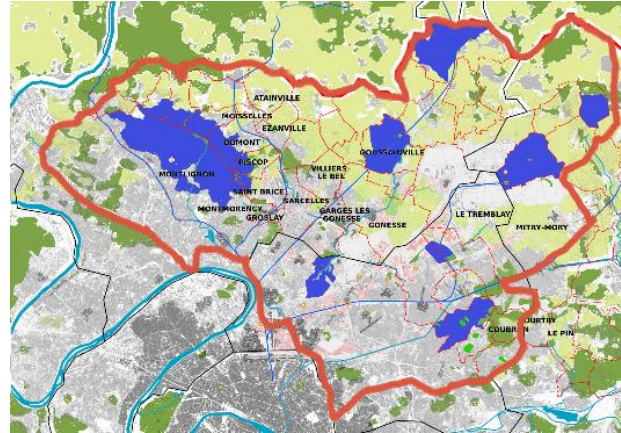


Fig. 3.2. **Correct** aUGGp boundary following pre-existing administrative limits.

2. For aUGGps that include maritime areas and Islands:

To be a unified territory (criteria i), an aUGGp must integrate maritime parts where applicable (Fig. 3.3 and 3.4). This integration is an important asset for a terrestrial-maritime aUGGp to consider its marine environment including elements like biodiversity, submarine geology cultural relations to the sea (sailing, sea related mythology, cosmology etc.) and marine protected areas.



Fig.3.3. **Wrong** island aUGGp boundary



Fig. 3.4. **Correct** island aUGGp boundary

Q4 – Do you have a significant population living in your aUGGp territory?

An aUGGp is a sustainable development territory and should exist to support its local population. For this reason, a territory (often a conservation area) without a local population or a significant number of inhabitants cannot become a UGGp.

The definition of a “significant population” should at least present the lower population density for desert areas, equating to around ten inhabitants per kilometre square¹. In some rare situations, for example, in an island context (or desert area), this population density could be even lower; and in this case, please consult the UGGp Secretariat at UNESCO early in your planning phase, before preparing your application.

Q5 – Does your aUGGp territory size provide the necessary conditions for appropriate sustainable development for the local population?

Currently, the average surface area of a UGGp is between 1 000 and 2 000 km². The biggest one is Alxa UGGp (desert area, China) with 68 374 km². Huge areas are difficult to manage and require considerable effort to demonstrate a coherent image to visitors who may just visit a small part of it.

Among the intermediate UGGps are:

Hexigten, China	1 750 km ²
Toya Usu, Japan	1 180 km ²
Hateg, Romania	1 023 km ²
Rocca di Cerere, Italy	1 279 km ²
Qinling, China	1 074 km ²
Shetland, United Kingdom	1 468 km ²
Comarca Minera	1,848 km ²

While the smallest one the English Riviera UGGp (UK) with a land area of 64 km² and sea area of 42 km², it has significant population contributing to sustainable development.

Q6 - Do you have clear evidence that your aUGGp has a geological heritage with an international value?

We encourage candidates to work closely with their own national scientists (i.e. Universities, Geological Survey, IGCP National Committee, Geological Institute of Academy of Science and other research institutions) during the early stage of their application. This is necessary to assess the probability of recognition of the international importance of their geological heritage, to provide a sound basis for the desktop analysis to be undertaken by the International Union of Geological Sciences (IUGS)².

A complete and comprehensive bibliography of a territory’s international and national publications and research evidence in Earth sciences is fundamental in helping an aUGGp to establish geological heritage of international value. An aUGGp that is unable to provide a complete and comprehensive bibliography is less likely to demonstrate international value.

To support the IUGS desktop analysis, candidates need to prepare:

¹ *United Nations Decade for deserts and the fights against desertification.*

² *IUGS guidelines currently under preparation (example of national guidelines <https://geoheritage-iugs.mnhn.fr/>)*

Checklist Explanatory Notes for aspiring UNESCO Global Geoparks incl. use of new logo (2022)

1. Annex 2: an additional and separate copy of section E 1.1 5 relating to geological heritage and conservation.
2. Annex 6: a complete bibliography of the territory's Earth sciences publications divided into two sections:
 - International publications and research.
 - National publications and research (in the case the publications and research are not in English, please provide an English summary or Abstract if possible).

Q7 - Is there comparable geology at another UGGp located within your country? Or those countries you share a border with?

Aspiring UGGps located close 100 km³ to an UGGp must commission a comparative geological study. This study should determine major differences between the Earth heritage of the areas, identify how the aUGGp can position itself with respect to the existing UGGp and identify ways how to best promote and interpret the territory, focusing on its unique assets.

To guarantee objectivity, a comparative geological study cannot be undertaken directly by the aUGGp due to conflict of interest. Instead, an independent study should be commissioned through a local University or relevant research institution, Geological Survey, IGCP National Committee, Geological Institute of Academy of Science or independent qualified (geology-related) company. The study should synthesise and clearly highlight similarities, differences and complementary or even synergic aspects between the two territories, including natural and cultural heritage aspects.

Q15 - If you have specific protected fragile geological/geomorphological sites, do you develop protective measures against erosion?

Aspiring UGGps promote geological heritage but also need to be involved in its preservation, particularly when this heritage is being threatened by natural or anthropogenic damage. Erosion is a common natural process, affecting and changing geological heritage and as such does not need to be controlled everywhere. However, protective measures must be developed for geological sites of recognized value, especially if they are part of the internationally important geological heritage of the territory, or with a particular threat, which can be resolved or slowed down by physical protective measures (Figure 15.1, 2, 3, and 4). For the anthropogenic damage, the effective protective measures (such as protective facilities, monitoring systems, visitor code of conduct, etc.) should also be adopted.

