



# Paths to the Digital Future

Solutions for the Digital Challenges in Protected Areas  
- The Example of the National Natural Landscapes in Germany

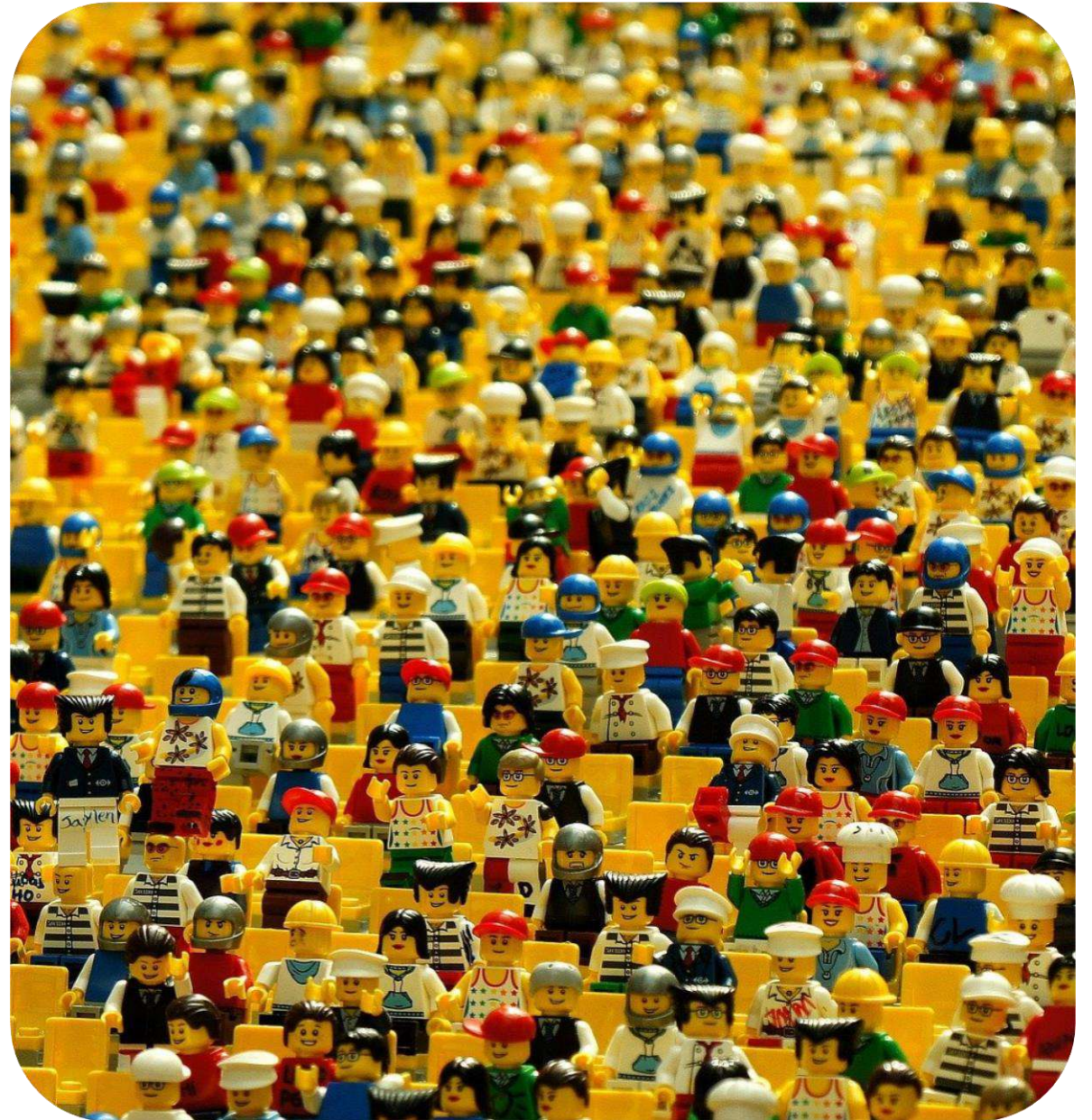
**Nationale  
Naturlandschaften**





# The sufferings of protected areas are well known everywhere...

Too many *insensitive* visitors in *sensitive* nature and no one knows the rules.





# French nature parks warn of 'harmful effects' of mass tourism

Amid uncertainties surrounding the evolution of Covid-19 and border restrictions, many French people are choosing to explore their own country instead of heading abroad for summer holidays. The implications are not all positive.

Issued on: 09/07/2021 - 08:23 3 min



The Ecrins park in south-eastern France saw a huge increase in visitor numbers in 2020. © AFP/Philippe Desmazes.

