









Union for the Mediterranean Union pour la Méditerranée الاتحاد من أجل المتوسط

ORIENTATION PAPER MED CLUSTER Innovation and Technology Capacities



by Community4Tourism





















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Table of Contents

1. Introduction and explanation of the topic covered by the MED Cluster Innovation and Technology Capacities
2. State of the art from the International, European and Mediterranean perspective
UN Tourism: a methodology for tourism innovation
3. The projects' approach
TOURISMO - TOURism Innovative andSustainable ManagementSustainable ManagementSMITour - SMart Industrial Tourism in the MediterraneanLIBECCIO - SustainabiLity of tourism By EnhaCingCooperation and digital transformationMedDiet Go - Med Diet identities - from territorialnetworking to cluster organizationNotematical
4. Main challenges and topics for discussion identified 11
5. Key documents



2







1. Introduction and explanation of the topic covered by the MED Cluster Innovation and Technology Capacities

Innovation is not only about technology and its use, but it also concerns capacities, cooperation and business models for sustainable development. In fact, following the direction of the Interreg Euro-MED programme, the main priorities useful to adopt innovation in tourism are connected to the use of smart technologies (Smarter Mediterranean Priority) to:

- improve innovation capacities, competitiveness and internationalisation of tourism SMEs confronted with international competition in economic activities linked to tourism;
- strengthen Smart Specialization Strategies, promote advanced technology (digitalization is now more than ever an enabler of a sustainable economy) and non-technological innovations in the tourism sector;
- strengthen cooperation between stakeholders of the quadruple hélix in the tourism sector, considering the environmental dimension in their activities;
- reinforce tourism as a growth sector supporting environmental and climate change initiatives and representing important job potential;
- support **new business models** oriented to the generation of shared value and cultural and creative industries in a post-Covid context.

These broad targets can be achieved with activities and actions where innovative strategies, processes and approaches are applied, developing different types of solutions and tools for:

- i. the development of value chains in the tourism sector and setting up transnational cooperation patterns with tourism clusters;
- ii. enhancing transnational cooperation among 4 helix stakeholders in the tourism sector;
- iii. the implementation, monitoring, and evaluation of Research and Innovation;
- iv. Smart Specialisation (RIS3 strategies) in the tourism sector;
- v. skills development and capacity building of public institutions for the implementation of RIS3 strategies in the tourism sector;
- vi. strengthening the competitiveness, internationalization, and sustainability of tourism SMEs, promoting technological and non-technological innovations;
- vii. assisting tourism SMEs in extroversion and transnational and/or international cooperation;













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- viii. establishing sustainable business development practices for tourism SMEs;
- ix. acceleration of technology transfer and digital transformation to be applied in the tourism sector;
- x. promoting climate-friendly innovations in tourism activities;
- xi. enabling tourism SMEs to turn environmental challenges into opportunities;
- xii. promoting entrepreneurship and cultural and creative industries in the tourism sector;
- xiii. the effective change in tourism practices promoting destinations sustainability and "responsible tourism" practices;
- xiv. the management of tourism flow during the high season;
- xv. a sustainable recovery of the tourism sector in the aftermath of the COVID-19 crisis;
- xvi. the improvement of data collection, management, and sharing in the field of sustainable tourism;
- xvii. the establishment of knowledge networks focused on both enabling knowledge transfer in the area of data collection and tourism research, and initiating and conducting research on topics related to innovative tourism practices.

The implementation of these targets will be evaluated and prioritised in this document with the collaboration of the projects part of the innovation cluster and with external experts involved in the 1st Annual Meeting of the Clusters.

2. State of the art from the International, European and Mediterranean perspective

In the following section, a brief description of the topic of innovation has been developed taking into consideration different governance scales.