Many technical solutions exist, and aUGGps need to consider when physical conservation measures are necessary and determine the most appropriate action, given the severity of the situation and financial implications. Some of the more common

³ This is relative to the country size, population density and geodiversity. If your aUGGp is less than 100 km away from another UGGp, please consult the UGGp Secretariat at UNESCO before preparing your application.

techniques used are on-site museums, protective shelters, using conservation techniques and methodologies, which are following the [Venice Charter](#). Besides physical conservation, another important option to consider would be 3D scanning of the geological site, which is highly recommended for paleontological sites (especially fossil footprints, fossil skeletons, etc.). 3D scanning allows for comprehensive site recording and potential reconstruction by 3D printer.



Fig. 15.1. On-site museum built around a fossil tree, Lesvos UGGp, Greece



Fig. 15.2. On-site museum on sirenian fossils, Haute Provence UGGp, France



Fig. 15.3. Placing a protective coating on dinosaur footprint fossils, Yanqing UGGp, China



Fig. 15.4. On-site museum on dinosaur footprint Terra.vita UGGp, Germany

Q18 - Have you developed educational activities connected with your natural heritage (biotic)?

The educational mandate of an aUGGp is to teach local students, its community and visitors about the intrinsic nature of its territory and all its potentials. Therefore, an aUGGp must develop suitable educational activities to make better understood and explain the aUGGp's natural heritage, climate change, natural hazards, paleo-environments, the evolution of life, and at a large scale our living and moving planet and the necessity for its preservation.



Fig. 18.1. Establishment of a monkey conservation foundation, Shennongjia UGGP, China



Fig. 18.2. Imbabura UGGP conservation plan for the Andean Condor (©EFEverde)

Q23 - Does your aUGGP support and develop research in its territory?

UGGPs are living and active territories, which should support the enhancement of scientific research within their areas (i.e. Master’s degree, PhD, Postdocs, research projects, etc.). Aspiring UGGPs should define and organise their research strategy and activities with the support of, for example, local Universities, Geological Survey, IGCP National Committee, Geological Institute of Academy of Science and other Academic Institutions, using formal research agreements, research contracts, organised field research camps and logistic support, to form active working partnerships. The scientific research developed in an aUGGP should not exclusively focus on Earth sciences but should look into other territorial specificities including biodiversity, intangible, cultural heritage, natural hazards (landslides, earthquakes, etc.), and climate change. All aUGGPs should pay attention to transferring the scientific results into accessible science, which can be understood by the public.

Q25 - Do visitors of your area easily recognize and understand that they are in a Geopark? Is your aUGGP appropriately visible in the area?

An aUGGP must develop its own brand identity connected to a logo and specific branding, which is present on visibility tools. This point must be clear before an aUGGP can design or modify panels. *Please refer to Question 26* for examples of branding and panels. To be visible, an aspiring area must have a name. As a general guideline, an aUGGP:

- During its preparation phase can use “Name Geopark”.
- When the application has been sent to UNESCO it also could use “Name Aspiring UGGP”.
- After successful designation by UNESCO the name will be “Name UNESCO Global Geopark”.

This must be kept in mind while designing the visibility tools.

Q26 - Do you have information panels at the entrance area(s) or in important sites of your aUGGp?

An aUGGp must have a **brand identity** through which it promotes itself, its heritage and its activities and services in the frame of sustainable development. This includes the provision of easily identifiable signage that informs visitors and the public that they are entering or inside the Geopark territory. (Examples of Geopark logos are given in Figs. 26.1, 2, 3, 4).

The appropriate mechanisms for territorial visibility are not the same everywhere and may depend on local legislation in terms of what kind of display panels and information is allowed and on what places. The conformity to local legislative context must be kept in mind while reading the proposed examples below. To achieve the necessary visibility, each aUGGp needs to combine different communication tools and adapt them to their local context.

Pannels are only one of the many examples of how visibility can be reached. As an interim measure after accreditation, existing panels can be customized by adding the aUGGp logo and information (possibly by using stickers, etc.). This interim measure should be replaced at the earliest opportunity but not at the expense of appropriate sustainability considerations. The main tools used (although not exhaustive) are entrance gates, road signs, parking signs, partnership panels, products, communication tools.

How to use the logo? What kind of logo should be used and for what purpose?

During the preparation and application phase (but also later), the Geopark uses its own logo and brand identity, which demonstrates in smart a graphic way the characteristics of the area, as to be seen in the example below.



Fig. 26.1. Geopark logo, Mexico
(showcasing indigenous cultural setting)



Fig. 26.2. Geopark logo, France
(showcasing a wine leaf)



Fig.26.3. Geopark logo, China (showcasing the important geological structure)



Fig. 26.4. Geopark logo, Germany (showcasing the important geomorphological structure)

Only after the official designation as UGGp, the Geopark will be allowed to use the proper UNESCO Global Geoparks logo in their activities, in order to promote the visibility and strengthen the outreach of the UGGp network. Please note that UNESCO Member States have approved a new logo toolkit in April 2021 which can be obtained at request from the UNESCO Secretariat, below we explain the principal points.

Background UNESCO logo

The name, acronym and logo of UNESCO are the intellectual property of the United Nations Educational, Scientific and Cultural Organization. No individual or organization should use the name, acronym or logo of UNESCO without prior written authorization.

At its 38th Session in Paris in November 2015, the General Conference of UNESCO approved the new statutes of the International Geoscience and Geoparks Programme (IGGP), together with the establishment of the UNESCO Global Geoparks designation within the International Geoscience and Geoparks Programme. Since then, Global Geoparks and national committees have been using a UNESCO Global Geopark combined logo accompanied by the name of the Global Geopark and the country name of the national committee.



Fig. 26.5. Former Geoparks and National Committee logos

New UNESCO-Global Geopark logo

To further enhance UNESCO's visibility, UNESCO developed and issued a new set of "Graphical Standards and Logo Toolkit" in June 2021, after one-year's consultation with its Member States.

These new standards bring not only changes to the use of the UNESCO logo by UNESCO Secretariat itself, but also by its designations. For the purpose of more consistency, efficiency and flexibility, UNESCO has adopted a new policy for designation logos. UNESCO-designation combined logos that include the individual name of each designation are no longer used. Instead, they are replaced by a generic logo for each type of designation.

