

## Concluding Document

### 18<sup>th</sup> European Tourism Forum: Digital transformation as the engine of sustainable growth for the EU tourism sector

9–10 October 2019, Helsinki, Finland



## Summary

The 18<sup>th</sup> European Tourism Forum took place in Helsinki on 9–10 October 2019. It was co-organised by the Finnish Presidency of the Council of the European Union and the European Commission.

The Forum consisted of five parts:

The opening session included a welcome address from the State Secretary Mr. Jari Partanen of the Ministry of Economic Affairs and Employment of Finland, followed by keynote addresses by the Commissioner for Internal Market, Industry, Entrepreneurship and SMEs Ms Elżbieta Bieńkowska of the European Commission and Vice-Chair of the Transport and Tourism Committee Mr István Ujhelyi from the European Parliament.

The first session concerning **the impact of digital transformation on the tourism sector** included two inspirational talks. The first one focused on unleashing the powers of digitalisation for Travel 4.0 and beyond and the second one on how to use policy as an enabler for tourism SMEs in digitalisation. Following these inspirational talks there was a stimulating panel discussion where the different points of view were presented.

The second session handled **cross-innovation ecosystems and capacity building in tourism** and included presentations of three case studies. The first case study presented European incubation networks for creativity-driven innovation, the second digitalisation of small travel companies (the Andalusia case) and the third sustainable innovation for the future of hospitality. The presentations were followed by a panel discussion.

The third session tackling **the data management as a strategic instrument of the digital transformation and sustainability of tourism** presented five different cases. The cases focused on how data enhances the customer holiday experience, Lyon as a European Capital of Smart Tourism 2019, Finland's Digital Roadmap for tourism, travel technology as driving optimization for the tourism ecosystem and making tourism statistics (more) relevant.

The closing session included conclusions made by Head of Tourism, Emerging and Creative Industries Ms Anna Athanasopoulou from the European Commission and Director General Ms Ilona Lundström from the Ministry of Economic Affairs and Employment of Finland.

The full programme of the Forum, including the speakers, can be found in an annex 1 of this report.

## Key conclusions and messages from the Forum

In advance of the Forum, a discussion paper was shared to all participants. It provided background for the discussion and exchange of views on the theme of the Forum, *digital transformation as the engine for sustainable growth within the European tourism sector*. The discussion paper can be found in an annex 2 of this report.

Based on the background material, the presentations and the interventions during the Forum, the following key conclusions and messages can be identified:

### 1) Digital transformation opens up new opportunities for sustainable growth in the EU's tourism sector

New technologies will inevitably change the European economy and society. The use of data will grow in a revolutionarily rapid manner, and data has become a new currency. The tourism sector should actively search for ways to benefit of the use of new technologies, such as AI and augmented reality. Technological development will offer more power and tools but it does not displace a human being; tourism as service sector is strongly based on encounters between people.

Digital transformation is a strong catalyst for innovation and growth in tourism. Digitalisation is one of the megatrends, which have an impact on the future of tourism. Tourism policy at all levels - EU, national, regional or even local - should be future-proofed. Policy measures and regulations need re-thinking. It is important to recognize what works and shape the policy and measures according to it. More integrated policy approach and coordination between digitalisation and tourism policies are essential.

Digitalisation can support sustainable growth and new business opportunities in the tourism sector. Digitalisation enables to find new markets, to develop new services and to enhance the visitor experience. The role of knowledge-driven collaboration (for instance utilising open data), possibilities to create new business models based on the platform and collaborative economy as well as helping visitors to make responsible decisions are essential. The EU needs a functional Digital Single Market.

### 2) Sustainability in tourism can be increased by digitalization

The EU Commissioner with responsibility for tourism, Ms Elżbieta Bieńkowska, reminded the Forum that tourism growth has to be sustainable. Advancing digital innovation uptake is essential so the tourism sector can contribute effectively to sustainable development in the EU. The deployment of advanced technologies has re-invented the way to consume tourism experiences, offer tourism services and manage destinations in a more sustainable way. The impact of digitalisation to the

competitiveness and sustainability of tourism sector should be monitored. Sustainable tourism growth should be based on knowledge, foresight and impact assessment. Sustainable tourism takes into account the different dimensions of sustainability: ecological, economic, social and cultural. The impacts of tourism on the local communities need to be taken into account. The rapidly growing demand for sustainable tourism needs to be considered by tourism businesses and destinations, as customer satisfaction goes side by side with sustainability. This requires breaking up the silos, increasing cooperation and learning from each other. Businesses and destinations need to adapt to new, sustainable tourism models to ensure balanced development of tourism and value-added to the economy as well as to local destinations and populations.