UN Tourism: a methodology for tourism innovation

UN Tourism defines innovation in tourism as a "collaborative action between governments, academia, corporations, micro, small and medium enterprises (MSMEs) and start-ups, investors, supporting business partners (accelerators, incubators, etc.) and other stakeholders". This definition illustrates **more the methodology** to achieve innovation rather than the topic itself. Innovation is reached fostering the tourism ecosystem through the active role of all stakeholders in collaboration opportunities and prioritising capacity building in tourism and technology. The pathway to innovation in tourism described by UN Tourism enlarges the quadruplehelix methodology involving six types of different stakeholders:



4





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Governments & Public Entities policies that foster innovation, trade and the adoption of technologies, generally promote innovation in tourism.

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• Academia creates frameworks and models on sustainable innovation in tourism, smart destinations, contribute knowledge to Governments, Startups, MSMEs and Startups and Supporting Business Partners.

Corporations develop new technologies, raise awareness internally about innovation, implement an organizational structure and vision for technology, invest in open innovation.

Start-ups & MSMEs (micro, small and medium enterprises) develop and implement disruptive technologies in tourism, satisfy and reflect the needs and demands of travelers, create innovative solutions in tourism that support the SDGs.

Investors invest in sustainable projects related to tourism and technology, support the growth and <u>internationalization</u> of Corporations, Destinations and MSMEs and Startups.

Supporting Business Partners support Startups that are directly or indirectly impacting the tourism value chain.

The main dimensions of what stakeholders need to work towards to reach innovation are briefly drafted and concern the adoption of new technologies, the innovation for sustainable development, the satisfaction of visitors and the internationalization approach.

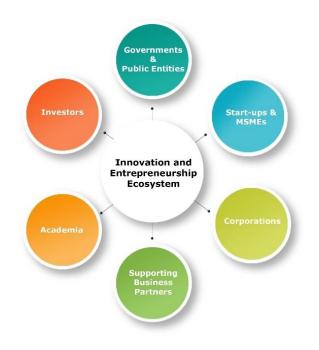


Figure 1 - Innovation in the tourism ecosystem (source UN Tourism)









OECD: innovation as a process for tourism development

Another international institution, the Organisation for Economic Co-operation and Development (OECD), puts attention on the tourism policy with a focus on the **promotion of innovation** itself. In this context, innovation is expected to add consumer surpluses and increase profits for the suppliers of tourism products and services (OECD, 2006, page 17). The tourism industry does of course have several specific characteristics which can influence the innovation process, especially regarding the **demand-driven** nature of tourism, geography/spatial features and the available capital and human resources in the destination. OECD continues with the relation between innovation and policy underlying the role that innovation, and in particular green innovation (defined as innovation that results in a reduction of environmental impact) can play to significantly change the global tourism environment by improving product (good or service), process, or method (marketing or organisational). In those terms innovation can be new to a firm, new to the market or new to the world (OECD and Eurostat, 2005) and can encompass **a wide range of activities**, including R&D, business methods, marketing and design, and is influenced by a wide range of factors, some of which can be affected by policy (OECD, 2010).

In the "Green Innovation in Tourism Services" report by OECD applying a global survey among countries, three stages of innovation have been described and applied to tourism:

- a. Incremental innovation is the dominant form of innovation in enterprises and aims to modify and improve existing technologies or processes to raise the efficiency of resources.
- **b. Disruptive innovation** changes how things are done or specific technological functions are fulfilled, without necessarily changing the underlying technological regime itself.
- **c. Radical (or systemic) innovation** involves a full-scale shift in the technological regime of an economy and can lead to fundamental changes in the economy's enabling technologies.

Even if it seems that those stages can be achieved thanks to the use of technologies, OECD put the attention also to non-technological changes, especially based on social capital, collaboration and networking.

European Commission: the pathway(s)

From the international perspective, the European Commission also focused on policy and governance to innovate the tourism industry and sector, well summarized by the "Transition pathway for tourism: Taking stock of progress by 2023" report useful to fulfill the European Agenda for Tourism 2030. The EU guidelines regarding tourism innovations particularly focus on:







7

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- **Environment**: circular economy, biodiversity strategy, energy efficiency, alternative fuel infrastructures, water policy, blue economy;
- **Mobility**: to adopt a sustainable and smart mobility strategy (air, rail, road and maritime passenger transport, multimodal digital ticketing, urban mobility, transport infrastructure);
- **Digital**: Digital decade, online platforms, digitalisation of industry;
- Consumer protection and passenger mobility policies:
- Data and statistics policies: European strategy for data collection and data sharing, regulation on tourism statistics.
- Cohesion policy and territorial cooperation.

