

NTG ALLIANCE

COUNTRY SURVEY REPORT | BULGARIA

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NEXT TOURISM GENERATION ALLIANCE – BULGARIA SURVEY REPORT

Introduction

The **Next Tourism Generation Alliance (NTG)** is the first European partnership for improving a collaborative and productive relationship between education and industry, funded by the European Union. The NTG Alliance has partners from 8 countries (Spain, UK, Hungary, Netherlands, Italy, Bulgaria, Germany, Ireland), and will provide employees, employers, entrepreneurs, teachers, trainers and students with a set of Core NTG modules in digital, green and social skills.

Goals of the NTG Alliance are:

- To establish a Blueprint Strategy for Sectoral Skills Development in Tourism to respond to the fast-changing and increasing skills gaps in digital, green and social skills sets;
- To define a scalable mechanism and model for sustainable and digital curricula between the industry and education providers at regional, national and European level;
- To create transformative cooperation in five key tourism sub-sectors: hospitality, food and beverage operations, travel agencies and tour operators, visitor attractions and destination management;
- To develop, deliver and test Next Tourism Generation (NTG) Skills Products for professionals, trainers, students, university tourism departments, local authorities, companies to respond to the fast-changing and increasing skills gaps in digital, green and social skills sets.

Should you wish to know more about the Next Tourism Generation Alliance project, please visit www.nexttourismgeneration.eu

For getting involved in the project (as a community member, affiliate partner or associate partner), please visit nexttourismgeneration.eu/contact/

Country Survey Report

From January-March 2019, a European survey was conducted in the 8 partner countries of the NTG Project (Spain, UK, Hungary, Netherlands, Italy, Bulgaria, Germany, Ireland). Subsequently, an analysis of the survey, exploring the skills gaps per skills sets type, was finished in May 2019. The total sample of the survey on a European level was 1404.

In this Country Survey Report, trends and findings are listed on how each tourism sector (see below), type and size of the business is responding to the skill sets, highs, lows, current and future level of proficiency in digital, environmental, social and soft skills sets. Furthermore, explanations are given on how businesses are accessing training, with an evaluation as to why businesses respond as they have and what may be contributing factors. An overview of the gaps in the current and future level of proficiency in environmental, social and digital levels of proficiency across the 5 sectors is given.

Sectors

Sectors of the tourism industry covered in this report are:

- Visitor Attractions – Historic Buildings, Heritage Centre, Museum/Art Gallery; Place of worship; theatre/Cinema/Leisure/Theme Park; Park/Gardens; Wildlife Attractions/Zoo; Retail;
- Food and Beverage – Café; Restaurant; Bar/Pub; Distillery; Brewery;
- Accommodation – Hotel; Guesthouse/B&B; Self-catering/apartments; Hostel; Caravan/Camping;
- Destination Management – Destination Management Organisation; National Tourism Organisation; Regional Tourism Organisation; City Tourism Organisation; Protected Area Organisation
- Tour Operators – Travel Agency; Tour operator; both

Size of Business/Organisation – (Number of Employees)

- Large = 250+
- Medium = 100-249
- Small = 10-99
- Micro = Less than 10

Sample characteristics

Number of responses for Bulgaria:	276
Number of responses per sector:	
Visitor Attractions:	40
Destination Management Organizations:	52
Travel Agencies / Tour Operators:	55
F&B:	19
Accommodation establishments:	86

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1. VISITOR ATTRACTIONS

The visitor attractions in Bulgaria are mostly museum-like organized, and almost all of them are state-owned. Furthermore, by law, the visitor attractions are managed not by the Ministry of Tourism, but by the Ministry of Culture. Therefore, most of the visitor attraction employees hardly consider their companies as part of the tourism industry, but rather as a part of the cultural and historical heritage of the country. In the current study, 40 people participated working in visitor attractions in Bulgaria

Environmental Skills	
Current Level of Proficiency. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Knowledge of climate change 2. Promotion of environmentally friendly activities and products 3. Conservation of biodiversity <p>Least:</p> <ol style="list-style-type: none"> 1. Ability to manage waste, sewage, recycling and composting 2. Ability to minimise the use and maximise efficiency of energy and water consumption 3. Promotion of sustainable forms of transport (e.g. public transport)
Future level of proficiency in 2030. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Knowledge of climate change 2. Promotion of environmentally friendly activities and products 3. Conservation of biodiversity <p>Least:</p> <ol style="list-style-type: none"> 1. Ability to manage waste, sewage, recycling and composting 2. Ability to minimise the use and maximise efficiency of energy and water consumption 3. Promotion of sustainable forms of transport (e.g. public transport)
Training Provision for these skills?	Generally, no training on green skills has been provided among the Visitor attraction sector. Only 21,4% (6) of the companies report they ever had such training, whereas the rest 78,6% (22) have not had training on Environmental Management skills

Most popular/ three main types of training	For all 6 Visitor attractions companies, that have had training on Environmental Management skills, all the training sessions were implemented On the job. Only 2 report to have One day on-site training by external provider and 1 for Several days training by external provider.
<p>An interesting fact is that the level of both current state and future environmental skills needs of the Visitor attractions remain the same (see Table 1.). All three highest appreciated skills (<i>Knowledge of climate change; Promotion of environmentally friendly activities and products; Conservation of biodiversity</i>) now and in the future, however, seem directed to the tourist product itself. That means that the attractions companies' employees are prepared more to preserve the authentic form of their sights (be it natural or hand-made), than to perform any proactive behaviour. Generally, their reaction is mostly passive, probably because the ownership of the attractions belongs to the state, hence the employees transfer the whole responsibility of environment care and protection to the state. This is evident also from their open question answers:</p> <p>"It is not our job to deal with environmental protection"</p> <p>"Environmental skills have nothing to do with attractions", etc.</p> <p>Expectedly, training in environmental skills has hardly been provided, and in all cases on the job, not as a separate activity.</p> <p>The percentage gap across environmental skills in visitor attractions, however, comes in the <i>Ability to manage waste, sewage, recycling and composting</i> (27,04%, see Table 1). The explanation of this result stems from the extremely low utilisation of such activities across the whole Bulgaria, not only in the tourism industry. Apparently, visitor attractions employees realize this lack and anticipate they would need to develop such skills in the future.</p>	

Table 1. ENVIRONMENTAL SKILLS OF Visitor attractions – current and future mean, and gap between them

ENVIRONMENTAL SKILLS. Visitor attractions	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Ability to minimise the use and maximise efficiency of energy and water consumption	2,75	3,18	0,43	15,64%
Ability to manage waste, sewage, recycling and composting	2,39	3,04	0,65	27,04%
Conservation of biodiversity	2,86	3,29	0,43	15,15%
Promotion of sustainable forms of transport (e.g. public transport)	2,79	3,29	0,50	18,10%