## Selfies make a new brand of tourist

Social media tourism is drastically changing who and how many of us go to places such as

[Figure Eight Pools](#) in Sydney's Royal National Park or [Josephine Falls](#) not far from Cor

As one land manager told us:

**Mass tourism: finding a balance between environmental conservation and personal liberty in the age of Instagram**



## It's not sustainable: overcrowding is changing the soul of US national parks



Instagram Travel records

## Instagram Wenn Likes und Geotags die Natur zerstören

Tausende Menschen kletterten zu einem natürlichen Becken oberhalb des Königssees in Bayern, um sich in Pose für das Netz zu fotografieren. Der Run auf die perfekten Instagram Spots macht mittlerweile vielerorts Probleme.

06.07.2021 um 14:23 Uhr · Pla Steiner - in Kultur · 3 Ergänzungen



Commonly the Infinity Pools lockte Tausende an den Königsbach. AGO / Roland Müllberger

## Faced with too many tourists, France's natural sites push back

Several of France's heavily visited natural sites are sounding the alarm. Access to some of the Calanques coves in Marseille and Corsica is now limited in order to limit erosion. Other villages struggling with mass tourism, such as Étretat in Normandy, are rethinking how they handle the influx of visitors.

Issued on: 10/07/2021 - 17:13 4 min



Visitors stand atop the Étretat cliffs in Normandy on November 7, 2021. © AFP (Archiv)

**The Consequences:**

- Damage to nature
- Pressure on the environment
- Dissatisfied tourists
- Conflicts with local communities

**Spain is the second-most visited country in the world - but huge visitor numbers are taking their toll on some of its most beautiful spots.**

Spain is known for its white sand beaches, rugged landscapes, and sweeping vistas.

But these beautiful landscapes are under threat from the trampling and mistreatment from thousands of tourists.

According to a [survey](#) by Eco-un Spain's national parks every year

**'Captured the public zeitgeist': Court to hear appeal against England wild camping ban**

Dartmoor ruling has sparked mass trespasses that may lead to biggest shake-up of land rights in a generation

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PREZEITKOLLAPS  
**Overtourism in den Bergen: Bayerische Alpen im Urlaubsstress**



## Overpopularity Is Nearly Destroying the National Park Experience



Wild camping protesters held placards and flags as they gathered in the village of Cornwood on the edge of Dartmoor, in south-west England, in January 2023. Photograph: Adrian Dennis/AFP /Getty Images



# Information sources and navigation during the hike

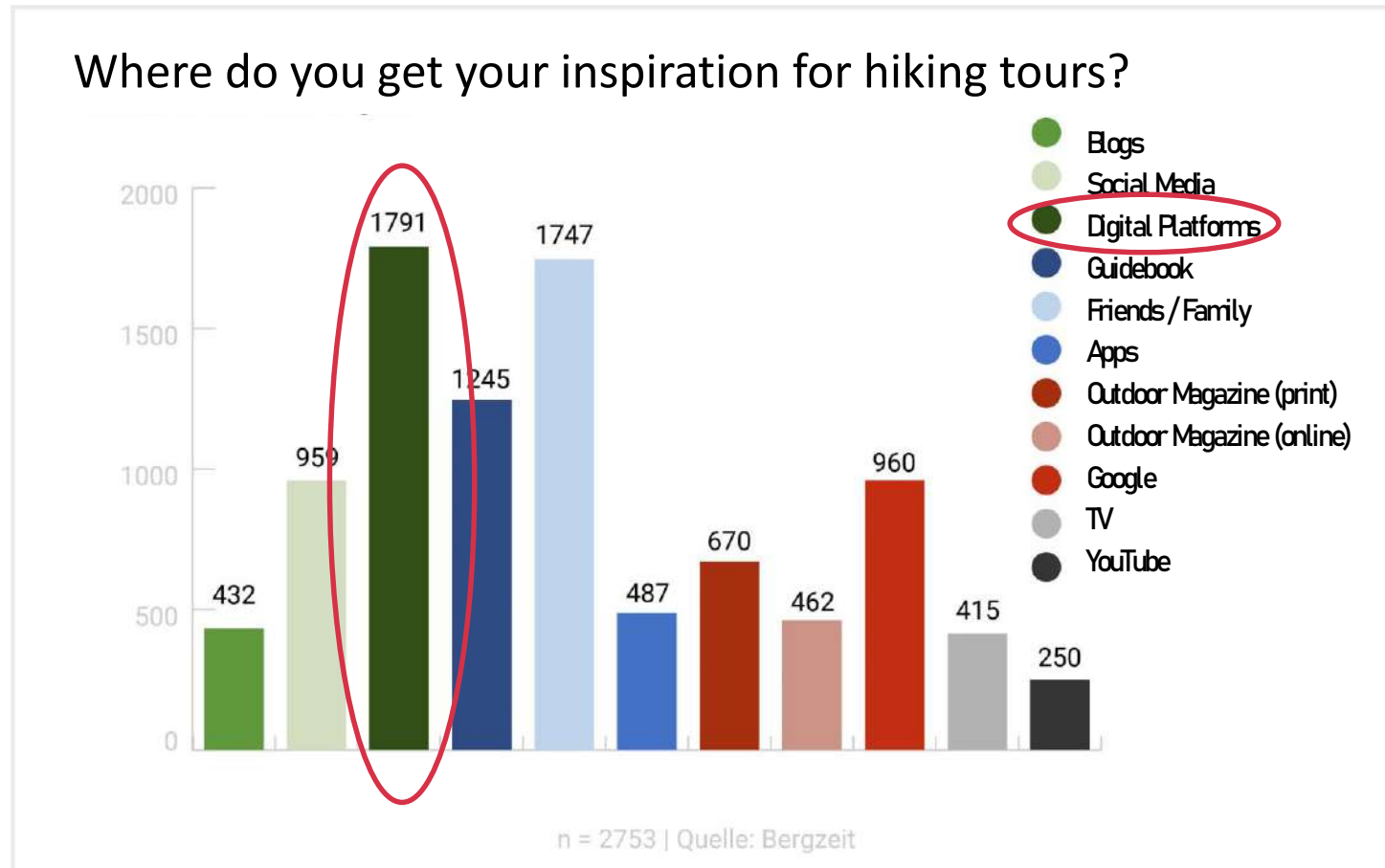
Analog information sources like signs and maps are becoming less important to visitors of all ages, making them less guidable on the site by traditional means.