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In addition to these main trajectories to tourism innovation, the pathways illustrate other main directions:

- a) **Green Transition:** Sustainable mobility, Circularity of tourism services, Green transition of tourism companies, R&I projects and pilots on circular and climate-friendly tourism, Product environmental footprint methodology.
- b) **Digital Transition:** Innovative and data-driven tourism services, Availability of online information on tourism offer, Common European data space for tourism, R&I for digital tools and services in tourism, Digitalisation of tourism SMEs and destinations.
- c) **Resilience and inclusion**: Seamless cross-border travel, Coordinated information on travel restrictions, Fairness and equality in tourism jobs, Access for all for tourism, Diversification of tourism services and well-being of communities.

Particular attention to the digital transition is given by the European Commission, especially regarding the topic of **Smart Tourism**. The Smart Destination initiative by the European Commission is based on two competitions (i.e. The European Capital of Smart Tourism and the European Green Pioneer of Smart Tourism) to promote smart and sustainable tourism in the EU with the recognition of outstanding achievements in four categories: **sustainability, accessibility, digitalisation as well as cultural heritage and creativity**. These two competitions running yearly, have the aim to promote innovation to enhance tourism offers for visitors and to facilitate new partnerships, networking and the exchange of best practices. In addition, a final aim is fostering the EU's forward-thinking tourism offer to global audiences and sustainably increasing footfall at pioneering destinations that offer unique visitor experiences.

In addition to that, a smart destination is a tourism destination able to adopt a data-driven approach. This approach is strongly encouraged by the European Commission boosting data sharing and innovation for a smart, sustainable and resilient EU tourism ecosystem. This initiative takes the name of the **Common European Tourism Data Space** as a digital space able to allow businesses and public authorities to share a broad range of data to inform the development of innovative tourism services, improve









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the sustainability of the tourism ecosystem and strengthen its economic competitiveness. This European data space focuses on three specific challenges: 1) Interoperability of data; 2) Access to data; 3) Provision of data by public and private stakeholders to reach the following innovation objectives:

- fostering innovation in the sector for business and for DMOs in creating, improving and personalizing services and offers, through access to more quality information, which is not only shared but also easier to find;
- supporting public authorities in making decisions for the sustainability of their tourism offer, marketing and management based on a variety of relevant data;
- supporting specialised companies in providing better services to the market in terms of data analysis, indexes, and market trends;
- allowing SMEs or small DMOs to share their data and information related to services and offer to an EU-wide data sharing framework;
- improving the availability of data sources for producing statistical information for policymakers, businesses or for public interest, fostering integrating with and enhancing existing official statistics

The Euro-MED initiatives and ambition

The Euro-MED ambition for innovation is trying to outline all these directions, both on methodology and strategy but also on dimensions and use of the technology listing possible solutions to achieve common Mediterranean challenges.

Activities shall be designed to produce the outputs and reach the results of the Specific Objective number 1.1 by the shape of methodologies, tools, technologies, services, partnership/cooperation agreements and action plans. These solutions should be tested in real conditions and easily transferable for short and long-term goals.

Another relevant initiative carried out by Euro-MED is the creation within the framework of BEST MED projects of the Mediterranean Network of Sustainable Tourism Observatories, aligned with the UN Tourism International Network of Sustainable Tourism Observatories (INSTO). The main objective is the continuous improvement of sustainability and resilience for the Mediterranean tourism sector through systematic, timely and regular monitoring of tourism performance and impact and to









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connect dedicated destinations in order to better understand destinationwide resource use and foster the responsible management of tourism.