In the case of UNESCO Global Geoparks, each Global Geopark and national committee will from now on use the generic logo as shown below:



Fig. 26.6. New UNESCO-Global Geoparks and National Committee logos

Languages, colours and size of the UNESCO-Global Geopark logo

The logo can be used in one of the official languages of UNESCO, which are English, French, Spanish, Russian, Arabic and Chinese, or in a national language, or in a multi-lingual version combining an official language of UNESCO and a national language. The logo is available in three colours: **blue**, **black** and **white**. Wherever possible, UNESCO encourages the use of the blue version of the logo. The height of the UNESCO temple symbol, which is used to measure the size of the logo, should not be featured lower than 12mm from the top point to the last step.

Context and conditions for the use of the UNESCO-Global Geopark logo

The UNESCO Global Geopark logo can only be used after an official written authorization from UNESCO.

The UNESCO Global Geopark logo must be used as illustrated above without any modifications, without any text or graphical elements added to it or too closely next to it. Global Geoparks can use their own logo at the same time as the UNESCO Global Geopark logo. However, the logos should be featured separately, without being built or shown as one logo block.

The UNESCO Global Geopark must not be used for commercial purposes. National Committees and individual UNESCO Global Geoparks can use the logo for their own activities but cannot give logo use permission to any third parties.

The use of the UNESCO Global Geopark logo on signage and other communication material is a good way to increase visibility and is therefore recommended. However, the UNESCO-Global Geopark logo can only be used on communication material that is produced by or solely for the Global Geopark. For example:

- A municipality has no permission to use the UNESCO Global Geopark logo on its general communication material about the municipality. However, if it prints a flyer or banner that is solely for the promotion of the geopark, the UNESCO Global Geopark logo can be featured on them after their content is validated by the global geopark management.
- If a person in the municipality or museum is also part of a geopark management, he/she can use UNESCO Global Geopark logo headed paper if he/she is writing in the capacity of a member of the geopark management. The same person, however, does not have the permission to use the same headed paper if writing in capacity as part of the municipality or museum.
- Geopark affiliated partners such as local tour companies, restaurants, etc. do not have permission to use the UNESCO Global Geopark logo.
- It is up to a Geopark management to decide if the municipality, schools or other partners can or cannot use the Geopark's own logo or make a link to the Geopark website or state their contribution to the Geopark. But the Geopark cannot give permission for these entities to use the UNESCO Global Geopark logo.

Transitional period

As agreed with UNESCO's Member States, implementation of the new Graphical Standards will follow a gradual and steady process, with a transitional period over the next biennia. UNESCO Global Geoparks can, therefore, replace their old logos by the new one on brochures and panels etc. when these items are re-printed and re-produced.

Special cases

In the case of multi-UNESCO designations, for example, if a designation is a UNESCO World Heritage site, a UNESCO Biosphere reserve, as well as a UNESCO Global Geopark, it can use the logo as shown below.



Fig. 26.7. "Triple designation" logo



Fig. 26.8. Exemple of logo with double designation

In some cases, especially for transboundary site nominations, a specific logo that includes the name and year of the designation may be considered necessary. In these cases, the National Commission will consult the UNESCO Secretariat first and then create the logo itself for the designation if it is decided that a specific logo is needed. Below are listed some examples of the new UGGp logo.

Contact at UNESCO Secretariat: *Kristof Vandenberghe* k.vandenberghe@unesco.org

Examples of the new UNESCO Logo for UGGps



unesco

Global Geopark



unesco

Hnattrænn jarðvangur



unesco

Παγκόσμιο Γεωπάρκο



unesco

Geoparc Byd-eang

Fig. 26.9. Different language versions of the new UNESCO Global Geoparks logo in blue, black and transparent in English, Icelandic, Greek, and Gaelic



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De Hondsrug
UNESCO Global Geopark
Van alle tijden ...



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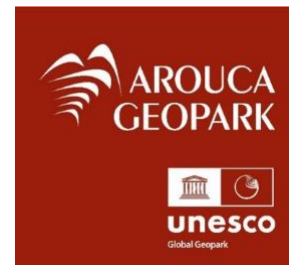


Fig. 26.10. Examples of UNESCO UGGp logo in signature

Checklist Explanatory Notes for aspiring UNESCO Global Geoparks incl. use of new logo (2022)



estrelageopark Vale Do Mondego



ΦΥΣΙΚΟ ΠΑΡΚΟ ΨΗΛΟΡΕΙΤΗ | **PSILORITIS NATURAL PARK**
Ιδαίων Άντρο | **Idaion Andro**

Γεώτοπος Geosite B2

Το Ιδαίον Άντρο είναι ένας από τους σημαντικότερους αρχαιολογικούς χώρους της Κρήτης. Στο ομώνυμο σύμπλεγμα με τη μυθολογία αναφέρεται ο Δίας και γι' αυτό κατά τους Μινωικούς κυρίως χρόνους επετίθησε το σημαντικότερο ιερό λατρείας του νησιού.

Οι αρχαιολογικές ανασκαφές αποκάλυψαν πολλά και σημαντικά ευρήματα που φυλάσσονται στο Αρχαιολογικό Μουσείο Ηρακλείου και στο Κέντρο Αρχαιολογικής Έρευνας στο Άνωγειο.

Το ομώνυμο συγκριτικό μέσο στα Λεπτοκοκκώδη σύμπλεγμα της ενότητας Πλατεσκαλιών Αδελφωτών. Είναι σχετικά μικρό, με ένα κεντρικό θάλαμο και μικρές πλευρικές διακοσμητικές αίθουσες. Είναι ένας τμήμα ενός μεγαλύτερου συστήματος τα οποία έλαβε και βύθισε κάτω από το οροπέδιο της Νίδας το μεγάλο ρήγμα που φαίνεται στην είσοδο του σπηλαίου.

Idaion Andro cave is one of the most important archaeological sites of Crete. According to Greek mythology, it is the cave where Zeus grew up. That's mainly the reason why it flourished as the most important place of worship predominately during the Minoan era.