Digital technology allows us to deliver tourism services in a smarter way, to use tourism infrastructure and destinations more efficiently and with fewer resources and to better address the sustainable management of destinations. European tourism can become more competitive and sustainable through the better and more effective use of digital tools, new technologies and enhanced digital skills.

### 3) The tourism sector needs more cross-sectoral innovation ecosystems

Innovation in the tourism sector do not happen naturally and is not always straightforward to understand. More collaboration is needed to find the joint understanding of innovation in the tourism sector in terms of what the current situation is and what we are aiming for.

Tourism should be better integrated into innovation ecosystems. Tourism sector and other, related industries (e.g. health care, food, education, culture, and technology) need more networking and collaboration in order to enhance innovation. There are still challenges in cooperation that are shared by many, such as access to funding, lack of cross-sectoral innovation or insufficient knowledge on how to enter new markets and attract new talent. In the myriad of information available, finding what is relevant can be difficult for businesses, particularly SMEs. Regarding these challenges, tourism businesses can and should learn from other sectors.

Cross-sectoral innovation ecosystems, such as clusters or public-private partnerships based on smart specialisation can create new value-added products and enable new businesses. Both big companies and SMEs should be boosted. Smooth operational environment is essential.

### 4) Focus on capacity building and SMEs to foster the adaptation of the digital transformation

The tourism sector is a micro-business dominated sector. Tourism businesses need support to increase their digital skills and competences. Capabilities for managing the future technologies and digital innovation uptake in the tourism sector should be

strengthened. Enhancing the competences of the tourism workforce can foster the overall competitiveness of the sector and the use of the full potential of digital economy. It is essential for the European tourism sector to update its competences and business models to keep up with the global digitalization trend and competition. Closer collaboration between private and public sector, knowledge institutions and the civil society is essential.

SMEs form the backbone of the tourism sector. The impacts of digital transformation are different for different size of businesses. SMEs should be supported in adopting new technologies and business models, therefore empowering them to innovate. SMEs and big enterprises alike should have equal opportunities to benefit from the digital transformation. Capacity building, development of skills of employees and ability to respond to the needs of the customers should be strengthened.

## 5) Data management and access to data are crucial for evidence-based policymaking

Data management opens new opportunities in destination management, offerings of tourism services, marketing and smooth travel experiences. Data should be used more effectively in policy formulation, implementation and evaluation. Therefore, decision makers need relevant data to make relevant decisions, while investing in data management is also important for businesses.

Actors in the tourism sector need access to different data resources. Data enables the understanding of the needs, plans and preferences of the customers and therefore the increase of customer satisfaction. Destinations can use data for instance to targeted marketing and campaign purposes. Chat services are one way to collect information on the interests and worries of the customers. Customers also collect and share data of the destination. Both online and offline data are important for different-sized tourism businesses.

It is important to differentiate between private (business-generated) data, public data and publically available data and also focus on relevant statistics. This requires knowing the needs of the users. New data sources and methods are needed to investigate the digital footprint of tourists and service providers.

Data management faces challenges like lack of competence to make data analysis, funding and reaching the customers. Overcoming these challenges could be facilitated by relevant policies and actions at EU level. GDPR has put in place a framework of collecting individual data, while safeguarding consumers. Better dialogue between different data owners and users on EU level is needed.

## 6) Cooperation is necessary to use digital transformation as the engine of sustainable growth of tourism

The EU Commissioner with responsibility for tourism, Ms Elżbieta Bieńkowska, highlighted that European cooperation should be strengthened. Only through sharing our experiences and through learning from each other can we achieve results. The Vice-Chair of the Transport and Tourism Committee of the European Parliament, Mr István Ujhelyi, also underlined the need for cooperation so that tourism will have sufficient funding and value at the EU level.

It is important to strengthen the cooperation in innovation, collecting and sharing tourism data and in adopting sustainable practices in tourism. Discussion and common networks are needed between all relevant actors at EU, national, regional and local level to advance the digital transformation and innovation of tourism for a balanced, sustainable development and competitiveness of the sector.