Also from the Mediterranean Perspective, innovation is not only about new technologies and new governance models but also it is strongly related to environmental sustainability. In these terms, the complexity and multidimensionality of tourism under the social, economic and environmental implications have been pointed out from the PRIMA initiative where innovation is considered a method able to face agro-food and farming systems and water resources challenges. This strategy is strongly connected to bigger mediterranean challenges like environment protection as well as soil sustainability, food security, digital revolution, socio-economic research and stakeholder involvement and capacity building.

If the international institutions such as the United Nations and OECD have greater capacity to formulate methodologies and guide the process of achieving innovation in tourism, it seems that the European Commission and the European Union provide guidance on the aspects that require innovation, offering pathways, themes, and uncovering best practices.

3. The projects' approach

The following projects are the first thematic projects approved by the Interreg Euro-MED 21-27 programme, under the Sustainable Tourism Mission and more specifically, tackling the Specific Objective 1.1 "Developing and enhancing research and innovation capacities and the uptake of advanced technologies". For this reason, they have been allocated in the MED Cluster Innovation and Technologies Capacity. More projects will join the cluster as new calls are resolved.

TOURISMO - TOURism Innovative and Sustainable Management

TOURISMO fosters research & innovation to tackle the management of tourism flows in Med destinations. The starting point is represented by a well-known Mediterranean **phenomenon of overtourism** and its social, environmental, and economic negative externalities. The methodology to tackle this widespread situation connected to excess tourism flows is based on innovation through digital transactions using **open-big smart data** and ICT tools (including IA) in addition to on-site equipment and innovative methodologies. TOURISMO aims to deliver monitoring tools and decision-making support management systems, exploiting innovative data technologies. Pilot tests of the projects are: Rhodes City, City of Florence, Limassol port, City of Varna, Island of Biševo, Golden Bay (II-Bajja tal-Mixquqa) pointing to local effectiveness but also on replicability in other areas.







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SMITour - SMart Industrial Tourism in the Mediterranean

The project aims to exploit transnational cooperation to explore the social and economic potential of smart and industrial tourism (SMIT) as a sustainable economic activity, by analysing the state of the art and the use of advanced & immersive technologies for the sector. The project will design a common **strategy and an Action Plan** for developing sustainable industrial tourism activities in the MED regions, thereby contributing to diversifying tourism, reducing its environmental impact and boosting social & economic growth **through technological innovation**.

LIBECCIO - SustainabiLlty of tourism By EnhaCing Cooperation and dlgital transformation

LIBECCIO project aims to enhance tourism governance, destination management and sustainability by applying a data-driven **Destination Management Support System (DMSS**) able to support regional and national policymakers for innovative governance of the destinations. This DMSS structure is functional to develop scenarios and assist DMOs with strategies and actions following a data-driven approach. This technological system prioritizes enhancing visitors' Big Data and destination sustainability Indicators collection and Big Data Analytics of capitalized tools applying a **Q Helix tourism methodology** with several types of partners during Living Labs activities. The DMSS will be created and tested in 7 pilot areas (Italy Emilia Romagna and Abruzzo regions, Greece in Western Greece, Spain in Terrassa District, Montenegro in Kotor municipality, Bulgaria in the areas of Burgas district, Bosnia Herzegovina in the territory of East Sarajevo, Slovenia in Postojna cave) and can be transferred to other territories in the cooperation area.

MedDiet Go - Med Diet identities - from territorial networking to cluster organization

Med Diet Go! aims to transfer the main MD.net achievements to foster rural lifestyle and landscape as tourism opportunities through innovation and networking. The innovation points are both on enlarging stakeholders' adherence to MD values, communities and territories. The activities are based on expanding the actions and the community of the international cluster, by transferring the concepts of Med Diet and Sustainable Tourism, and the results of the MD.net project, especially targeting the new 4 regions involved in the project as receivers (Bulgaria; Puglia; Greece; Portugal), as well as other organisations and private companies willing to join.