Promotion of environmentally friendly activities and products	2,86	3,32	0,46	16,20%
Knowledge of climate change	3,11	3,5	0,39	12,64%
TOTAL	2,79	3,27	0,48	17,13%

Personal, Communication and Diversity Skills	
Current Level of Proficiency. Three most and three least proficient per category	<p>PERSONAL SKILLS - Most:</p> <ol style="list-style-type: none"> 1. Creativity 2. Willingness to learn and to perform 3. Ethical conduct and respect <p>PERSONAL SKILLS - Least:</p> <ol style="list-style-type: none"> 1. Problem solving 2. Customer orientation 3. Initiative and commitment <p>COMMUNICATION SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Skills related to awareness of local customs (e.g., food, arts, language, crafts) 2. Oral communication skills 3. Skills related to cultural awareness and expression AND Skills related to intercultural host-guest understanding and respect <p>COMMUNICATION SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Ability to speak foreign languages 2. Written communication skills 3. Active listening skills <p>DIVERSITY SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Gender equality skills 2. Age-related accessibility skills

	<p>3. Skills related to diversity in religious beliefs</p> <p>DIVERSITY SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Diets and allergy needs skills 2. Skills related to disabilities and appropriate infrastructure 3. Skills related to diversity in religious beliefs
<p>Future level of proficiency in 2030. Three most and three least proficient.</p>	<p>PERSONAL - Most:</p> <ol style="list-style-type: none"> 1. Creativity 2. Willingness to learn and to perform 3. Ethical conduct and respect AND Customer orientation <p>PERSONAL - Least:</p> <ol style="list-style-type: none"> 1. Problem solving 2. Initiative and commitment 3. Willingness to change <p>COMMUNICATION – Most:</p> <ol style="list-style-type: none"> 1. Skills related to awareness of local customs (e.g., food, arts, language, crafts) 2. Skills related to intercultural host-guest understanding and respect 3. Skills related to cultural awareness and expression <p>COMMUNICATION – Least:</p> <ol style="list-style-type: none"> 1. Written communication skills 2. Active listening skills 3. Ability to speak foreign languages <p>DIVERSITY– Most:</p> <ol style="list-style-type: none"> 1. Gender equality skills

	<p>2. Age-related accessibility skills</p> <p>3. Skills related to diversity in religious beliefs</p> <p>DIVERSITY– Least:</p> <p>1. Diets and allergy needs skills</p> <p>2. Skills related to disabilities and appropriate infrastructure</p> <p>3. Skills related to diversity in religious beliefs</p>
Training Provision for Social Skills	<p>Training for social skills have been provided to 53,6% (15) of the Visitor attraction companies, whereas in 46,4% (13) there was no such training. This shows that almost half of the respondents (visitor attractions) received such training of soft skills, which is considerably higher, compared to environmental skills. Notably, the higher education is among the most common type, probably because, as mentioned above, the visitor attraction employees are by default experts in cultural and historical heritage, hence many of them come with a university degree.</p>
Most popular/ three main types of training for social skills	<p>The most popular types of social skills training in Visitor attraction companies appear as One-day on-site provided by an external provider (10,7%, 3 respondents), higher education (pointed by 2 respondents, which are 7,1% from the entire sample) and several days off-site training by external provider (2 respondents, 7,1%).</p>
<p><i>Personal skills</i></p> <p>Again we can see coincidence of current state and expected needs of personal skills (see Table 2) – <i>Creativity, Willingness to learn and to perform, and Ethical conduct and respect</i> are considered developed now, and necessary in the future. It should be noted, that <i>Ethical conduct and respect</i> is also among the highest ranked skill for the 2030 for whole Bulgaria. Apparently, people value proper relations in their jobs, especially when related to interaction with tourists from different cultures, nations and religions. <i>Creativity and Willingness to learn and perform</i> are important skills, but in terms of the Visitor attraction business they might be needed to attract tourists' attention and stay updated with the newest facts.</p> <p>In contrast, the least appreciated skills (<i>Problem solving; Initiative and commitment; Willingness to change</i>) imply again passive attitude towards future needs and the organisation relies on external party (in the Bulgaria case – the state) to cope with changes and problems.</p>	

In general, gaps in personal skills are comparatively low (below 0,50 in absolute numbers and below 13,33%, see Table 2.). This indicates that visitor attraction employees do not estimate some drastic change in the personal skills need. If we consider the absolute numbers, however, it is notable that currently those skills are already highly evaluated (all of them having current level of proficiency mean over 3,61).

Communication skills

In terms of communication, the most developed communication skills now (*Skills related to awareness of local customs (e.g., food, arts, language, crafts); Oral communication skills; Skills related to cultural awareness and expression AND Skills related to intercultural host-guest understanding and respect*) definitely reveal the employees' knowledge of and capabilities to tell about the visitor attractions (natural sights, cultural and historical heritage) (see Table 3).

Apparently there is a lack of people speaking *foreign languages* in the current moment (M=3,11, the lowest ranked, all the rest above 4), but the high gap of *Ability to speak foreign languages* (32,15%) demonstrates that this need should be addressed in the future.

A very intriguing situation here is the negative gap in *Oral communication skills and Skills, related to awareness of local customs* (see Table 3). This means that visitor attractions employees do not foresee any additional need of proficiency in oral communication and cultural awareness in the future. The reasons might be various and hardly to generalize. From one side, the current level of proficiency of employees might be enough for their jobs, hence no need of additional improvement. On the other side, oral communication might not be considered as essential in the future, i.e. current guide, conducting a lecture in front of the tourists might be exchanged with digital audio guides, or with any other form of self-service guiding.

Diversity skills

In the evaluation of current and future diversity skills there is again an overlap - Gender equality skills; Age-related accessibility skills; Skills related to diversity in religious beliefs – appear on the top both now and in the future. All three topics are currently extensively discussed in Bulgarian society, and therefore visitor attraction employees consider them as important.

Notable gaps here (see Table 4):

- Diets and allergy needs skill - 16,29%
- Skills related to disabilities and appropriate infrastructure - 15,61%

Both these gaps are in infant age of utilization in Bulgaria, but it is a very good sign, that people have realised this and anticipated significant development in this direction.