## Annex 1: Agenda

### Wednesday, 9 October

Venue: Helsinki City Hall, Pohjoisesplanadi 11–13

17.15–18.00	<b>Registration</b>
18.00–21.30	<b>Gala Dinner with Award Ceremony for European Capitals of Smart Tourism 2020</b>

### Thursday, 10 October

Venue: Finlandia Hall, Mannerheimintie 13 e, Helsinki

	Chair Mr <b>Paavo Virkkunen</b> , Head of Visit Finland, Executive Director of Business Finland
08.30–09.30	<b>Registration and welcome coffee</b>
09.30–10.00	<p><b>Opening Session</b></p> <p>Opening remarks by Mr <b>Paavo Virkkunen</b>, Head of Visit Finland, Executive Director of Business Finland</p> <p>Welcome address by Mr <b>Jari Partanen</b>, State Secretary, Ministry of Economic Affairs and Employment of Finland</p> <p>Keynote addresses by</p> <p>Ms <b>Elżbieta Bieńkowska</b>, Commissioner for Internal Market, Industry, Entrepreneurship and SMEs, European Commission</p> <p>Mr <b>István Ujhelyi</b>, Vice-Chair of the Transport and Tourism Committee, European Parliament</p>
10.00–11.15	<p><b>Session 1 Impact of Digital Transformation on the Tourism Sector</b></p> <p><i>What are the strategic and operational impacts of digital transformation on different aspects of the tourism experience, and on tourism businesses? What are the important factors for a successful digital transformation at business level? How could policy discussion support the tourism sector in its digital transformation?</i></p> <p>The session will start with two inspirational talks, followed by a moderated panel discussion.</p> <p><b>Inspirational talks</b></p> <p>Unleashing powers of digitalisation for Travel 4.0 and beyond Mr <b>Pekka Sivonen</b>, Executive Director of Digital Transformation, Business Finland</p> <p>Policy as an enabler for tourism SMEs in digitalisation</p>

Ms **Jane Stacey**, Head of Tourism Unit, OECD

### **Panel discussion**

*Moderator*

Mr **Pekka Sivonen**, Executive Director of Digital Transformation, Business Finland

*Panellists*

Ms **Nicole Cutrufo**, Lecturer – Guest Experience, Università degli Studi di Roma Tre

Mr **Coley Dale**, Senior Director for Strategic Partnerships, Ctrip

Mr **Jukka Punamäki**, Senior Advisor, City of Helsinki

Ms **Doris Reinisch**, Owner and Managing Director, Hotel Das Reinisch Vienna Airport

11.15–11.45

### ***Networking coffee break***

11.45–13.00

### **Session 2 Cross-innovation Ecosystems and Capacity Building in Tourism**

*How to keep agility in innovations in the micro and small business dominated tourism sector? What are the specific challenges for cross-border, inter-regional and cross-sectoral cooperation? How to encourage the inclusion of tourism in smart specialisation strategies?*

In the session, short presentations of the case studies will be presented, followed by a moderated panel discussion.

#### **Moderator**

Mr **Sampsa Nissinen**, Director of Unit, Ministry of Economic Affairs and Employment of Finland

#### **Case studies and panellists**

European incubation networks for creativity-driven innovation  
Ms **Helena Deane**, Project Manager CAST, WestBIC

Digitalisation of small travel companies: the Andalusia case  
Mr **José Luis Córdoba**, Managing Director, Andalusia Lab

Sustainable innovation for the future of hospitality  
Ms **Lovisa Hedlund**, Marketing Communications Manager, Metro Accelerator

13.00–14.00

### ***Lunch***



14.00–15.45

### **Session 3 Data Management: A Strategic Instrument of the Digital Transformation and Sustainability of Tourism**

*How does digital transformation enable the management and use of data by tourism at a strategic and practical level? What should be done at EU, national, regional and local level to further facilitate the collection, use and sharing of data? What is the role of the different actors? Once the use and sharing of public or publically funded data, as well as big data are effective, how do they facilitate destination management and tourism policy planning by public authorities?*

In the session, short presentations of the case studies will be presented, followed by a moderated panel discussion.