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4. Main challenges and topics for discussion identified

An important aspect of facing innovation challenges is to try to better contextualize the topic of innovation inside the four Euro-Med projects. This definition can be updated in the future when the cluster gains other participants. The definition of innovation in tourism has been drawn up also with the help of external experts. The vision of innovation by the project partners is for sure related to new and digital technologies and the use of new, non-official data. These data are the activators of innovation because they are able, through new indicators and new ways of measuring tourism dynamics, to provide meaningful information and different governance approaches (data-driven). In fact, innovation is not only about fresh datasets but is connected with tourism and destination management based on collaboration, adaptation, transfer of knowledge and co-creation. The data-driven innovation is related to the creation of digital systems, new business models, new services, and new promotions all with the help of decision support systems. This detailed and customised definition is summarized in the schematic word cloud in Figure 2.

TRAYSMATION	INNO	VATION	истис
DIGITAL	NEW INDIATORS ME ASUNAME WAS	DATA DRIVEN	+DANFORMATION
TECHMOLOGIES	J DIGITAL SYSTEMS	WEW SER WEW COMMENCE WEW PROMOT	AL
bata Data	S NEW CONCEPT food - territury NEW BELIAVIOR	ADANTER OF Krowlepot	- MEAMINGFUL INFORMATION FROM DATA
STRATECY + SMART TOURISM	NotechAted Strategy Note System CO-(PEATION	HOW to bear with intormation	MANAGEMENT E (PE ATIVITY)
DIVERSIFICATION USE (ASES	SUPPORT		CollopzoRation
BUSINESS MODEL	NEW SOURCES OF INFORMAtion	MENT t ECH-MORECY	ADAPTATION



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11

Figure 2







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Regarding the use of data and the data-driven approach, several challenges should be identified to address MED projects on the possible solutions and actions to achieve smarter Mediterranean tourism destinations. Especially regarding the application of new technologies and the use of different sources of data, solutions also proposed by the projects described before, it's clear the need for discussions about different topics. EU and local projects already raised a few key challenges in the effective application of data-driven approaches for tourism development and innovation. Such challenges must be known and taken into consideration to design strategies capable of addressing them. 'Challenges' does not mean only aspects about the purely data-analytics sphere, such as enabling technologies and related infrastructures and data formats, but also normative aspects related to data privacy and data management, as well as 'human' aspects such as digital literacy of tourists and tourism workers or the ability to involve as many stakeholders as possible in data sharing initiatives. Therefore, being aware of the key challenges for data-driven tourism is crucial for any destination aspiring to successfully master data. Those are the main data challenges also defined by the European Commission in the Smart Tourism Destination Project (EU guide on data for tourism destinations 2023).

Key Challenge 1 – Data itself.

Which source of private and public datasets are needed for an innovative data-driven approach? What is the frequency of updates? Which geographical scale (e.g. hotspot of visit/municipal/province/national/ international level) is the most suitable for tourism policies and strategies development?

Concerning the availability of the datasets, costs to acquire and store (big) datasets, update possibilities, and representativeness of data and analysis (geographical and temporal scales). This challenge is faced by all four MED projects (TOURISMO, SMITour, LIBECCIO and MedDiet Go).

Key Challenge 2 – Heterogeneity of tourism data.

How to connect different datasets? Which is the most useful way to visualise analysis? How is the data-sharing model? How data and indicators must be collected, stored, analysed and properly disseminated?

The lack of interconnection, common formats, standards (e.g., semantic), and interoperability protocols. This limits the full exploitation of the data value to support destination management and sustainable tourism development approaches, as well as the possibility for stakeholders to combine data from different sources and obtain insights to feed into policy and business decision-making processes. This challenge is faced by TOURISMO, SMITour, LIBECCIO projects.







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Key Challenge 3 – Technology and power.

Smart solutions require an ecosystem of information and communication infrastructures, systems, and devices to function. The development of this info-structure requires significant investments on the part of destinations and companies especially regarding storage, updating, usability and for the afterlife of the platforms. This challenge is mainly faced by TOURISMO and LIBECCIO projects in charge of building platforms and smart systems to share the knowledge coming from the data.

Key Challenge 4 – Tourist attitude and digital literacy.