Table 2. PERSONAL SKILLS. Visitor attractions – current and future mean, and gap between them

PERSONAL SKILLS. Visitor attractions	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Problem solving	3,61	4	0,39	10,80%
Initiative and commitment	3,79	4,11	0,32	8,44%
Customer orientation	3,75	4,25	0,50	13,33%
Ethical conduct and respect	3,96	4,25	0,29	7,32%
Willingness to change	3,86	4,18	0,32	8,29%
Promoting a positive work environment	3,86	4,21	0,35	9,07%
Creativity	4,11	4,29	0,18	4,38%
Willingness to learn and to perform	4	4,25	0,25	6,25%
TOTAL	3,87	4,19	0,33	8,40%

Table 3. COMMUNICATION SKILLS. Visitor attractions - current and future mean, and gap between them

COMMUNICATION SKILLS. Visitor attractions	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Written communication skills	3,93	4,04	0,11	2,80%
Oral communication skills	4,18	4,14	-0,04	-0,96%
Active listening skills	4,04	4,11	0,07	1,73%
Skills related to cultural awareness and expression	4,11	4,25	0,14	3,41%
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	4,43	4,32	-0,11	-2,48%
Ability to speak foreign languages	3,11	4,11	1,00	32,15%
Skills related to intercultural host-guest understanding and respect	4,11	4,29	0,18	4,38%
TOTAL	3,99	4,18	0,19	4,84%

Table 4. DIVERSITY SKILLS. Visitor attractions- current and future mean, and gap between them

DIVERSITY SKILLS. Visitor attractions	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Gender equality skills	4,04	4,14	0,10	2,48%
Age-related accessibility skills	3,93	4,11	0,18	4,58%
Diets and allergy needs skills	3,07	3,57	0,50	16,29%
Skills related to disabilities and appropriate infrastructure	3,46	4	0,54	15,61%
Skills related to diversity in religious beliefs	3,79	4,04	0,25	6,60%
TOTAL	3,66	3,97	0,31	8,58%

Digital Skills	
Current Level of Proficiency. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Operating System use skills (e.g., Windows) 2. Microsoft Office skills (e.g., Word, Excel, Powerpoint) 3. Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors <p>Least:</p> <ol style="list-style-type: none"> 1. Artificial Intelligence (AI) and robotics skills 2. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality 3. Computer programming skills
Future level of proficiency in 2030. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Microsoft Office skills (e.g., Word, Excel, Powerpoint) 2. Operating System use skills (e.g., Windows) 3. Social media skills <p>Least:</p>

	<ol style="list-style-type: none"> 1. Artificial Intelligence (AI) and robotics skills 2. Computer programming skills 3. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality
Training Provision for digital skills?	These are the skills for which training was most provided – 57,1% (16) of the respondents say they have had training in digital skills, whereas 42,9% (12) of them deny they have received digital training.
Most popular/ three main types of training for digital skills	Exactly half (50%, 14) of the Visitor attraction companies received On the job training and 17,9% (5) of them took online courses. Other types of training provided – 10,7% (3) used One day on-site training by external provider, 7,1% (2) - Several days on-site training by external provider, and 3,6% (1) for One day off-site training by external provider and 3,6% (1) for Several days off-site training by external provider; 7,1% (2) – vocational training and 3,6% (1) – higher education
<p>Expectedly, the scope of current digital skills is limited to the most common computer literacy (see Table 5), i.e. <i>Operating System use skills (e.g., Windows); Microsoft Office skills (e.g., Word, Excel, Powerpoint); Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors</i>. It is strange, however, that 2 of them (<i>Operating System use skills (e.g., Windows); Microsoft Office skills (e.g., Word, Excel, Powerpoint)</i>) are again cited as mostly needed in the future. In contrast to the coming trend of <i>Artificial intelligence, Robotics, Augmented reality and Virtual reality</i> penetrating the visitor attractions market, in Bulgaria those technologies still lack enough appreciation as possible tools in the visitor attractions. The reason behind those results might be found both in the general scepticism towards such devices, and the relatively high prices of these technologies, making them too expensive to implement in Bulgaria, where the standard of living is generally lower.</p> <p>The highest gap for Visitor attractions companies is found in <i>Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality (81,56%) and Artificial Intelligence (AI) and robotics skills (57,14%)</i> groups of skills. This is also the highest gap of any skills for the Visitor attractions (see Table 6). A possible explanation might be the fact, that currently none of those skills have ever been required and/or applied by the visitor attractions. Still, the high gaps notify, that employees understand that such skills will be needed in the future, and therefore point them out as necessary.</p>	

Table 5. DIGITAL SKILLS. Visitor attractions - current and future mean, and gap between them

Table 6. terms.	DIGITAL SKILLS. Visitor attractions	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %	Gaps in relative Visitor attractions
	Operating System use skills (e.g., Windows)	4,07	4,21	0,14	3,44%	
	Microsoft Office skills (e.g., Word, Excel, Powerpoint)	3,89	4,25	0,36	9,25%	
	Skills for implementing online safety procedures	2,86	3,82	0,96	33,57%	
	Online marketing and communication skills	3,36	4,04	0,68	20,24%	
	Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	3,71	4,04	0,33	8,89%	
	Desk top publishing skills (for designing brochures, catalogues, etc.)	3,43	3,93	0,5	14,58%	
	Computer programming skills	2,14	2,79	0,65	30,37%	
	Website development skills	2,29	3,25	0,96	41,92%	
	Social media skills	3,64	4,18	0,54	14,84%	
	Skills to monitor online reviews	3	3,64	0,64	21,33%	
	Data analytics, business intelligence, big data skills	2,61	3,29	0,68	26,05%	
	Artificial Intelligence (AI) and robotics skills	1,68	2,64	0,96	57,14%	
	Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	1,79	3,25	1,46	81,56%	
	TOTAL	2,96	3,64	0,68	27,94%	

VISITOR ATTRACTIONS	GAP %
Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	81,56%
Artificial Intelligence (AI) and robotics skills	57,14%
Website development skills	41,92%
Skills for implementing online safety procedures	33,57%
Ability to speak foreign languages	32,15%
Computer programming skills	30,37%
Ability to manage waste, sewage, recycling and composting	27,04%
Data analytics, business intelligence, big data skills	26,05%
Skills to monitor online reviews	21,33%

Online marketing and communication skills	20,24%
Promotion of sustainable forms of transport (e.g. public transport)	18,10%
Diets and allergy needs skills	16,29%
Promotion of environmentally friendly activities and products	16,20%
Ability to minimise the use and maximise efficiency of energy and water consumption	15,64%
Skills related to disabilities and appropriate infrastructure	15,61%
Conservation of biodiversity	15,15%
Social media skills	14,84%
Desk top publishing skills (for designing brochures, catalogues, etc.)	14,58%

In general, Visitor attractions employees indicate bigger deficiencies in their digital and green skills, and less challenges regarding social and soft skills. The results might be interpreted from two different points of view. From one side, people perceive their current skills, hence education, as enough to cover their work needs in the attractions, or their current skills would not be necessary at all in the future. From the other side, however, this big difference might indicate the lack of such skills in the current situation, although needed now.