Archaeological excavations unearthed several and important findings that are now exhibited in Heraklio's Archaeological Museum and Anogia's Center for Archaeological Research.

The cave is formed in the paly marble of the Platetskalk series. It is relatively small with one main hall and minor side passages. It consists, through, part of a larger cave system, which was cut by the big fault that is found at its entrance, still existing below Nida's plateau.

www.psiloritisgeopark.gr

Parco del Beigua
parco naturale regionale

Parco del Beigua
parco naturale regionale

Parco del Beigua
parco naturale regionale

Parco del Beigua
parco naturale regionale

Globální Geopark UNESCO Český ráj
Hruboskaňské skalky město – vyhlídka na Kapelu

CERRO DE LA OBSIDIANA

TALLER DE OBSIDIANA

LAS ARMAS MILITARES

EL LUGAR DE LA OBSIDIANA

EL LUGAR DEL EPAZOTE DEL ZORRILLO

EL CERRO AGANTILADO DONDE SE ADORA UN NAVAJÓN

Fig. 26.11. Different design possibilities to use the UNESCO UGGp logo by the Geopark



Fig. 26.12. Two examples of an individual Geopark logo and new UNESCO Global Geopark logo that are not ok

Disclaimer: Kindly note, many of the following examples of logo-use in practice are taken from before 2021, and therefore exhibit the old logo. UNESCO foresees a smooth transition of several years to apply the new logo and allows the UGGPs to put the new logo on media and panel supports at the moment of their 'natural' renewal.

Examples of UGGp Entrance:

The UGGp entrance is usually located along different access roads into the UGGp. It aims to inform travelers that they are entering the UGGp from this point on. These UGGp entrance ways are often identified by the presence of large advertising panels, big rock signage, signposts, etc. Including *Advertising Road Signs*, generally placed inside the UGGp, along main roads and are often placed on large advertising panels. These signs are also necessary along the main roads (highways) leading to the UGGp.



Fig.26.13. Entrance panel before designation, Rio Coco aUGGp, Nicaragua



Fig. 26.14. Entrance gate before designation, Rinjani-Lombok UGGp, Indonesia

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Fig. 26.15. Road panel after designation, Araripe UGGp, Brazil



Fig. 26.16. Road panel during application period, before designation, Estrela UGGp, Portugal



Fig. 26.17. Geopark land-mark before designation, (World heritage logo + Geopark logo) Ngorongoro-Lengai UGGp, Tanzania



Fig.26.18. Road panel, Toya Usu UGGp, Japan

Examples of direction Signs/Orientation signs/Indicators:

On the roads leading from the main access into the UGGp direction, signs should be put up in order to orient visitors and tour operators from the main road to specific sites. All orientation panels need to carry the aUGGp logo/branding. Make sure that they are in a safe place where visitors can stop and not hindering traffic.



Fig. 26.19. Directional panel, after designation, Dong Van UGGp, Vietnam



Fig. 26.20. Directional panel, English Riviera UGGp, UK



Fig. 26.21. Directional panel, Katla UGGp, Iceland



Fig. 26.22. Directional panel, Sobrarbe UGGp, Spain

Parking Signs:

For visitor security, safe areas need to be created to be used as parking and/or observation points. Parking signs are therefore required which again need to carry the aUGGp logo/branding.



Fig. 26.23. Parking area, North West Highlands UGGp, UK



Fig. 26.24. Advertising and parking panel, Cao Bang UGGp, Vietnam

Information/Interpretation Panels:

To explain a site of interest, interpretation panels are usually placed in their vicinity. Such panels need to provide easily understandable information and carry the aUGGp logo/branding.



Fig. 26.25. Interpretation panel, Satun UGGp, Thailand



Fig. 26.26. Interpretation panel after designation, Terra.vita UGGp, Germany

Checklist Explanatory Notes for aspiring UNESCO Global Geoparks incl. use of new logo (2022)



Fig. 26.27. Interpretation panel after designation, Burren and Cliffs of Moher UGGp, Ireland



Fig. 26.28. Interpretation panel after designation, Zhijidong UGGp, China



Fig. 26.29. Interpretation panel, Cliff of Fundy aUGGp, Canada



Fig. 26.30. Interpretation panel, Imbabura UGGp, Ecuador

ΦΥΣΙΚΟ ΠΑΡΚΟ ΨΗΛΟΡΕΙΘΗ PSILORITIS NATURAL PARK

Ιδαίων Άντρο Idaion Andro

Γεωτόπος Geosite B2

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Ο αρχαιολογικός ενστανσιόν αποτελείται από πολλά και σημαντικά ευρήματα που φιλοξενούνται στο Αρχαιολογικό Μουσείο Ηρακλείου και στο Κέντρο Αρχαιολογικής Έρευνας στο Άντρο.

Το ανάκλινο ενστανσιόν μένει στο λεγόμενο κλάμα της ενστανσιόν (Πλακωτών Αδελφών). Είναι σχετικά παλιό, με ένα στενό διάδρομο και μεγάλες αίθουσες διακόσμησης. Αποτελεί όμοια, ταίρια και προέλευσης από το Ιδαίων το οποίο είναι Ιδαίων κλάμα ενώ το αρχαιολογικό κέντρο είναι το Ιδαίων, που βρίσκεται στην είσοδο του ανάκλιου.

Idaion Andro cave is one of the most important archaeological sites of Crete. According to Greek mythology, it is the cave where Zeus grew up. That's mainly the reason why it flourished as the most important place of worship predominantly during the Minoan era.