especially first time visitors!

# Digital tour planning is on the rise

To find new tours, 65% of respondents use tour platforms such as Outdooractive or Komoot as their main source of information.



We as protected areas are in risk of increasingly playing the role of mere observers!

Hiking survey 2021, Bergzeit

# The tour starts long before the departure...

Only with digital information can guests be reached before they arrive at their destination.

How does the information get to where it is used?





# Strategies in German Protected Areas

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## The Challenge:

How can we protect particularly sensitive areas and at the same time offer impressive nature experiences for guests?

# Establishing partnerships with outdoor platforms



## Results

- Free partner accounts for all PAs incl. training courses
- Deletion of illegal highlights and routes in core zones of PAs possible (**worldwide, when OSM protected class = 1**)
- Komoot reads all data from OSM, no other data source
- Komoot informs visitors if their route goes through a PA and asks for compliance with local rules (so far, rules are not directly played out in Komoot)
- New landing page on the topic "out and about in PAs" with rules of conduct



## Results

- Free Pro Accounts for all PAs incl. training courses
- Rules and regulations are integrated into platform. Prohibited content cannot be published by users → **PAs keep data and communication sovereignty**
- PAs can digitize own routes and information as well as third-party offers and manage them centrally online; heavily visited POI can be moved to the back; it is also possible to display routes on OA via an interface on own website
- Setting up bookable offers and thus digitizing the booking process for e.g. ranger tours



# Work with and on OpenStreetMap

## OpenStreetMap / OSM

- Large database for many map services / tour portals, e.g. for Komoot
- Data can/must be maintained by the user
- Permanently the only way to maintain trails
- Many protected areas do not have the know-how
- Staff must be trained!



# Staff for „Digital Visitor Management“ in Protected Areas

**It is necessary for protected areas to get to grips with digital media in order to minimize conflicts on the one hand and exploit potentials of digital visitor management on the other.**

- **Objectives:** To guide and inform visitors about the protected areas and rules of conduct in digital media
- **Focus areas:** Editing OpenStreetMap and using different types of media, e.g. tour portals, online map services, social networks, hiking and outdoor blogs for the own visitor management

**Digital Visitor Managers** are already in place in the National Parks of Saxon Switzerland, Bavarian Forest or Eifel... more will follow...

It's a start, but many protected areas continue to lack capacity!



# DIGITIZE the Planet

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# Digitize the Planet...



...is a non-profit association representing stakeholders from outdoor sports, nature conservation and destinations.

Goal is to digitize the rules for the use of nature as opendata and to disseminate them among platforms.

DIGITIZE offers for the first time a solution WORLDWIDE for the urgently needed digitization of nature conservation!