Smart solutions can accommodate different levels of tourists' eagerness to make use of technologies, and to avoid any negative consequences of ICT on the tourist experience, a phenomenon sometimes referred to as "e-lienation". Similarly, a strong reliance on technology also poses issues when considering that tourists can have different levels of digital literacy, and that therefore tourists without the necessary competencies or devices may risk being left out of particularly smart experiences. This challenge is transversal but concerns more to MedDiet Go project.

Key Challenge 5 – Privacy.

The continuous capture and exploitation of tourists' personal data lies at the core of many smart tourism solutions to enable the creation of enriched experiences. Indeed, personal data allows to tailor tourism services to personal preferences (e.g., suggesting meal options in accordance with dietary requirements), location (e.g., alerting of important landmarks in the vicinity), and time (e.g., suggesting alternative routes based on real-time weather conditions). While caution regarding privacy is certainly on the rise among European citizens, especially after the entry into force of the General Data Protection Regulation (GDPR), tourists tend to be more easily persuaded to share their personal data when compared to people in their usual context of life. All projects will be involved in this challenge.

Key Challenge 6 – Human and artificial intelligence.

Tourism workers are on average less qualified than the overall EU working population, with up to 25% possessing low-level qualifications. The sector is also affected by structural innovation deficiencies, even though ICT is ubiquitous in tourism and that tourism experiences are more and more mediated by smart technologies. The TOURISMO project is mainly involved in this challenge.

Key Challenge 7 – Governance and cooperation.

Successful smart tourism strategies leverage the common interests and resources of stakeholders involved, exploiting and creating new synergies.







This requires that at least an initial critical mass of stakeholders is aware of the benefits and opportunities of smart solutions, that they trust each other and agree on a mandate, and that they cooperate to build an active and engaged smart tourism ecosystem. Ensuring smooth cooperation, sharing of data, commonality of intents, and definition of responsibilities is a key challenge that DMOs embarking towards smart tourism need to consider. All projects will be involved in this challenge.

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In addition to the data-driven aspect of innovation Euro-Med projects have been asked to work on the European Commission specific targets for the Smarter Mediterranean Priority. They have been involved in two different activities:

- Evaluating every single target using a scale from 1 (less important) to 5 (very important). In this activity also the external expert has been part of the evaluation. The results are an average value per single target and a final ranking.
- Estimate the achievability of every single target through a round table discussion using the Q-sort methodology. The projects used the Q set of statements (innovation targets) and they sort all the statements, putting them in order (as a shape of a pyramid) the statements from most achievable to least achievable by their single project's activities and outputs. Q methodology is a research method used in social sciences to study people's (and in this case projects') "subjectivity"—that is, their viewpoint.













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TARGETS	RANKING	VALUE	COMMENTS AND ACHIEVABILITY BASED ON Q-SORT METHOD
The development of value chains in the tourism sector and setting up transnational cooperation patterns with tourism clusters.	14	3,50	This target has been considered as less achievable by the financed projects. The most difficult aspect raised by experts and project members is to involve all the stakeholders of the tourism value chain, especially private industries and small medium enterprises and tourism facilities.
Enhancing transnational cooperation among 4 helix stakeholders in the tourism sector.	8	3,83	This has been evaluated as the most achievable target. This methodology, also promoted by UN TOURISM, is a core part of all the Euro-Med projects and it is a valuable way to test and transfer tools, guidelines, and best practices.
The implementation, monitoring, and evaluation of Research and Innovation.	5	4,00	This target is considered less achievable by the projects (-1 position). The reason is due to the difficulties about the afterlife of the project, the unclear tasks and responsibilities for the future and the lack of action plans for short and long-term strategies after the end of the project.
Smart Specialisation (RIS3 strategies) in the tourism sector.	16	3,00	These targets have been evaluated as neutral regarding the achievement of the projects. All the partners, in fact, illustrate that their projects are inside these strategies improving capacity
Skills development and capacity building of public institutions for the implementation of RIS3 strategies in the tourism sector.	6	4,00	building and skill as possible solutions for innovation even if it's not their ultimate goal.
Strengthening the competitiveness, internationalization, and sustainability of tourism SMEs, promoting technological and non-technological innovations.	2	4,67	Even though this target has been evaluated as one of the most important to achieve for the Smarter Mediterranean priority it has been put in the least achievable by the projects. Experts and partners raised their difficulties in actively involving the SMEs, both in terms of identifying the key private stakeholders willing to continue and adapt project results and also about economic issue.