#### **Moderator**

Ms **Kaisa Kosonen**, Digital Development Manager, Business Finland / Visit Finland

#### **Case studies and panellists**

How data enhances the customer holiday experience

Mr **Peik Martin**, Director Sales & Digital, TUI in the Nordics

Lyon, European Capital of Smart Tourism 2019

Ms **Virginie Carton**, Deputy Director, ONLYLYON Tourism and Conventions

Finland's Digital Roadmap for tourism – On a way of becoming a smart destination

Ms **Katarina Wakonen**, Manager in Research, BI, MI & Opportunities, Business Finland / Visit Finland

Travel technology: driving optimization for the tourism ecosystem

Mr **Simon Gros**, Chair of European Technology and Travel Services Association

Making tourism statistics (more) relevant

Mr **Carsten Olsson**, Head of Unit, EUROSTAT

15.45–16.00

#### **Closing Session**

Ms **Anna Athanasopoulou**, Head of Tourism, Emerging and Creative Industries, European Commission

Ms **Iiona Lundström**, Director General, Ministry of Economic Affairs and Employment of Finland

16.00–16.30

#### **Networking coffee**

## Annex 2: Discussion paper

This Discussion Paper provides background for the discussion and exchange of views at the 18<sup>th</sup> European Tourism Forum. This year the theme of the Forum addresses digital transformation as the engine for sustainable growth within the European tourism sector.

This paper presents the current topics that have arisen internationally and within the European Union relevant to the theme of the Forum. The speakers and panellists will further elaborate these topics in the sessions.

The purpose of this paper is to:

- Introduce the topics addressed in the sessions
- Brief the speakers, panellists and other Forum attendees on the scope of the sessions
- Offer discussion points related to the topics of each session
- Provide an initial reference point for the concluding document of the Forum.

### Session 1:

#### Impact of Digital Transformation on the Tourism Sector

The European economy is in the process of a thorough transformation. Tourism is one of the economic sectors most affected by the global expansion of digitalisation<sup>i ii iii</sup>, holding a great potential to spur economic growth and create jobs<sup>iv</sup>. Digitalisation and new technological innovations present new business opportunities, yet they also unveil challenges that the EU tourism industry faces<sup>v</sup>. Although the growth prospects offered by the digital economy in Europe are promising, its full potential remains underutilised in Europe<sup>vi</sup>. The competitiveness of the sector relies largely on the competence of the tourism workforce to unlock this potential to the maximum.

It is clear that digital services are now part of the tourism experience<sup>vii</sup>. The rapid evolution of new business models and change of the marketing and distribution channels represent challenges to all actors involved. It is especially challenging for the SME businesses of the sector<sup>viii ix</sup> - which, EU-wide, comprise the vast majority of tourism enterprises<sup>x</sup>. Tackling the digital revolution, however, offers the EU a chance to demonstrate global leadership in innovation and technology<sup>xi</sup>.

The European Commission first looked at the challenges and opportunities of digitalisation of tourism, based on a stakeholder survey conducted in 2016 and analysed in two stages, with the latest Report published in 2018. The Report<sup>xii</sup> identified a number of factors that hold back the digital transformation of tourism SMEs as well as a list of opportunities offered along the journey of digitalisation. These included, among others, smart tourism through the use of data, new technologies such as AI, and blockchain, as well as advanced digital skills. However, the landscape of digitalisation has gone through significant evolution in the past few years, affecting, bringing new challenges and opportunities to the EU tourism sector.

The aim of the session is to exchange views over strategic and operational impact digital transformation and new technologies have on tourism businesses and on the tourism experience. Further, the objective is to share best practices on how to make European tourism more competitive through the better and more effective use of digital tools, new technologies and enhanced digital skills.

### **Discussion points**

*What are the strategic and operational impacts of digital transformation on different aspects of the tourism experience, and on tourism businesses?*

*What are the important factors for a successful digital transformation at business level?*

*How could policy discussion support the tourism sector in its digital transformation?*

### **Session 2:**

### **Cross-innovation Ecosystems and Capacity Building in Tourism**

Today, digital innovation is a key asset for meeting the demands of the modern traveller and ensuring the competitiveness of the European tourism industry<sup>xiii</sup>. From the tourism stakeholders and policymakers this requires investments in innovation, sectorial and territorial cooperation and incentives to ensure sufficient competencies within the tourism sector to innovate. Thus, it becomes increasingly important to ensure that, for example, education and training policy will adapt to the challenges posed by the changing economic structure<sup>xiv</sup>.

The European Commission, under the objectives of the Digital Single Market Strategy, has introduced various initiatives aimed at boosting the innovative capacity and advancing the adoption of new technologies and promotion of innovation in the EU industry as a whole, including in the tourism sector. In addition, the Commission has undertaken several actions to boost the competitiveness of small businesses<sup>xv</sup>. For example, the Smart Specialisation Platform for Industrial Modernisation and the Clusters Initiative support public-private partnerships and cooperation for more innovation at interregional, regional and local level and smarter and more effective use of EU funds and financial instruments.