2. DESTINATION MANAGEMENT ORGANIZATIONS

In Bulgaria the role of a DMO is undertaken by the Ministry of Tourism, which forms part of the government, and in every municipality there is a special Tourism department, dealing with promotion and management of the industry on a local level. There are numerous NGOs, related to the tourism and hospitality, and although registered as “national coverage”, hardly any of them has the sufficient power and impact to act as a DMO. Usually most of the tourism NGOs are sector-related and focus only on the problems of the particular sector. Furthermore, some of the NGOs duplicate by sector or vision, which further fragments the tourism landscape. The NTG survey was distributed among the municipalities, which also by law are considered the DMOs in Bulgaria. Currently, there are 264 municipalities in Bulgaria, and 52 participated in the survey.

Environmental Skills	
Current Level of Proficiency. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Promotion of environmentally friendly activities and products 2. Conservation of biodiversity 3. Knowledge of climate change <p>Least:</p> <ol style="list-style-type: none"> 1. Ability to minimise the use and maximise efficiency of energy and water consumption 2. Ability to manage waste, sewage, recycling and composting 3. Promotion of sustainable forms of transport (e.g. public transport)
Future level of proficiency in 2030. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Promotion of environmentally friendly activities and products 2. Conservation of biodiversity 3. Knowledge of climate change <p>Least:</p> <ol style="list-style-type: none"> 1. Ability to minimise the use and maximise efficiency of energy and water consumption 2. Ability to manage waste, sewage, recycling and composting 3. Promotion of sustainable forms of transport (e.g. public transport)

Training Provision for these skills?	48,4% (15) of the DMOs provide training in environmental skills, which is significantly higher share, compared to the rest sectors.
Most popular/ three main types of training	25,8% (8) of the respondents have had on the job training, 16,1% (5) used online courses, 12,9% (4) have had on-site external provider training, whereas 9,7% (3) have had Several days off-site training by external provider.
<p>Bulgarian DMOs value the most proficient skills as the same for current and future environmental skills (Promotion of environmentally friendly activities and products; Conservation of biodiversity; Knowledge of climate change). Apart from the pure knowledge on current environmental problems, the DMOs' employees realize the importance to inform and educate the tourists and suppliers about relevant sustainable activities and products. Considering that DMOs are mostly municipalities, this promotion might be also in the form of directives and local legislation, thus managing not only the tourism industry in the region, but also any other kind of businesses. It is, however, strange that the Ability to minimise the use and maximise efficiency of energy and water consumption, and to manage waste, sewage, recycling and composting has been ranked at a lower place, because these are the particular operational activities that would mostly contribute to the entire sustainable development of a destination. A probable explanation for this phenomenon might be the fact that currently similar environmental practices have very low penetration in Bulgaria, hence people cannot appreciate their real value and contribution to the environment protection.</p> <p>The same skills also indicate the highest gaps (see Table 7): <i>Ability to minimise the use and maximise efficiency of energy and water consumption (8,80%) and Ability to manage waste, sewage, recycling and composting (11,48%)</i>. While the lowest gaps are registered for <i>Conservation of biodiversity (5,24%) and Knowledge of climate change (5,46%)</i>. The latter, however, usually cater for a more passive approach and personal education, not proactive behaviour, as might be suggested for DMOs, considering their ultimate role for the tourism industry.</p>	

Table 7. ENVIRONMENTAL SKILLS. Destination management - current and future mean, and gap between them

ENVIRONMENTAL SKILLS. Destination management	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Ability to minimise the use and maximise efficiency of energy and water consumption	3,35	3,65	0,30	8,80%
Ability to manage waste, sewage, recycling and composting	3,35	3,74	0,39	11,48%

Conservation of biodiversity	3,68	3,87	0,19	5,24%
Promotion of sustainable forms of transport (e.g. public transport)	3,52	3,74	0,22	6,37%
Promotion of environmentally friendly activities and products	3,71	3,94	0,23	6,21%
Knowledge of climate change	3,61	3,81	0,20	5,46%
TOTAL	3,54	3,79	0,25	7,18%

Personal, Communication and Diversity Skills	
Current Level of Proficiency. Three most and three least proficient per category	<p>PERSONAL SKILLS - Most:</p> <ol style="list-style-type: none"> 1. Willingness to learn and to perform 2. Customer orientation 3. Ethical conduct and respect <p>PERSONAL SKILLS - Least:</p> <ol style="list-style-type: none"> 1. Creativity 2. Willingness to change 3. Promoting a positive work environment <p>COMMUNICATION SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Oral communication skills 2. Skills related to intercultural host-guest understanding and respect 3. Skills related to awareness of local customs (e.g., food, arts, language, crafts) <p>COMMUNICATION SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Ability to speak foreign languages 2. Active listening skills 3. Skills related to cultural awareness and expression <p>DIVERSITY SKILLS – Most:</p>

	<ol style="list-style-type: none"> 1. Age-related accessibility skills 2. Gender equality skills 3. Diets and allergy needs skills <p>DIVERSITY SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Skills related to disabilities and appropriate infrastructure 2. Skills related to diversity in religious beliefs 3. Diets and allergy needs skills
Future level of proficiency in 2030. Three most and three least proficient	<p>PERSONAL - Most:</p> <ol style="list-style-type: none"> 1. Willingness to learn and to perform 2. Initiative and commitment 3. Problem solving <p>PERSONAL - Least:</p> <ol style="list-style-type: none"> 1. Creativity 2. Promoting a positive work environment 3. Customer orientation <p>COMMUNICATION – Most:</p> <ol style="list-style-type: none"> 1. Oral communication skills 2. Active listening skills 3. Skills related to awareness of local customs (e.g., food, arts, language, crafts) AND Skills related to intercultural host-guest understanding and respect <p>COMMUNICATION – Least:</p> <ol style="list-style-type: none"> 1. Ability to speak foreign languages 2. Written communication skills 3. Skills related to cultural awareness and expression