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Assisting tourism SMEs in extroversion and transnational and/or international cooperation.	11	3,67	Even the support of SMEs is critical for Euro-Med projects due to the lack of direct involvement of SME categories and organizations inside the project. The difficult aspect is once again related to money issues (especially in the afterlife stage of the project) and the handover from the project stage to the market.
Establishing sustainable business development practices for tourism SMEs.	9	3,83	This target has been evaluated as very less achievable (minus 2) due to the lack of involvement, from the first project stages, of SMEs and the private sector. The Q-helix approach is a good methodology of involvement but it lacks of tools and strategies for the development of businesses.
Acceleration of technology transfer and digital transformation to be applied in the tourism sector.	3	4,67	This target is one of the most achievable for the projects thanks to their targets on the use of digital technologies and big data able to change the current tourism situation activating transformation (new models, new services, new products) usable for different kinds of stakeholders.
Promoting climate- friendly innovations in tourism activities.	12	3,67	Even though this target is neutral for the project, it has been decided to put it on the top of the pyramid representing a common and essential target and output of the Euro-Med strategy for sustainable tourism.
Enabling tourism SMEs to turn environmental challenges into opportunities.	15	3,33	Also, this target is considered as neutral in the achievability scale of the targets. Even if the environmental challenges are crucial for the sustainable development of the tourism sector, the difficulties of working in cooperation with SMEs are difficult to manage.
Promoting entrepreneurship and cultural and creative industries in the tourism sector.	13	3,67	This target has been considered slightly achievable for Euro-Med projects especially through the quadruple helix approach all the project will be adopt.
The effective change in tourism practices promoting destinations sustainability and "responsible tourism" practices.	7	4,00	













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The management of tourism flow during the high season.	4	4,17	This is one of the most important targets identified and also evaluated as slightly achievable. This could be one of the results and main output of the innovation clusters, especially through the use of new technologies and data.
A sustainable recovery of the tourism sector in the aftermath of the COVID-19 crisis.	17	2,00	This target is the slightly less achievable for Euro-Med project because the recovery of tourism industry and tourism flows has already occurred.
The improvement of data collection, management, and sharing in the field of sustainable tourism.	1	4,83	This target is the most important following the evaluation from the innovation cluster and it is also the very achievable from the projects. The projects inside the clusters will work definitely about data collection and management.
The establishment of knowledge networks focused on both enabling knowledge transfer in the area of data collection and tourism research, and initiating and conducting research on topics related to innovative tourism practices.	10	3,83	This target has been considered as neutral but with a low importance. Even if the topic of data collection and the development of data driven approach is crucial, the establishment of a solid knowledge network is less obtainable.









A visual summary of the Q-sort methodology able to evaluate the 17 targets in terms of achievability from the four projects inside the cluster is presented in Figure 3 showing the results of the activity. This pyramid could be updated during the program time slot but also when new projects will join the innovation cluster.