In addition, the Digital Innovation Hubs Networks act as one-stop-shops for companies – especially SMEs, start-ups and mid-caps – to get access to technology-testing, financing advice, market intelligence and networking opportunities.

At the same time, it is essential for the European tourism industry to update its competencies and business models to keep up with the global digitalization trend and competition.

The objective of the session is to examine the cross-innovation ecosystems and capacity building as well as their impact on the competitiveness of EU travel and tourism sector. In particular, the main topics address digital innovations, agility in tourism businesses and the possibilities offered to the tourism industry by cross-sectoral cooperation.

## Discussion points

*How to keep agility in innovations in the micro and small business dominated tourism sector?*

*What are the specific challenges in cross-border, inter-regional and cross-sectoral cooperation?*

*How to encourage the inclusion of tourism in smart specialization strategies implemented by EU regions?*

## Session 3:

### Data Management: A Strategic Instrument of the Digital Transformation and Sustainability of Tourism

New technologies are rapidly changing the tourism industry. Data has become a central asset in management and marketing of tourism destinations and businesses. On the other hand, data driven services have become a prominent tool for tourists, who plan their trips<sup>xvi</sup>. In addition, travel experiences are shared increasingly often on social media platforms. These contribute to travel-related decision making, as tourists are likely to use an online platform to access information (e.g. social media recommendations) on a given destination<sup>xvii</sup>. Hence, data management plans are a key component of competitive advantage in the global tourism markets.

Tourism data hubs and warehouses allow tourism organisations and businesses, including SMEs, to understand the tourist activity and product preferences in their area – and better tailor their services to meet the results<sup>xviii</sup>. Data management has become a strategic advantage and an instrument of the digital transformation and sustainability of tourism<sup>xix</sup>.

With the advent of the Big Data, it is necessary to focus on how the data can be used to improve management<sup>xx</sup>. Considered a form of disruptive technology, Big Data becomes available when businesses adapt to digitalisation<sup>xxi</sup>.

However, the EU industry, including tourism, as well as public administrations face a number of common challenges, that need to be tackled through effective and appropriate measures at EU, national, regional and local level. The challenges include the re-use of public and publically funded data, which can contribute to the development of artificial intelligence or the fight against societal challenges, as well as the access and re-use of private sector data.

At EU level, building a European data economy is part of the Digital Single Market strategy. Its aim is to facilitate the use of the potential of digital data to benefit the economy and society. To this end, the Commission works to support the creation of a common European data space. The measures announced in the Communication 'Towards a common European data space'<sup>xxii</sup>, covering different types of data, include the revision of the Directive on the re-use of public sector information as well as guidance on sharing private-sector data. In addition, the Copernicus Earth Observation programme<sup>xxiii</sup> provides user-driven climate information system for the tourism sector. By delivering pan-European climate indicators (snow conditions, Holiday Climate Index,

coastal waters data, lake temperature, forest fires index) it can facilitate ongoing and long-term adaptation of the sector to a changing climate and can be useful for businesses, destination managers, tourism associations and policy makers.

The aim of the session is to share the experiences of data management in tourism sector and explore the opportunities data management opens in destination management, offerings of tourism services, marketing and smooth travel experiences. Further, it is discussed what measures and policies are required in the path towards more efficient and effective data management in tourism industry.

## Discussion points

*How does digital transformation enable the management and use of data by tourism businesses at a strategic and practical level?*

*What should be done at EU, national, regional and local level to further facilitate the collection, use and sharing of data? What is the role of the different actors?*

*Once the use and sharing of public or publically funded data, as well as big data are effective, how do they facilitate destination management and tourism policy planning by public authorities?*

---

<sup>i</sup> European Commission (2018) Interim Report: Digital Skills: New Professions, New Educational Methods, New Jobs (SMART/2016/1006). <https://ec.europa.eu/digital-single-market/en/news/digital-skills-training-blueprints-upskilling-sme-employees-and-unemployed-persons>

<sup>ii</sup> Next Tourism Generation Alliance (2019) Desk Research Summary on the Future of Digital, Green and Social Skills in Tourism. [https://nexttourismgeneration.eu/wp-content/uploads/2019/03/NTG\\_Desk\\_Research\\_Summary\\_January\\_2019.pdf](https://nexttourismgeneration.eu/wp-content/uploads/2019/03/NTG_Desk_Research_Summary_January_2019.pdf)

<sup>iii</sup> Visit Finland (2018) The Digital Roadmap of Finnish Tourism. [http://www.visitfinland.fi/wp-content/uploads/2018/06/Suomen-matkailun-digitiekartta\\_6\\_2018.pdf?dl](http://www.visitfinland.fi/wp-content/uploads/2018/06/Suomen-matkailun-digitiekartta_6_2018.pdf?dl)

<sup>iv</sup> European Commission (2017) Blueprint for Sectoral Cooperation on Skills - Tourism. Responding to skills mismatches at sectoral level. <https://ec.europa.eu/social/BlobServlet?docId=16962&langId=en>

<sup>v</sup> OECD (2019) Preparing the Tourism Workforce for the Digital Future. Revised Concept Note.