	<p>DIVERSITY– Most:</p> <ol style="list-style-type: none"> 1. Age-related accessibility skills 2. Skills related to disabilities and appropriate infrastructure 3. Skills related to diversity in religious beliefs <p>DIVERSITY– Least:</p> <ol style="list-style-type: none"> 1. Gender equality skills 2. Diets and allergy needs skills 3. Skills related to disabilities and appropriate infrastructure
Training Provision for Social Skills	Social skills training have been provided to 67,7% (21) from the DMOs, and only 32,3% (10) did not have such training
Most popular/ three main types of training for social skills	<p>On the job – 45,2% (14)</p> <p>Online course 16,1% (5)</p> <p>One day on-site training by external provider – 16,1% (5)</p> <p>Several days on-site training by external provider – 12,9% (4)</p> <p>One day off-site training by external provider – 12,9% (4)</p> <p>Vocational training – 19,4% (6)</p>
<p><i>Personal Skills</i></p> <p>Bulgarian DMOs rate the highest personal skills regarding <i>Willingness to learn and to perform; Customer orientation; Ethical conduct and respect</i> as currently best presented in their companies (see Table 8). For the future, however, they place <i>Customer orientation</i> to a much lower position. They anticipate that in 2030 people should be ready to learn any time (M=4,39), manage crisis (<i>problem solving</i>, M=4,35) and demonstrate proactive behaviour (<i>Initiative and commitment</i>, M=4,39). Although the biggest gap in personal skills appears for the <i>Creativity</i> (14,95%), although the latter appears among the least necessary skills for the future employees of DMOs in Bulgaria (M=4,23). Notably, all the anticipated personal skills are evaluated above 4 (see Table 8), which means that DMOs' employees feel the crucial importance of the personal perception and self-commitment to the ultimate success of the tourism destination. On the other hand, the absolute size of gaps in Personal skills is among the lowest (0,13 – 0,50), which marks that DMOs do not foresee any substantial change in the proficiency and apparently are delighted with their current level</p>	

Communication Skills

As highest level of current proficiency Bulgarian DMOs place *Oral communication skills; Skills related to intercultural host-guest understanding and respect and Skills related to awareness of local customs (e.g., food, arts, language, crafts)*, all of them essential for the successful promotion and presentation of a tourist destination/product (see Table 9). However, similar to the Visitor attractions, DMOs also lack enough talent in *Speaking foreign languages* (Gap 15,49%). While *oral and written communication skills* decrease their importance as priority, *Active listening skills* appears with second largest gap and significance for the future employees (M=4,39) (see Table 9).

Diversity skills

The most appreciated diversity skills by Bulgarian DMOs (*Age-related accessibility skills; Gender equality skills; Diets and allergy needs skills*) are connected with providing proper service and commitment to the tourists and building welcoming image of the destination (see Table 10). These skills are upgraded with *Skills related to disabilities and appropriate infrastructure* for the future, proving the efforts of the DMOs to improve quality of service among all clients.

Training

An interesting fact about social skills training is the application of online course as training tool (5 DMOs pointed it). The most common training provider is always an external one. This is a serious reason to conclude that DMOs cannot rely on their own resource to organize soft skills training.

Overall, Bulgarian DMOs evaluate higher the future needs of social skills (all of them rated above 4), they anticipate certain needs for training, but in the current situation cannot provide such training, but rely almost entirely on an external supplier.

Table 8. PERSONAL SKILLS. Destination management - current and future mean

PERSONAL SKILLS. Destination management	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Problem solving	4	4,35	0,35	8,75%
Initiative and commitment	4	4,39	0,39	9,75%
Customer orientation	4,13	4,26	0,13	3,15%
Ethical conduct and respect	4,03	4,32	0,29	7,20%

Willingness to change	3,9	4,29	0,39	10,00%
Promoting a positive work environment	3,94	4,26	0,32	8,12%
Creativity	3,68	4,23	0,55	14,95%
Willingness to learn and to perform	4,16	4,39	0,23	5,53%
TOTAL	3,98	4,31	0,33	8,32%

Table 9. COMMUNICATION SKILLS. Destination management - current and future mean

COMMUNICATION SKILLS. Destination management	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Written communication skills	3,97	4,23	0,26	6,55%
Oral communication skills	4,03	4,39	0,36	8,93%
Active listening skills	3,81	4,39	0,58	15,22%
Skills related to cultural awareness and expression	3,9	4,32	0,42	10,77%
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	3,94	4,35	0,41	10,41%
Ability to speak foreign languages	3,55	4,1	0,55	15,49%
Skills related to intercultural host-guest understanding and respect	3,97	4,35	0,38	9,57%
TOTAL	3,88	4,30	0,42	10,89%

Table 10. DIVERSITY SKILLS. Destination management - current and future mean

DIVERSITY SKILLS. Destination management	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Gender equality skills	3,52	4	0,48	13,64%
Age-related accessibility skills	3,71	4,23	0,52	14,02%
Diets and allergy needs skills	3,52	4,1	0,58	16,48%
Skills related to disabilities and appropriate infrastructure	3,35	4,19	0,84	25,07%
Skills related to diversity in religious beliefs	3,45	4,19	0,74	21,45%
TOTAL	3,51	4,14	0,63	18,01%

Digital Skills	
Current Level of Proficiency. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Operating System use skills (e.g., Windows) 2. Microsoft Office skills (e.g., Word, Excel, Powerpoint) 3. Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors <p>Least:</p> <ol style="list-style-type: none"> 1. Artificial Intelligence (AI) and robotics skills 2. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality 3. Computer programming skills
Future level of proficiency in 2030. Three most and three least proficient.	<p>Most:</p> <ol style="list-style-type: none"> 1. Operating System use skills (e.g., Windows) 2. Microsoft Office skills (e.g., Word, Excel, Powerpoint) 3. Online marketing and communication skills AND Social media skills <p>Least:</p> <ol style="list-style-type: none"> 1. Artificial Intelligence (AI) and robotics skills 2. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality 3. Website development skills
Training Provision for digital skills?	Again a high share of DMOs provide training on digital skills – 54,8% (17) and only 45,2% (14) do not provide
Most popular/ three main types of training for digital skills	<p>On the job 38,7% (12)</p> <p>Online source 32,3% (10)</p> <p>Vocational training 12,9% (4)</p> <p>Several days off-site training by external provider 9,7% (3)</p>

<p>DMOs from Bulgaria report relatively good level of proficiency in the most common computer literacy skills (<i>Operating System use skills (e.g., Windows); Microsoft Office skills (e.g., Word, Excel, Powerpoint); Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors</i>). In the future decade they would rely on the same skills, enriched with increased expertise in <i>Social media and Online marketing and communications</i>. Unexpectedly, DMOs do not pay more attention to the <i>Artificial Intelligence, Augmented and Virtual reality</i>, although the relative gaps are significant (63,32% and 55,51% accordingly). In terms of absolute numbers the future need remains quite low (M=3,74 and M=3,81 accordingly) (see Table 11).</p> <p><i>Training</i></p> <p>32,3% of the DMOs point out Online course as a training tool, and 12,9% recognise Vocational training. This means that those training tools prove to be efficient in Digital skills training.</p> <p>The top Skill gaps across Bulgarian DMOs (see Table 12) are classified as digital skills, whereas at the lesser skills gaps include green and social skills. According to the above analysis these results demonstrate good preparation in social skills and a proper attitude regarding green skills, but still not enough well trained employees.</p>