# The challenges have been sufficiently discussed. We want to be part of the solution.

## These are not our tasks

- We do not moderate local conflicts on the ground.
- We do not create new rules.

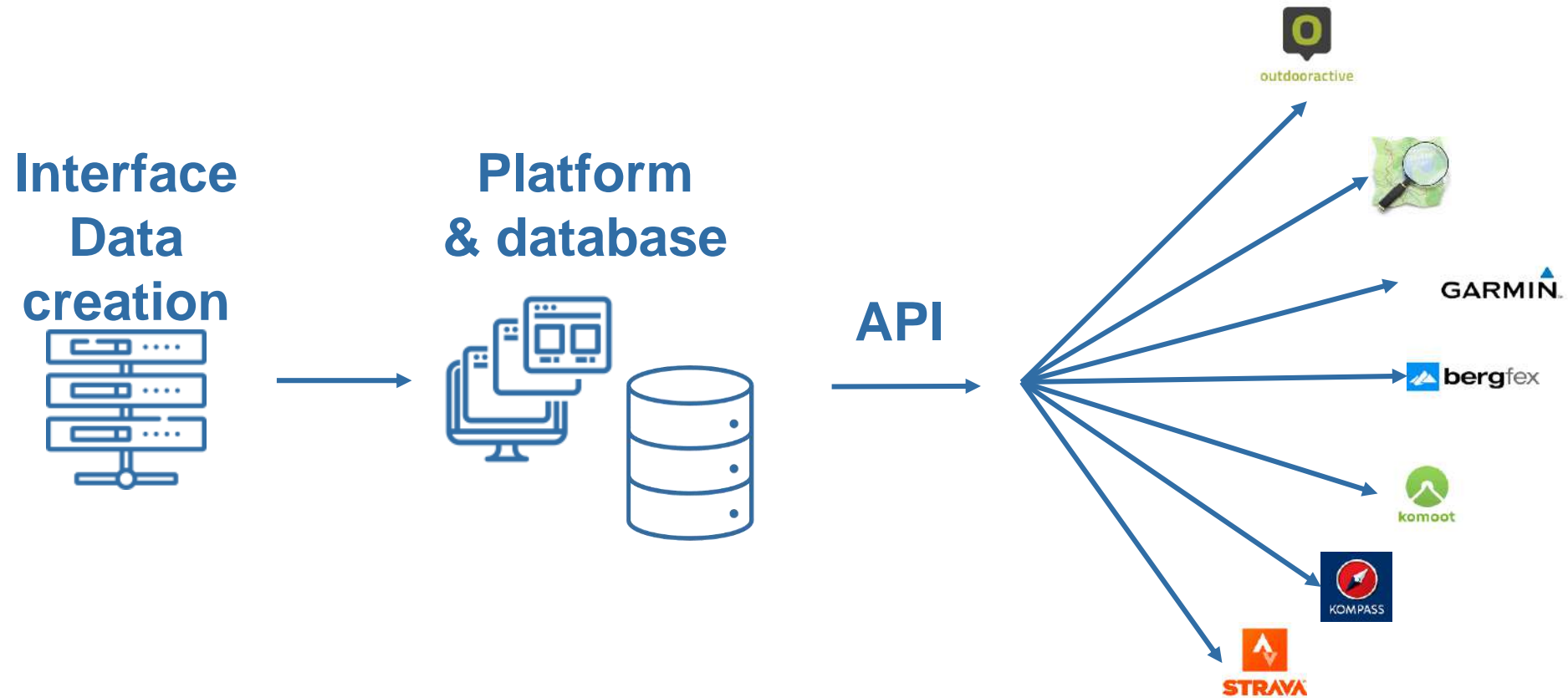
## Five key tasks

1. screen rules and regulations
2. create digital mapping format
3. create data
4. disseminate data
5. educate



# OPEN DATA HUB

**Bundle information and data from different services and authorities in one data hub and use it as Open Data via the API in all channels.**





# Members of DIGITIZE the Planet



outdooractive



Nationale  
Naturlandschaften

alpenverein  
österreich



LOWA  
simply more...



Respektiere  
deine Grenzen



Bad Urach



Landkreis  
Ostallgäu



hubermedia



Südliche  
Weinstrasse  
Zum Wohl. Die Pfalz.