<sup>vi</sup> European Commission (2018) Interim Report: Digital Skills: New Professions, New Educational Methods, New Jobs (SMART/2016/1006). <https://ec.europa.eu/digital-single-market/en/news/upskilling-europes-small-businesses-digital-age>

<sup>vii</sup> Nordic Council of Ministers (2019) Plan for Nordic Tourism Co-operation 2019-2023. <https://www.norden.org/fi/node/36946>

<sup>viii</sup> European Commission (2017) Management and Content Provision for ICT and Tourism Business Support Portal. Final Report. <https://ec.europa.eu/docsroom/documents/24262/attachments/1/translations/en/renditions/native>

<sup>ix</sup> Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, E.S. (2018) Digitalisation in Tourism: In-depth analysis of challenges and opportunities. <https://ec.europa.eu/docsroom/documents/33163/attachments/1/translations/en/renditions/native>

<sup>x</sup> *Ibid.*

<sup>xi</sup> European Commission (2018) European Union Tourism Trends. <https://ec.europa.eu/growth/tools-databases/vto/content/2018-eu-tourism-trends-report>

- 
- xii Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, E.S. (2018) Digitalisation in Tourism: In-depth analysis of challenges and opportunities. <https://ec.europa.eu/growth/tools-databases/vto/documents?page=1>
- xiii Next Tourism Generation Alliance (2019) Desk Research Summary on the Future of Digital, Green and Social Skills in Tourism. [https://nexttourismgeneration.eu/wp-content/uploads/2019/03/NTG\\_Desk\\_Research\\_Summary\\_January\\_2019.pdf](https://nexttourismgeneration.eu/wp-content/uploads/2019/03/NTG_Desk_Research_Summary_January_2019.pdf)
- xiv *Ibid.*
- xv Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, E.S. (2018) Digitalisation in Tourism: In-depth analysis of challenges and opportunities. <https://ec.europa.eu/docsroom/documents/33163/attachments/1/translations/en/renditions/native>
- xvi Visit Finland (2018) The Digital Roadmap of Finnish Tourism. [http://www.visitfinland.fi/wp-content/uploads/2018/06/Suomen-matkailun-digitiekartta\\_6\\_2018.pdf?dl](http://www.visitfinland.fi/wp-content/uploads/2018/06/Suomen-matkailun-digitiekartta_6_2018.pdf?dl)
- xvii European Commission (2017) Management and Content Provision for ICT and Tourism Business Support Portal. Final Report. <https://ec.europa.eu/docsroom/documents/24262/attachments/1/translations/en/renditions/native>
- xviii Visit Finland (2018) The Digital Roadmap of Finnish Tourism. [http://www.visitfinland.fi/wp-content/uploads/2018/06/Suomen-matkailun-digitiekartta\\_6\\_2018.pdf?dl](http://www.visitfinland.fi/wp-content/uploads/2018/06/Suomen-matkailun-digitiekartta_6_2018.pdf?dl)
- xix European Commission (2017) Blueprint for Sectoral Cooperation on Skills - Tourism. Responding to skills mismatches at sectoral level. <https://ec.europa.eu/social/BlobServlet?docId=16962&langId=en>
- xx Dredge, D., Phi, G., Mahadevan, R., Meehan, E. & Popescu, E.S. (2018) Digitalisation in Tourism: In-depth analysis of challenges and opportunities. <https://ec.europa.eu/docsroom/documents/33163/attachments/1/translations/en/renditions/native>
- xxi European Commission (2017) Management and Content Provision for ICT and Tourism Business Support Portal. Final Report. <https://ec.europa.eu/docsroom/documents/24262/attachments/1/translations/en/renditions/native>
- xxii <https://ec.europa.eu/digital-single-market/en/news/communication-towards-common-european-data-space>
- xxiii [https://ec.europa.eu/growth/sectors/space/copernicus\\_en](https://ec.europa.eu/growth/sectors/space/copernicus_en)