Table 11. DIGITAL SKILLS. Destination management - current and future mean, and gap between them

DIGITAL SKILLS. Destination management	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Operating System use skills (e.g., Windows)	4,29	4,55	0,26	6,06%
Microsoft Office skills (e.g., Word, Excel, Powerpoint)	4,23	4,55	0,32	7,57%
Skills for implementing online safety procedures	3,39	4,29	0,9	26,55%
Online marketing and communication skills	3,61	4,45	0,84	23,27%
Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	3,84	4,42	0,58	15,10%
Desk top publishing skills (for designing brochures, catalogues, etc.)	3,48	4,32	0,84	24,14%
Computer programming skills	2,48	3,77	1,29	52,02%
Website development skills	2,58	3,94	1,36	52,71%
Social media skills	3,55	4,45	0,9	25,35%
Skills to monitor online reviews	3,19	4,06	0,87	27,27%

Table 12. Relative Destination

Data analytics, business intelligence, big data skills	3	3,97	0,97	32,33%
Artificial Intelligence (AI) and robotics skills	2,29	3,74	1,45	63,32%
Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	2,45	3,81	1,36	55,51%
TOTAL	3,26	4,18	0,92	31,63%

gaps of all skills.
Management.

DESTINATION MANAGENT	GAP %
Artificial Intelligence (AI) and robotics skills	63,32%
Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	55,51%
Website development skills	52,71%
Computer programming skills	52,02%
Data analytics, business intelligence, big data skills	32,33%
Skills to monitor online reviews	27,27%
Skills for implementing online safety procedures	26,55%
Social media skills	25,35%
Skills related to disabilities and appropriate infrastructure	25,07%
Desk top publishing skills (for designing brochures, catalogues, etc.)	24,14%
Online marketing and communication skills	23,27%
Skills related to diversity in religious beliefs	21,45%
Diets and allergy needs skills	16,48%
Ability to speak foreign languages	15,49%
Active listening skills	15,22%
Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	15,10%
Creativity	14,95%
Age-related accessibility skills	14,02%

Gender equality skills	13,64%
Ability to manage waste, sewage, recycling and composting	11,48%
Skills related to cultural awareness and expression	10,77%
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	10,41%
Willingness to change	10,00%
Initiative and commitment	9,75%
Skills related to intercultural host-guest understanding and respect	9,57%
Oral communication skills	8,93%
Ability to minimise the use and maximise efficiency of energy and water consumption	8,80%
Problem solving	8,75%
Promoting a positive work environment	8,12%
Microsoft Office skills (e.g., Word, Excel, Powerpoint)	7,57%
Ethical conduct and respect	7,20%
Written communication skills	6,55%
Promotion of sustainable forms of transport (e.g. public transport)	6,37%
Promotion of environmentally friendly activities and products	6,21%
Operating System use skills (e.g., Windows)	6,06%
Willingness to learn and to perform	5,53%
Knowledge of climate change	5,46%
Conservation of biodiversity	5,24%
Customer orientation	3,15%

3. TRAVEL AGENCIES / TOUR OPERATORS

According to the Bulgarian official register there are around 4000 travel agencies in the country. Most of them act simultaneously as tour operator and travel agent. However, many of the travel agencies are affiliated to accommodation companies and actually do not operate as regular tourist intermediaries. Sample for this survey: 55

Environmental Skills	
Current Level of Proficiency. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Knowledge of climate change 2. Ability to minimise the use and maximise efficiency of energy and water consumption 3. Promotion of sustainable forms of transport (e.g. public transport) <p>Least:</p> <ol style="list-style-type: none"> 1. Ability to manage waste, sewage, recycling and composting 2. Conservation of biodiversity 3. Promotion of environmentally friendly activities and products
Future level of proficiency in 2030. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Knowledge of climate change 2. Ability to minimise the use and maximise efficiency of energy and water consumption 3. Promotion of environmentally friendly activities and products <p>Least:</p> <ol style="list-style-type: none"> 1. Conservation of biodiversity 2. Ability to manage waste, sewage, recycling and composting 3. Promotion of sustainable forms of transport (e.g. public transport)
Training Provision for these skills?	Only 30,8% (8) of the Travel Agencies report to having had Environmental Management skills, and the rest 69,2% (18) have not

Most popular/ three main types of training	<p>On the job – 19,2% (5)</p> <p>Online course 7,7% (2)</p> <p>Several days on-site training by external provider 7,7% (2)</p> <p>One day off-site training by external provider 7,7% (2)</p> <p>Several days off-site training by external provider 7,7% (2)</p> <p>Vocational training 7,7% (2)</p>
<p>As tour organization is a core activity, travel agencies' ultimate goal is to compile the most efficient and valuable trip for their clients. Therefore, when identifying green skills, they have selected <i>Knowledge of climate change; Ability to minimise the use and maximise efficiency of energy and water consumption and Promotion of sustainable forms of transport (e.g. public transport)</i> as most proficient for their current job (see Table 13). Since travel agencies usually assist with transportation, the promotion of sustainable transport comes as a natural part of their job.</p> <p>In the future Bulgarian travel agencies do not expect any sharp change, hence they rank almost the same skills, plus <i>Promotion of environmentally friendly activities and products</i>, indicating deeper understanding of the importance of sustainable development. Still, the gaps both in absolute numbers and in relative, appear very low for the whole group of skills (between 0,11 – 0,31 for absolute; and between 3,40% to 10,25% in relative). This implies that either travel agencies feel prepared for the next decade in terms of green skills, or they consider green skills as insignificant for their job.</p>	

Table 13. ENVIRONMENTAL SKILLS. Travel agents and tour operators

ENVIRONMENTAL SKILLS. Travel agents and tour operators	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Ability to minimise the use and maximise efficiency of energy and water consumption	3,35	3,46	0,11	3,40%
Ability to manage waste, sewage, recycling and composting	3,04	3,35	0,31	10,25%
Conservation of biodiversity	3,08	3,23	0,15	4,98%
Promotion of sustainable forms of transport (e.g. public transport)	3,23	3,38	0,15	4,62%
Promotion of environmentally friendly activities and products	3,19	3,42	0,23	7,13%
Knowledge of climate change	3,50	3,77	0,27	7,71%
TOTAL	3,23	3,44	0,20	6,32%