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Fig. 26.3. Information panels after designation, Psiloritis UGGp, Greece and Bakony - Balaton UGGp, Hungary

Kamon-kő tanösvény 7. Village and Nature Trail

A BALATON helyén a jégkorszak végén (kb. 15.000 évvel ezelőtt) több sekély, tiszta és hideg vízi tavacska alakult ki. Nyugatról kelet felé a vízborítottság egyre kisebb következtett be. A hőmérséklet melegeodéseivel és az éghajlat csapadékosabbá válásával vízszint emelkedett, a tavakat elváltató gátak a hullámmelés hatására fokozatosan eltűntek, és kb. 5.000 éve kialakult az egységes vízfelület. Ezt követően a 10 vízszintje, az éghajlat váltakozásának függvényében a mai vízszinthez képest +6 méter és -1 méter között voltak azonosok. A tó vízbe utalásakor tiszta volt, de hamar elszaporodott benne a növényzet, melynek mennyisége a tó térségében során gyakran változott, de általában a közepes (a mai mezotermi) állapot volt jellemző. A tó környezetében a jégkorszak végéig főleg a tölgyes, a jelenkorban lombos erdők voltak jellemzőek.

A tavi üledékek felhalmozódási sebessége a teljes üledékvastagságra vonatkozóan átlagosan évente 0,4 mm. Ezt az érték követeli helyhez kötötten azonban fagy a víz alatti áramlások iszapmozogató hatásától, a tó mélységétől, a vízzel borított terület nagyságától, a víz minőségétől, továbbá az éghajlati és a partterületi növénytakaróval való borítottságától, jelenleg a Balaton mederében felhalmozott iszap mennyisége (kb. 2,5-3,0 km³) hozzávetőlegesen 1,5-szerese a víz mennyiségének (kb. 2 km³).

In the place of LAKE BALATON several shallow, clean- and cold-water lakes formed at the end of the Pleistocene, about 15,000 years ago. They developed one after another, from the west to the east. As a result of the rising temperature and evolving wet climate, the water level rose and a unified water surface formed (about five thousand years ago). After that the water level alternated (between +6 metres and -1 metre compared to the present one), depending on changes in the climate. Vegetation gradually increased in the originally clean water. In the surroundings until the Holocene coniferous gallery, then deciduous forests were characteristic, depending on the prevailing climate.

The average annual growth of the thickness of the lake sediment is 0,4 mm. However, it depends on the mire-moving effect of underwater streams, the depth of the lake, the extent of the lake surface, the climate and the offshore vegetation cover. The present amount of lake-mud (2,5-3,0 km³) in the bed of Lake Balaton is approximately 1,5 times as big as the volume of water (2 km³).

Bakonyi Nemzeti Park Geopark unesco

UGGp Products:

Aspiring aUGGps need to promote local products using clear criteria and formal partnerships. Partner aUGGp products need to be identifiable via its branding and the aUGGp logo. (Sales products can only use the Geoparks logo not the UNESCO one).



Fig. 26.32. Sales product: Local rice wine, Izu Peninsula UGGp, Japan (Geopark logo)



Fig. 26.33. Tea Product from Muroto UGGp, Japan (Geopark logo)



Fig. 26.34. Sales products from Katla UGGp, Iceland (Geopark logo)



Fig. 26.35. Ammonite cookie from Swabian Alb UGGp, Germany (Geopark logo)



Fig. 26.36. Cookies Langkawi UGGp, Malaysia (Geopark logo)

Communication Tools:

In addition to the physical tools discussed above, aUGGp visibility needs to include communication tools such as a website, leaflets, site maps and publications, etc.

