

GLOW2.0 Capacity Building and Training Program Series of Modules

GLOW2.0 capacity building and training program's contents are based on a survey conducted with SMEs and stakeholders from all four participating regions in the project (Finland, Norway, Iceland and Ireland d 1.4.2023 – 15.5.2023), and on partners' own knowledge of each region's specified needs. Capacity building program's series of modules have been categorized in three sections that match with the project's work packages.

The modules lay a groundwork for assembling a series of actions for example workshops, seminars, webinars, printed or digital study materials, that can be tailored specifically for different regions' needs while at the same time preserving the capacity building program's thematic consistency as a whole. Categorization will also help partners in organising their regional activities without unnecessary overlap between different work packages' actions and capacity building program execution.

Although there is some linearity within some sub-modules, for example 1.1. Service design, the categorisation is not meant to be a chronological presentation of the capacity building and training program but preferably as a selection of essential themes from which each partner can build their own training program best suited for their stakeholders' needs.

GLOW2.0 Capacity Building Program Modules

Module 1 Marketing awareness and skills and networking for regional impact (WP1)	Dark sky concept in product – service development	Service design
		Identifying your customers, customer-based service creation/adaptation, creating a value proposition
	Networking for regional impact, added value from creative industry & food providers	Storytelling
		As added value in tourism offerings: Local legends, oral traditions, regional and global mythologies relating to dark skies, tourism actor's own stories as part of service
Module 2 Enhancing technical capacity in using immersive and other digital technologies (WP2)	Immersive and other technologies applications in tourism	As a competitive edge in tourism: Using storytelling in marketing and as part of service.
	Testing of technologies as base for ideation	Transnational and regional networking
	Dark sky in sustainability science	VR, AR and other technologies: differences and adaptation in tourism business; case studies
Module 3 Improving knowledge of dark skies science concepts and technologies and techniques for preserving dark skies (WP3)	Dark sky as added value to tourism	Low threshold testing events for selected groups of SMEs and organizations
	Responsible/ sustainable dark sky tourism	Learning light pollution basics. What is light pollution and how to control it. Effects on human, animal and vegetation health, and on biodiversity
	Tourism logistics	How to utilize dark sky themes in tourism offerings basics: Case studies of dark sky tourism as a niche tourism sector. Regional nocturnal fauna and flora, phenomena of the night skies, local legends and traditions as sustainable content
		Dark sky certifications: different certifications available and criteria as added value

Module 1 - Marketing awareness and skills, networking for regional impact (WP1)

In module 1, the dark skies' potential as a possible added value to tourism offerings is studied by means of service design, storytelling and networking.



1. Dark sky concept in product & service development

In order to successfully market dark skies products, SMEs and other stakeholders must first identify their customers' needs, expectations and channels of communication to reach the right segments. Service design and storytelling can be effective in achieving these. The Dark Sky Concept in service and product development. Service design methods will be used in identifying customer needs and expectations, while storytelling will be used to demonstrate ways by which product and service providers can add value to tourism offerings and/ or form competitive edge.

1.1. Service design

Service design is a method and a mindset for creating customer-centered services and products (vs. organisation centered service creation), that is useful in many areas of development from small businesses to public service systems. Service design consists of three features **a=Basis**, **b=Creation** and **C=Selling**, that can be applied separately or together.

Service design

Basis: Identifying your customers: customer personas, gathering info and feedback

Creation: Customer-centred service creation & adaptation - journey mapping, service testing

Selling: Creating a needs-based value proposition for dark skies tourism offerings

a. Basis: Identifying your customers, customer personas, gathering info and feedback

Focuses on identifying customers and their special features based on each SME's and stakeholders own best knowledge of their clientele by:

- i) describing different types of customer personas for dark sky tourism offerings to be used transnationally
- ii) using various methods to collect feedback from customers (i.e. surveys, observations, interviews etc.) to use in ongoing product and offering development

Methods: workshops, 1:1 sessions, study materials

Tools: customer persona worksheets, information and feedback forms

b. Creation: Customer-centred service creation & adaptation, journey mapping, and service testing

Builds upon **Basics i.e.** the ideation on new dark sky offerings or developing existing ones towards the dark sky thematic, based on what information has been gained on customers in earlier workings. The aim is to recognise critical points of development by:

- i) reviewing own services and offerings from the customers' viewpoint via customer journey mapping;
- ii) testing created services and offerings in small scale and early stages to minimise financial losses.