Personal, Communication and Diversity Skills	
Current Level of Proficiency. Three most and three least proficient per category	<p>PERSONAL SKILLS - Most:</p> <ol style="list-style-type: none"> 1. Customer orientation 2. Ethical conduct and respect 3. Promoting a positive work environment AND Willingness to learn and to perform <p>PERSONAL SKILLS - Least:</p> <ol style="list-style-type: none"> 1. Initiative and commitment 2. Willingness to change 3. Problem solving <p>COMMUNICATION SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Skills related to intercultural host-guest understanding and respect 2. Oral communication skills 3. Skills related to awareness of local customs (e.g., food, arts, language, crafts) <p>COMMUNICATION SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Skills related to cultural awareness and expression 2. Active listening skills 3. Ability to speak foreign languages <p>DIVERSITY SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Gender equality skills 2. Age-related accessibility skills 3. Skills related to diversity in religious beliefs <p>DIVERSITY SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Skills related to disabilities and appropriate infrastructure 2. Diets and allergy needs skills

	3. Skills related to diversity in religious beliefs
Future level of proficiency in 2030. Three most and three least proficient	<p>PERSONAL - Most:</p> <ol style="list-style-type: none"> 1. Promoting a positive work environment 2. Ethical conduct and respect 3. Creativity <p>PERSONAL - Least:</p> <ol style="list-style-type: none"> 1. Willingness to change 2. Initiative and commitment 3. Problem solving <p>COMMUNICATION – Most:</p> <ol style="list-style-type: none"> 1. Oral communication skills 2. Skills related to intercultural host-guest understanding and respect 3. Active listening skills AND Skills related to awareness of local customs (e.g., food, arts, language, crafts) AND Ability to speak foreign languages <p>COMMUNICATION – Least:</p> <ol style="list-style-type: none"> 1. Skills related to cultural awareness and expression 2. Written communication skills 3. Active listening skills AND Skills related to awareness of local customs (e.g., food, arts, language, crafts) AND Ability to speak foreign languages <p>DIVERSITY– Most:</p> <ol style="list-style-type: none"> 1. Gender equality skills 2. Age-related accessibility skills 3. Diets and allergy needs skills AND Skills related to disabilities and appropriate infrastructure AND Skills related to diversity in religious beliefs <p>DIVERSITY– Least:</p> <ol style="list-style-type: none"> 1. Diets and allergy needs skills 2. Skills related to disabilities and appropriate infrastructure

	3. Diets and allergy needs skills AND Skills related to diversity in religious beliefs
Training Provision for Social Skills	38,5% (10) of the Travel agencies and tour operators report to having had social skills training, and 61,5% (16) have not
Most popular/ three main types of training for social skills	<p>On the job 30,8% (8)</p> <p>Several days on-site training by external provider 11,5% (3)</p> <p>One day off-site training by external provider 7,7% (2)</p> <p>Several days off-site training by external provider 11,5% (3)</p> <p>Apprenticeship 7,7% (2)</p> <p>Vocational training 11,5% (3)</p>
<p><i>Personal skills</i></p> <p>Being in constant interaction with clients, Bulgarian travel agencies expectedly rank <i>Customer orientation; Ethical conduct and respect, Promoting a positive work environment AND Willingness to learn and to perform</i> as best performing skills in current situation. For the future they add <i>Creativity</i>, because of the rapidly increasing competition and the threat of OTA and sharing economy, which enable customers to book themselves and substitute or exclude any intermediary (see Table 14). Extraordinary products and solutions, based on the employees' creativity would definitely help in the future job of travel agencies. Still, the gaps in personal skills are relatively low (between 0,12-0,50 in absolute and 2,69% -12,50% in relative terms), with the notable exception of Initiative and commitment (0,50 and 12,50%).</p> <p><i>Communication skills</i></p> <p>Regarding communication skills Bulgarian travel agencies report relatively high levels of proficiency in the current situation (total M=4,19), hence their expectations for the future are almost on the same level (Total M=4,57). In contrast to the visitor attractions and DMOs, travel agencies employees emphasize on the importance of <i>oral and written communication skills</i>, as largely used in the intermediary business. That is why it is impossible to differentiate "most" and "least" preferred communications skills, because they actually overlap – the evaluation range of the future level of proficiency remains in very narrow limits – between 4,50 to 4,62 (see Table 15). Consequently, the gaps are comparatively low, implying that Bulgaria travel agencies feel confident in their communication abilities – now and in the future (see Table 15).</p> <p><i>Diversity skills</i></p>	

Similar to the previous sets of skills, the current diversity skills, selected by the Bulgarian travel agencies hardly differ from the future expectations (*Gender equality skills; Age-related accessibility skills and Skills related to diversity in religious beliefs* – current), finally almost overlapping in ranking (most and least future needs of skills are ranked very close (*Skills related to disabilities and appropriate infrastructure; Diets and allergy needs skills AND Skills related to diversity in religious beliefs* all have 4,38 value). The gaps, however, are higher, than in the previous social skills, leading to the conclusion, that Bulgarian travel agencies note an area for improvement for their employees in the diversity skills (see Table 16).

Training

38,5% (10) of the Travel agencies and tour operators report to having had social skills training, and 61,5% (16) have not had such. The training itself has happened on the job for 8 out of the 10 agencies. It is noteworthy to mention, that this is the first subsector where Apprenticeship appears as a tool for trainings. Apparently, it is not popular in Bulgaria, but since most of the training happens on the job, apprenticeship might be an appropriate solution for the Bulgarian travel agencies.

Table 14. PERSONAL SKILLS. Travel agents and tour operators

PERSONAL SKILL. Travel agents and tour operators	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Problem solving	4,08	4,54	0,46	11,27%
Initiative and commitment	4	4,5	0,50	12,50%
Customer orientation	4,46	4,58	0,12	2,69%
Ethical conduct and respect	4,46	4,62	0,16	3,59%
Willingness to change	4,04	4,38	0,34	8,42%
Promoting a positive work environment	4,35	4,65	0,30	6,90%
Creativity	4,23	4,62	0,39	9,22%
Willingness to learn and to perform	4,35	4,58	0,23	5,29%
TOTAL	4,25	4,56	0,31	7,36%

Table 15. COMMUNICATION SKILLS. Travel agents and tour operators

COMMUNICATION SKILLS. Travel agents and tour operators	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
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Written communication skills	4,12	4,54	0,42	10,19%
Oral communication skills	4,31	4,62	0,31	7,19%
Active listening skills	4,12	4,58	0,46	11,17%
Skills related to cultural awareness and expression	3,96	4,5	0,54	13,64%
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	4,27	4,58	0,31	7,26%
Ability to speak foreign languages	4,15	4,58	0,43	10,36%
Skills related to intercultural host-guest understanding and respect	4,38	4,62	0,24	5,48%
TOTAL	4,19	4,57	0,39	9,25%