			promoting			
			climate-friendly			
			innovations in tourism activities.			
		the implementation, monitoring, and evaluation of Research and Innovation.	enabling tourism SMEs to turn environmental challenges into opportunities.	promoting entrepreneurship and cultural and creative industries in the tourism sector.		
	assisting tourism SMEs in extroversion and transnational and/or international cooperation.	the development of value chains in the tourism sector and setting up transnational cooperation patterns with tourism clusters.	Smart Specialisation (RIS3 strategies) in the tourism sector + skills development and capacity building of public institutions for the implementation of RIS3 strategies in the tourism sector.	the management of tourism flow during the high season.	acceleration of technology transfer and digital transformation to be applied in the tourism sector.	
strengthening the competitiveness, internationalization, and sustainability of tourism SMEs, promoting technological and non-technological innovations.	establishing sustainable business development practices for tourism SMEs.	a sustainable recovery of the tourism sector in the aftermath of the COVID-19 crisis.	the establishment of knowledge networks focused on both enabling knowledge transfer in the area of data collection and tourism research, and initiating and conducting research on topics related to innovative tourism practices.	the effective change in tourism practices promoting destinations sustainability and "responsible tourism" practices.	the improvement of data collection, management, and sharing in the field of sustainable tourism.	enhancing transnational cooperation among 4 helix stakeholders in the tourism sector.
-3	-2	-1	neutral	1	2	3
Least achiveable						Most achiveable
1						

Figure 3









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5. Key documents

OECD (2006), Innovation and Growth in Tourism, OECD Publishing, Paris, https://doi.org/10.1787/9789264025028-en.

OECD (2010), The OECD Innovation Strategy: Getting a Head Start on Tomorrow, OECD, Paris <u>https://doi.org/10.1787/9789264083479-en</u>

OECD and Eurostat (2005), Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data. OECD, Paris. <u>https://doi.</u> <u>org/10.1787/9789264013100-en</u>

OECD (2013-02-26), "Green Innovation in Tourism Services", OECD Tourism Papers, 2013/01, OECD Publishing, Paris. http://dx.doi. org/10.1787/5k4bxkt1cjd2-en

European Commission (2023) Towards a Common European Tourism Data Space: boosting data sharing and innovation across the tourism ecosystem. https://single-market-economy.ec.europa.eu/document/download/ dba347be-59e7-4a2e-804b-1594bd9d3b3e_en?filename=C_2023_4787_1_ EN_ACT_part1_v4.pdf

European Union (2024) WILL YOUR CITY BE THE NEXT EUROPEAN CAPITAL OF SMART TOURISM? https://smart-tourism-capital.ec.europa. eu/document/download/102b6053-9bdd-4d09-a4e8-f615b90541bd_ en?filename=2025_CAPITAL_Factsheet_EN_FINAL2_0.pdf

European Union (2024) COMPETITION FOR THE EUROPEAN CAPITAL OF SMART TOURISM 2025 https://smart-tourism-capital.ec.europa. eu/document/download/0496f0f9-aa83-4312-b2ec-2bbb1077ef3f_ en?filename=Capitals_Guide_for_Applicants_2025_FINAL_0.pdf

European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, (2024). Transition pathway for tourism: taking stock of progress by 2023, Publications Office of the European Union. https://data.europa.eu/doi/10.2873/775069

World Tourism Organization (2017), Innovation in Tourism – Bridging Theory and Practice, UNWTO, Madrid, DOI: <u>https://doi.org/10.18111/9789284418503</u>

European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Galasso, G., Montino, C., Sidoti, A. et al., Study on mastering data for tourism by EU destinations – Main text, Publications Office of the European Union, 2022, <u>https://data.europa.eu/</u> <u>doi/10.2873/23880</u>









Union for the Mediterranean Union pour la Méditerranée الاتحاد من أجل المتوسط

This document has been developed in the framework of the Thematic Community Project of the Sustainable Tourism Mission of the Interreg Euro-MED Programme 21-27 (Community4Tourism project) and its activity of the Mediterranean Clusters.

The Mediterranean Clusters are the main project's proposal for the support of the transferring of practices and results to other actors and territories, and their integration into local, regional, national and European policies and strategies, covering the 4 main topics that the Sustainable Tourism Mission integrates: innovation, circular economy, climate change and nature & biodiversity.

This document is the Orientation Paper for the MED Cluster Innovation and Technologies Capacity and aims to serve as a basis to launch the discussion and set the main priorities for the activities of each cluster in the coming years. It also integrates the main discussions and key challenges identified by the members of the cluster during the 1st Annual Meeting of the Clusters, organised in Rome (April 11, 2024).

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