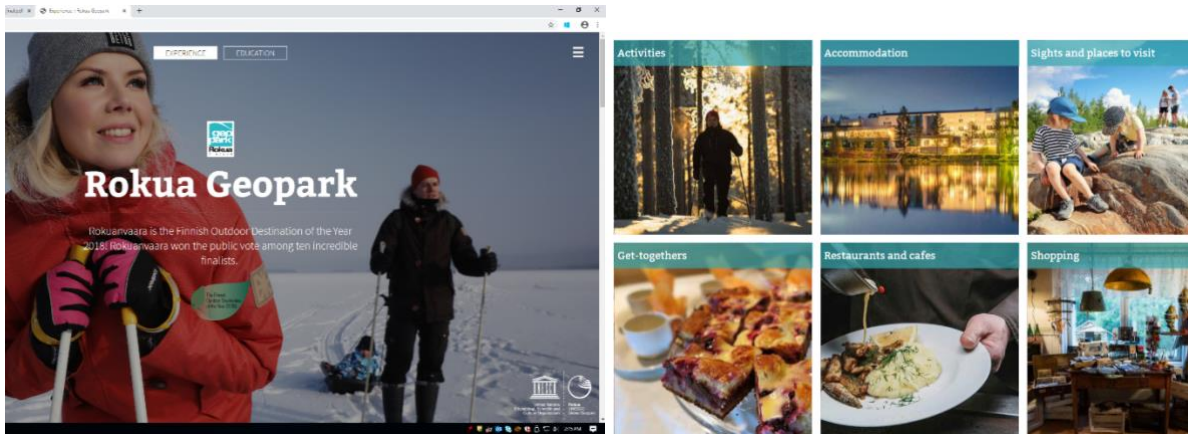


Fig. 26.37. Website after designation Rokua UGGp, Finland

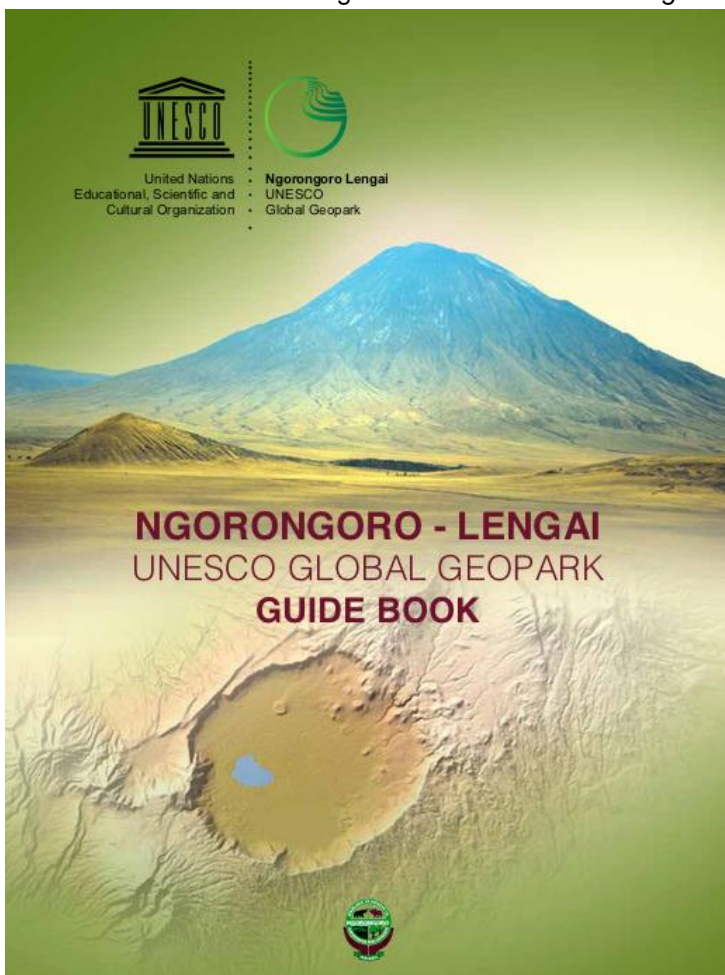


Fig. 26.38. Ngorongoro – Lengai UGGp guidebook, Tanzania, after designation

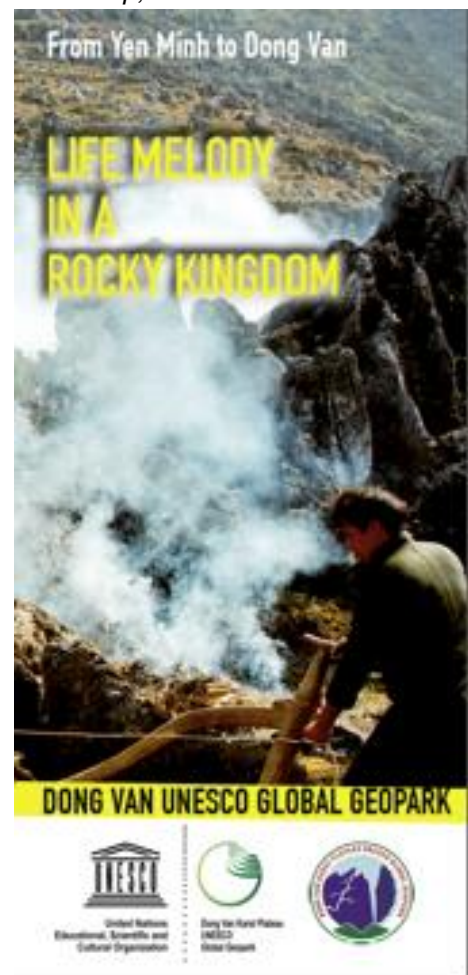


Fig. 26.39. Route leaflets after designation, Dong Van UGGp, Vietnam

Checklist Explanatory Notes for aspiring UNESCO Global Geoparks incl. use of new logo (2022)



Fig. 26.40. Promotional leaflet after designation, Itoigawa UGGp, Japan



Fig. 26.41. Route leaflets after designation, Dong Van UGGp, Vietnam



Fig. 26.42. Geopark app, Magma UGGp, Norway

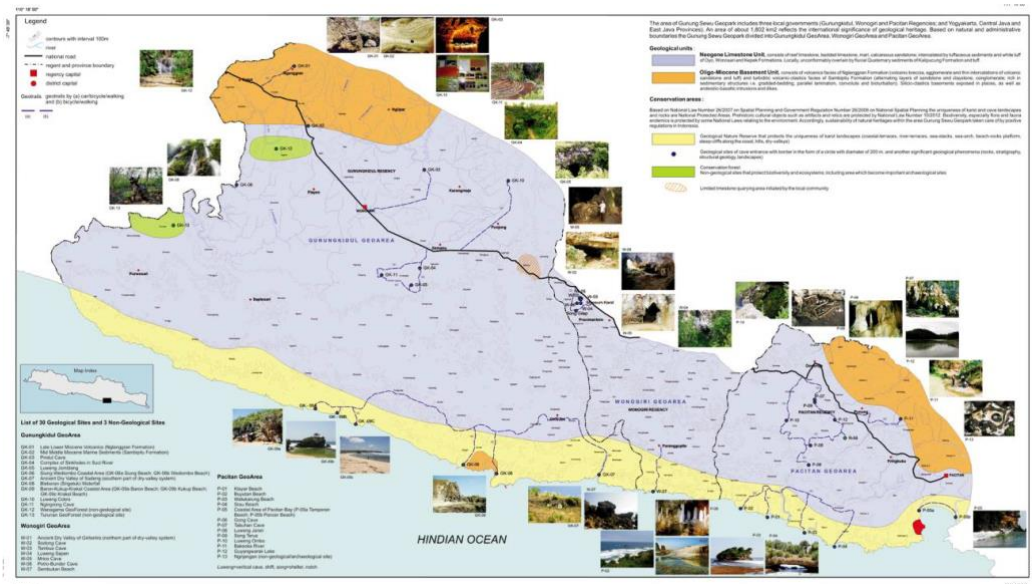


Fig. 26.43. Geopark map, Gunung Sewu UGGp, Indonesia

Q30 - Do you have an exhibition room or a museum presenting your aUGGp?

Aspiring UGGps should provide visitors and its publics with comprehensive information relating to the aUGGp (e.g., its territory, mission, sites, heritages, products), explaining the variety of potential visits to the points of interest of the area as well as activities, and showing the attractiveness of the area for visit potential. The aUGGp museum (or exhibition room) should be a storyteller for the territory (telling the stories of the past, present and future of the aUGGp and interconnecting its geological, natural and cultural heritage). The examples below demonstrate how established UGGps provide this information while targeting different audience and public.

UGGp Museum:

In many cases, this is a specific building, which can be focused on the specificities of the location presenting comprehensive information on the aUGGp.