Methods: workshops, 1:1 sessions, small scale product testing

Tools: Customer journey mapping worksheet

c. Selling: Creating a needs-based value proposition for dark skies tourism offerings

This builds upon **a. Basis** and **b. Creation**. The aim is to recognise own services' or offerings' unique selling points by:

- i) focusing on value producing points for customers and creating an effective value proposition to be used in marketing and selling the product;
- ii) presenting creations for other SMEs and stakeholders by giving and receiving peer-to-peer feedback (see also **1.2. Networking for regional impact**).

Methods: workshops, 1:1 sessions, networking meetings

Tools: Value proposition worksheet

1.2. Storytelling

This focuses on various ways storytelling can be effectively used by a tourism business to (a) add value to offerings and/ or (b) form a competitive edge.



a. Storytelling as added value

Integrating local legends and narratives, oral traditions and regional/global mythologies relating to dark skies into tourism offerings can bring more meaning and insight to visitors' experience. This introduces the tourism product or service provider to experience design, a study of mechanism of creating stronger memories and deepening the meaning of one's experience. The aim is to elevate tourism offers to meet visitors' expectations, and possibly exceed them by:

- (i) bringing forth tourism actors' own stories and histories in offered services;
- (ii) studying how service itself can work as a story by use of dramatic structure to produce more memorable and thought-out services.

Methods: workshops, study materials, webinars/seminars

Tools: Dramatic structure in service worksheet

b. Storytelling as a competitive edge

How to use stories and legends in marketing and selling tourism offerings; what stories and legends to tell and when to tell them. Storytelling as a competitive edge focuses on ways of enriching visitors' experience during service through storytelling. Stories and legends work also as marketing: the best stories and experiences are those that visitors will share with others (recommendation marketing).

Methods: workshops, study materials, webinars/seminars

Tools: Tourism offering productization worksheet

2. Networking for regional impact, added value from creative industry and food providers

Regional and transnational networking play significant roles in creating successful, interesting and versatile tourism offerings, and learning from best practices across the NPA region. It is important to provide opportunities for regional networking for SMEs and other stakeholders with similar interests i.e. developing dark sky themes. Bringing together companies from different sectors can generate new innovations in tourism.



Online and offline networking events aim to create direct engagement among tourism businesses, tourism support organisations (DMO, TAs, etc) and to

promote collaboration. The events also offer opportunity for peer-to-peer learning, and feedback on tourism offerings being developed.

Transnational networking is provided in form of learning journeys and other events, mainly online. The transnational networking events are forums for peer-to-peer learning, disseminating information and best practices, and creating connections among the participants and consortium of partners.

Methods: Online and offline events, gatherings, learning journeys and workshops

Module 2 - Enhancing technical capacity in using immersive and other digital technologies (WP2)

Module 2 aims to increase SMEs' and stakeholders' technical abilities and knowledge on how to best utilize immersive and other digital technologies in dark skies tourism offerings and business development. This will also enhance their capacity to utilize the virtual planetarium being developed by the project. These will consist of (a) knowledge-based events about immersive and other technologies applications in tourism, and (b) low-threshold testing events as a basis for ideation.



2.1. Immersive and other technologies applications in tourism

The aim is to gain knowledge about immersive technologies, their potential applications in tourism and the differences between technologies, e.g. virtual reality (VR) and augmented reality (AR), 360 photography, and night photography/videography.

Immersive and other technologies applications in tourism

VR and AR technologies: differences and adaptation in tourism business; case studies

360 photography and video

Night photography

The focus will be on:

- (i) VR and AR technologies in tourism business shown via case studies and possibilities how to adapt these technologies
- (ii) other possible technologies, competence levels, and resource requirements

Technologies will depend on participating SMEs' and stakeholders' interests in the various participating regions.