SÖLKTÄLER  
NATURPARK

Zum Wohl.  
Die Pfalz.

green-solutions



KOMPASS

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POLYMORPHE  
DESIGN

Biosphärengebiet  
Schwarzwald



David  
Wewetzer



Bayern



VENUS

bergzeit

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Alexander  
Dingeldey



Kanton  
Obwalden



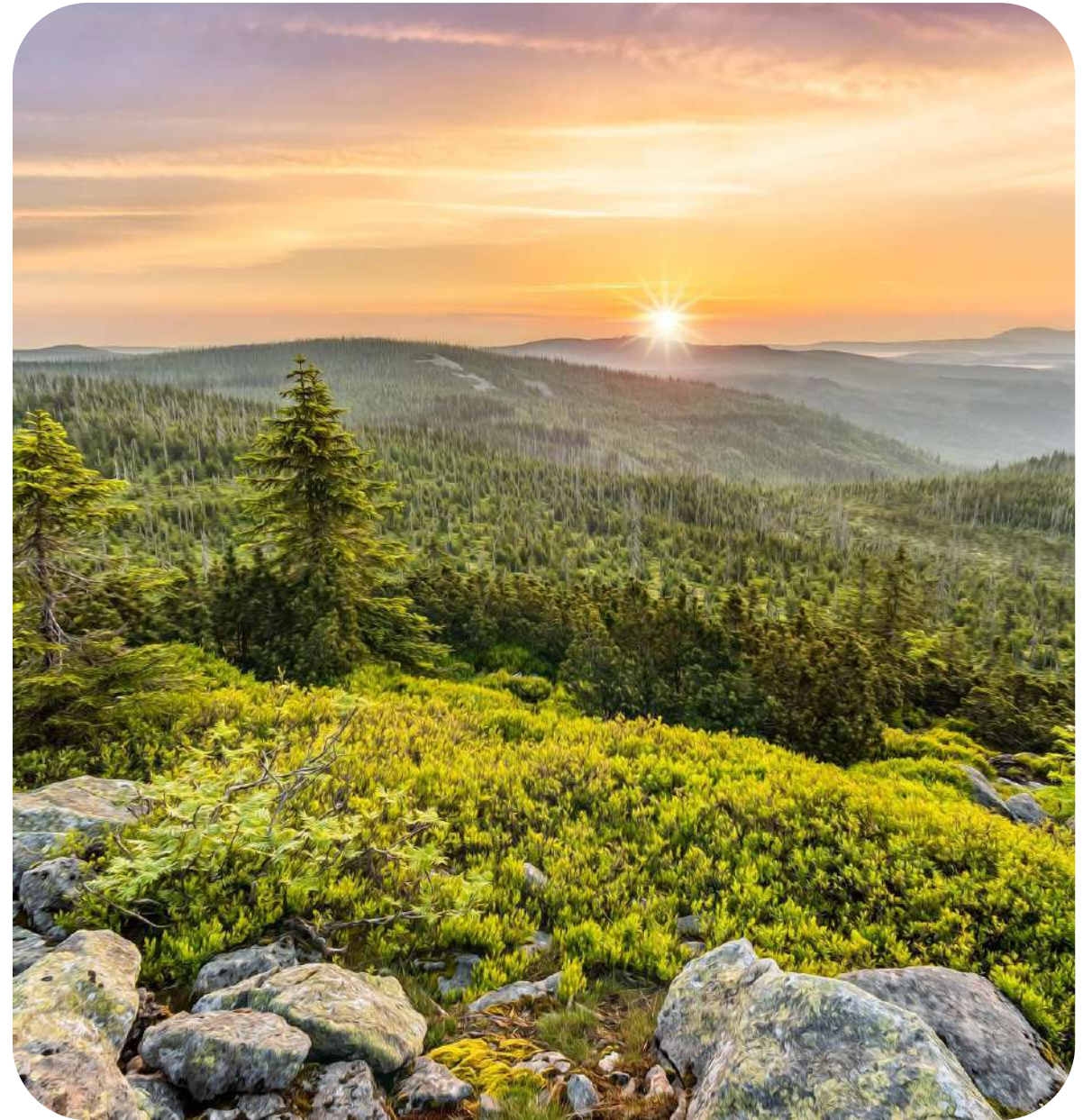
Deutscher  
Skilehrerverband

# Outlook

**We are all part of the problem. Let's become part of the solution.**

- We are only as strong as we are together: This great challenge can only be mastered together!
- We want to create a global dataset of all protected areas that includes baseline data and rules. We support all digital platforms to use this data through our API.

**We invite you to join!**





# Now it's your turn – be part of your own solution

## Let's think & discuss!

To boost digital visitor management in my own protected area:

1. **What can I do in my protected area? What is in my hands?**
2. **What can others do? What partners do I need?**

Think about it for five minutes and then let's gather the answers and find out what we can all accomplish with the right partners!



*„Anything that is against nature will  
not last in the long run “*

Charles Darwin

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