Fig. 30.1. Museum, Qeshm UGGp, Iran



Fig. 30.2. Museum, Leye Fangshan UGGp, China

Museum Partner:

This can be either a new or pre-existing partner or a facility within an aUGGp territory focusing on a specific thematic. A formal partnership must be established with such a partner, the aUGGp should set up a permanent exhibit with this partner or facility.



Fig. 30.3. Gassendi Museum, partner of Haute Provence UGGp, France



Fig. 30.4. Lamminahon talo Museum, partner of Rokua UGGp, Finland

Information Centre:

Frequently, aUGGps establish a designated information centre to provide comprehensive information on the aUGGp to visitors and the general public. The centre and its facilities are generally of limited size and investment and act as an information focal point for visitors allowing them not only to acquire a whole range of information on the UGGp but also to benefit from direct contact with the aUGGp team.



Fig. 30.5. Info centre Cilethu-Palabuhanratu UGGp, Indonesia



Fig. 30.6. Info centre, Mount Apei UGGp, Japan

Q31 - Is the presentation text displayed in your information centre or museum, etc. available in English?

Q33 - Is your website available in English?

Q35 - Do you have leaflets, publications, etc. presenting your aUGGp in English?

UGGps are an international designation open to international visitors. As such, aUGGps should provide English translation for visitors and different publics in their Information Centres and Museums. There is also a need to provide translation in other relevant international or local languages, which can be determined by the aUGGp management body. The requirement for English translation also extends to other forms of communication such as the aUGGp website, maps, essential leaflets and key publications.

Q38 - Do you have formal partnerships with local stakeholders (restaurants, hotels, tour operators, etc.)?

To be able to provide sustainable development in a territory an aUGGp needs to establish multiple partnerships with local stakeholders such as hotels, restaurants, guest houses, outdoor activities, tour operators, guides, museums schools and universities, local communities and regions, protected areas authorities, NGOs and other relevant institutions. These partnerships need to be formalised through a standard signed agreement, which clearly defines the partnership criteria and commitments between the partner and the aUGGp. *As indicated in Question 26, all partnerships need to be visible and promoted within the aUGGp.*

Partnership Panels:

Aspiring UGGps need to develop formal partnerships with their stakeholders, like hotels, restaurants, guest houses, outdoor activities, tour operators, guides, museums, etc., outlining clear partnership criteria and common commitments. If applicable, these partnerships should be promoted on the internet and physically by using "partner plaques" which are often placed in the entrance of a partner's premises (for example A4 or A3 size plaques) and carry the aUGGp logo/branding.



Fig. 38.1. Partner plaque, before or after designation, Famenne Ardenne UGGp, Belgium (Geopark logo)

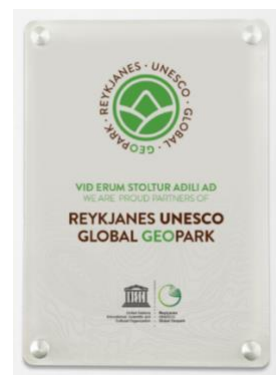


Fig. 38.2. Partner plaque, after designation, Reykjanes UGGp, Iceland (UGGp combined logo)



Fig. 38.3. Partner plaque, Hondsrug UGGp before and after designation, Netherlands



Fig. 38.4. Partner plaque, Villuercas Ibores Jara UGGp before and after designation, Spain

Q48 - Do you promote these relevant sites of natural heritage within your aUGGp

Aspiring UGGPs must promote their natural heritage sites connecting them to the biotic natural heritage, by, for example, organizing joint events, and information, communication, and education activities.

Q54 - Does your aUGGp have intangible heritage?

Intangible heritage definition (Convention for the safeguarding of the Intangible Cultural Heritage, 2003): Practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity.

It is manifested inter alia in the following domains:

1. Oral traditions and expressions, including language as a vehicle of the intangible cultural heritage;
2. Performing arts;
3. Social practices, rituals and festive events;
4. Knowledge and practices concerning nature and the universe including stories on natural hazards;
5. Traditional craftsmanship;
6. Local architectural techniques.

Q57 - Is your aUGGp involved in climate change and natural hazards adaptation and mitigation-related activities?

Climate change and questions around natural hazards should be a high priority for all aUGGps. The geological record shows the consequences of the past climate change on the development of our environment and biodiversity, as well as evidence for natural hazards. An aUGGp, therefore, can undertake educational activities related to both thematic, organize exhibitions, seminars, as well as work jointly with schools and educators.

Climate Change:

Aspiring UGGps have to play a vital role in promoting sites, which have been affected historically by climate changes and in explaining them to their visitors and the broad public. In areas where the local geology does not allow for this kind of geological interpretation, an aUGGp can still assume an active role by developing more general awareness and educational programmes related to climate change and environmental best practice. Like all areas of the world, aUGGps have to deal with environmental issues whilst also looking for green energy solutions, waste reduction schemes and carbon-neutral activities. They could, for example, organise awareness days, collect and recycle plastic waste, etc..



Fig. 57.1. Picking up trash day in Hong Kong UGGp, China



Fig. 57.2. Beach cleaning, Katla UGGp, Iceland



Fig. 57.3. Exhibition and activities using geological record to understand the consequences of climate change, Lesvos UGGp, Greece



Natural Hazards :

The aUGGp should take on the responsibility to initiate the development of research, surveys, monitoring and mitigation of natural hazards (landslides, earthquake, floods, volcanic risk, tsunamis, etc.) within its territory. Where relevant, this should be done in partnership with national or regional specialised agencies and be used in the aUGGp's visitor experience activities, educational programs, through specific publications and other media.



Fig. 57.4. On-site museum protecting houses damaged by last volcanic eruption- Unzen UGGp, Japan



Fig. 57.5. Volcanic risk education, Toya Uzu UGGp, Japan



Fig. 57.6. Earthquake educative table, Lesvos UGGp, Greece



Fig. 57.7. UGGp activity connected with natural hazards, Azores UGGp, Portugal

Q60 - Do you promote awareness/action for the sustainable use of aUGGp natural resources?