Methods: Online and offline events, workshops

Tools: Learning materials

2.2. Testing technologies as base for ideation

Low threshold testing events will be offered for selected groups of SMEs and organizations. Giving companies first-hand experience on VR and AR technologies will help them to integrate these technologies into their business operations and service development.

Testing of technologies as base for ideation

Low threshold testing events for selected groups of SMEs and organizations

Methods: workshops, offline events

Tools: Learning materials, technologies e.g. VR testing, testing virtual planetarium content during learning journeys.

Module 3 – Improving knowledge of dark skies science concepts and technologies and techniques for preserving dark skies (WP3)

In module 3, SMEs and stakeholders will learn about light pollution and its effects on human health and visitors’ wellbeing. There will also be education on biodiversity loss and how to prevent or reduce it. SMEs and stakeholders will be presented with the benefits and added value of dark skies that they can use to create tourism products. By the end of the study module the participant understands how to provide responsible and sustainable dark sky tourism experiences.

<p>Module 3 Improving knowledge of dark skies science concepts and technologies and techniques for preserving dark skies (WP3)</p>	<p>Dark sky in sustainability science</p>	<p>Learning light pollution basics. What is light pollution and how to control it. Effects on human, animal and vegetation health, and on biodiversity</p>
	<p>Dark sky as added value to tourism</p>	<p>How to utilize dark sky themes in tourism offerings basics: Case studies of dark sky tourism as a niche tourism sector. Regional nocturnal fauna and flora, phenomena of the night skies, local legends and traditions as sustainable content</p>
	<p>Responsible/ sustainable dark sky tourism</p>	<p>Dark sky certifications: different certifications available and criteria as added value</p>
	<p>Tourism logistics</p>	<p>Responsible and sustainable dark sky tourism; good practices for services happening in the dark</p>

3.1. Dark sky sustainability science

Dark sky sustainability science consists of three sections about light pollution, its effects and prevention.

<p>Dark sky in sustainability science</p>
<p>Basics of light pollution: sources of light pollution, information and impact of light pollution growth globally and regionally</p>
<p>Light pollution effects on tourism: effects on human, animal and vegetation health, and on biodiversity</p>
<p>Economic impacts of light pollution</p>

a. Basics of light pollution

Sources of light pollution and different ways light pollution appears; for example glare, clutter and light trespass. Information about global and regional light pollution growth, challenges, and impacts.

b. Light pollution effects on tourism

Light pollution effects on human health and wellbeing. Light pollution effects on biodiversity (insects, animals, plants). The relation between light pollution, tourism and visitor wellbeing. Scientific information provided about the theme.

c. Economic impacts of light pollution

Poor lighting design can cause financial losses but is easily avoidable through, for example, the right direction and intensity of lights.

Methods: workshops, online and offline events

Tools: Learning materials

3.2. Dark sky as added value in tourism

In this section we will study how dark sky themes can produce sustainable content, enrichment and added value in tourism products.



Dark sky tourism is approached as a niche tourism sector that can provide offerings also for a wider audience. For example, points of view for value creation could be:

- Astronomy, stargazing and the seasonal phenomena of night skies
- Regional nocturnal fauna and flora e.g.
- Local legends, oral traditions, regional and global mythologies
- Dark sky certification: different certifications available and criteria

Case studies build a base for a hands-on approach to the subject.

Methods: workshops, online and offline events

Tools: learning materials, digital library of dark sky related stories

3.3. Responsible & sustainable dark sky tourism

This section will focus on basics of sustainable and responsible dark sky tourism. It will offer good practices for services happening in the dark and information about responsible and sustainable tourism. Sustainability and responsibility in tourism services, e.g. in logistics, activities, accommodation and food services.



Methods: workshops, online and offline events

Tools: Learning materials

FURTHER INFORMATION

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Link to project website: [NPA GLOW2.0](#)

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