Sustainable development of a territory must include the sustainable use of natural resources. Aspiring UGGps need to promote awareness, action and/or educational programmes. For example, special attention should be given to the use of territorial water resources by establishing action and educational programmes to provide adapted initiatives on water management and use in each territory. Aspiring UGGps can also be innovative models for sustainable use of other natural resources.

Q63 - Are the local population and local leaders represented on the management body?

Aspiring UGGps should be established using a bottom-up approach, closely involving the local and indigenous population and their leaders. Policies concerning the future development of a territory, as well as territorial facilities, cannot be achieved and will not be sustainable without the participation and agreement of local authorities and key stakeholders.

It is essential that within the aUGGp decision-making processes of the management body, local leaders are represented (mayors, chiefs of the tribe or community, or elders, etc.) to participate in decision making regarding the development strategies of the aUGGp. The local and indigenous population (associations, interest groups) also need to be represented within the management body and should be able to participate in aUGGp decision making.

Q64 - Does your aUGGp have a permanent and professional working team?

An aspiring UGGp cannot achieve its mission and purpose without a unified permanent and professional team dedicated to its activities. The aUGGp team can be directly employed by the management body or the team can be constituted from individuals from different institutions or departments with a percentage of working time dedicated to the aUGGp. In the latter case, a formal partnership agreement should exist specifying the number of staff concerned, names, areas of specialization as well as the percentage of time dedicated to working for the aUGGp.

All aUGGp teams should have well-defined roles and responsibilities with professional skills that can be adapted to the needs of the aUGGp. Adequate training should be provided to ensure professional management and operations. Specific UGGp training is highly recommended through the UNESCO intensive course, UGGp workshops and the UGGp mentorship and knowledge exchange programmes.

Q65 - Does your team include a geoscientist working within your aUGGp on a daily basis?

Geoheritage of international geological value is the core of an aUGGp. It is therefore important that at least one geoscientist is included in its staff, available on a daily basis, in support of the management and interpretation of geological sites and related activities.

Q68 - Do you have an aUGGp management plan or a main general concept for it?

For management bodies to be properly equipped, all aUGGps need to have a vision document, setting out their strategy and main concept for future development. Management plans take time to develop and establish and need to be realistic and achievable. Therefore, a fully elaborated management plan will be checked in detail during the first revalidation of a UGGp.

A management plan can, for example, follow the formal structure of the candidate dossier or UGGp progress reports in order to provide a clear outline for actions and planned targets in a clear structured manner for at least a period of four years. In that sense, the management plans could include:

- Geopark personnel and capacity building
- Geoconservation strategy including protective and conservation measures and activities
- Heritage interpretation infrastructure, tools and publications
- Geoeducation strategy including partners, educational programmes and tools
- Geotourism⁴ strategy including services and activities
- Sustainable local development, partners and activities⁵
- Geopark promotional activities and tools
- Networking and Partnerships

Q70 - Have other UNESCO designated sites been informed about the aUGGp existence and does it positively support the development and concept of your aUGGp?

An aUGGp needs to be mindful that it is part of the UNESCO designated sites (World Heritage Sites, Biosphere Reserves, UGGps) and therefore should have policies and mechanisms in place to work collaboratively with any other of the UNESCO designated site present within its territory.

Q71 - Have you clearly examined the complementarity of your aUGGp with this other UNESCO designated site?

If a UNESCO designated site exists within an aUGGp territory, the aUGGp should meet the management team of this site before applying for candidature, to explain how their project will operate and reflect jointly on how the aUGGp will provide complementary activities with the other designated site. In such cases, a letter of support should be provided by the other UNESCO designated site(s) to acknowledge general support for the aUGGp candidature.

Q75 - Do you have a formal partnership agreement with the other designated site(s)?

Cooperation and partnerships between different UNESCO designated sites within the same territory should be subject to a formal partnership/cooperation agreement. Formal agreements define and clarify the different territorial responsibilities between the UNESCO designated sites and will establish the common commitments between them like shared training, collective actions, partnered activities, etc..

⁴*Arouca Declaration on Geotourism :*

http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/Geopark_Arouca_Declaration_EGN_2012.pdf

⁵ *Accompanied by a co-management plan, setting out the partnership with local and indigenous communities where relevant.*

Q91 - Networking

Networking among UGGps and with the GGN community helps exchange good practice and joint programmes and projects, among others. By visiting other UGGps one can see not only how a UGGp is operating but also what type of networks exist, with their different partnerships.

Please note the difference to UGGp partners located within the UGGp territory, dealt with under question 38. These partners are part of the UGGp stakeholder group.

Q98 - Is selling of geological material occurring inside your aUGGp infrastructure or in an aUGGp partner infrastructure?

UGGp guidelines (vii) clearly define the UGGp responsibilities concerning the selling of geological material. Therefore, the aUGGp cannot support, promote or sell geological material in any of its facilities like Museums, Info Centres and shops. This also extends to aUGGp partner premises and buildings.

An aUGGp should be used as leverage for promoting the protection of geological heritage locally and nationally. The management body must not participate directly in the sale of geological objects such as fossils, minerals, polished rocks and ornamental rocks of the type normally found in so-called “rock-shops” within the aUGGp (regardless of their origin) and should actively discourage unsustainable trade in geological materials as a whole. Where clearly justified as a responsible activity and as part of delivering the most effective and sustainable means of site management, it may permit sustainable collecting of geological materials for scientific and educational purposes from naturally renewable sites within the aUGGp. Trade of geological materials based on such a system may be tolerated in exceptional circumstances, provided it is clearly and publicly explained, justified and monitored as the best option for the aUGGp in relation to local circumstances. Such circumstances will be subject to approval by the UNESCO Global Geoparks Council on a case-by-case basis and should be clearly indicated in the application file.

Abbreviations	
aUGGp(s)	Aspiring UNESCO Global Geopark(s)
UGGp(s)	UNESCO Global Geopark(s)