Table 16. DIVERSITY SKILLS. Travel agents and tour operators

DIVERSITY SKILLS. Travel agents and tour operators	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Gender equality skills	4,38	4,58	0,20	4,57%
Age-related accessibility skills	4,04	4,5	0,46	11,39%
Diets and allergy needs skills	3,85	4,38	0,53	13,77%
Skills related to disabilities and appropriate infrastructure	3,62	4,38	0,76	20,99%
Skills related to diversity in religious beliefs	3,92	4,38	0,46	11,73%
TOTAL	3,96	4,44	0,48	12,17%

Digital Skills

Current Level of Proficiency. Three most and three least proficient

Most:

1. Microsoft Office skills (e.g., Word, Excel, Powerpoint)
2. Operating System use skills (e.g., Windows)
3. Social media skills

Least:

	<ol style="list-style-type: none"> 1. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality 2. Artificial Intelligence (AI) and robotics skills 3. Data analytics, business intelligence, big data skills
Future level of proficiency in 2030. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Social media skills 2. Online marketing and communication skills 3. Operating System use skills (e.g., Windows) AND Microsoft Office skills (e.g., Word, Excel, Powerpoint) <p>Least:</p> <ol style="list-style-type: none"> 1. Computer programming skills 2. Website development skills 3. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality
Training Provision for digital skills?	57,7% (15) of the Travel agencies have been provided with Digital skills training at their organizations. The rest 42,3% (11) did not have had such training
Most popular/ three main types of training for digital skills	<p>On the job 53,8% (14)</p> <p>Online course 19,2% (5)</p> <p>One-day on-site training by external provider 23,1% (6)</p> <p>Apprenticeship 15,4% (4)</p> <p>Several days on-site training by external provider 11,5% (3)</p>
<p>As suspected, <i>Augmented, Virtual reality and Artificial intelligence</i> again lead top of the least developed current skills. For the best proficiency level Bulgarian travel agencies rank <i>computer literacy skills and Social media handling</i>, thus proving the trend for increased significance of social media worldwide and in particularly in tourism (see Table 17). The future highest ranked skills include also <i>Online marketing and communications skills</i> to accomplish the digital promotion landscape as crucial for the travel agencies. Another reason for these results may come from the continuous digitalization of intermediaries and omission of their physical offices, thus increasing the need for better digital marketing skills.</p> <p>Another interesting occurrence in the digital skills and travel agencies is the negative gap for Microsoft Office skills (-0,04 in absolute and -0,92% in relative). In line with the previous reasoning this could be a consequence from transforming the travel agencies only to online intermediaries, where</p>	

they would not need so much pure office skills, but rather would rely on different innovative software and technologies. The results for *Computer programming skills (gap 30,31%)*, *Website development skills (gap 31,60%)*, *Data analytics, business intelligence and big data skills (gap 39,19%)* only support the above.

Table 17. DIGITAL SKILLS. Travel agents and tour operators

DIGITAL SKILLS. Travel agents and tour operators	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Operating System use skills (e.g., Windows)	4,23	4,31	0,08	1,89%
Microsoft Office skills (e.g., Word, Excel, Powerpoint)	4,35	4,31	-0,04	-0,92%
Skills for implementing online safety procedures	3,54	4,23	0,69	19,49%
Online marketing and communication skills	3,69	4,38	0,69	18,70%
Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	3,81	4,19	0,38	9,97%
Desk top publishing skills (for designing brochures, catalogues, etc.)	3,69	3,96	0,27	7,32%
Computer programming skills	2,54	3,31	0,77	30,31%
Website development skills	2,69	3,54	0,85	31,60%
Social media skills	4,04	4,46	0,42	10,40%
Skills to monitor online reviews	3,69	4,23	0,54	14,63%
Data analytics, business intelligence, big data skills	2,96	4,12	1,16	39,19%
Artificial Intelligence (AI) and robotics skills	2,12	3,58	1,46	68,87%
Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	2,04	3,54	1,5	73,53%
TOTAL	3,34	4,01	0,67	25,00%

As a rule, Bulgarian travel agencies primary skills gaps again belong to Digital skills, however, those are not dominant, like in the previous subsectors. In the top relative gaps of travel agency skills (see Table 18) green, diversity and communication skills predominate, implying that in Bulgaria training should be emphasized on the whole portfolio of future skills for travel agencies.

Table 18. GAPS IN RELATIVE TERMS. TRAVEL AGENTS/TO'S

TRAVEL AGENTS/TO'S	GAP %
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Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	73,53%
Artificial Intelligence (AI) and robotics skills	68,87%
Data analytics, business intelligence, big data skills	39,19%
Website development skills	31,60%
Computer programming skills	30,31%
Skills related to disabilities and appropriate infrastructure	20,99%
Skills for implementing online safety procedures	19,49%
Online marketing and communication skills	18,70%
Skills to monitor online reviews	14,63%
Diets and allergy needs skills	13,77%
Skills related to cultural awareness and expression	13,64%
Initiative and commitment	12,50%
Skills related to diversity in religious beliefs	11,73%
Age-related accessibility skills	11,39%
Problem solving	11,27%
Active listening skills	11,17%
Social media skills	10,40%
Ability to speak foreign languages	10,36%
Ability to manage waste, sewage, recycling and composting	10,25%
Written communication skills	10,19%
Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	9,97%
Creativity	9,22%
Willingness to change	8,42%
Knowledge of climate change	7,71%
Desk top publishing skills (for designing brochures, catalogues, etc.)	7,32%

Skills related to awareness of local customs (e.g., food, arts, language, crafts)	7,26%
Oral communication skills	7,19%
Promotion of environmentally friendly activities and products	7,13%
Promoting a positive work environment	6,90%
Skills related to intercultural host-guest understanding and respect	5,48%
Willingness to learn and to perform	5,29%
Conservation of biodiversity	4,98%
Promotion of sustainable forms of transport (e.g. public transport)	4,62%
Gender equality skills	4,57%
Ethical conduct and respect	3,59%
Ability to minimise the use and maximise efficiency of energy and water consumption	3,40%
Customer orientation	2,69%
Operating System use skills (e.g., Windows)	1,89%
Microsoft Office skills (e.g., Word, Excel, Powerpoint)	-0,92%

4. FOOD & BEVERAGE

According to the official register for F&B outlets in Bulgaria there are more than 20 000 units. Since they differ from simple bar or café to full a la carte or all-inclusive restaurants, it is not possible to differentiate which of them are directly concerned to the tourism industry, and which are used mostly from the local population. Our sample of F&B outlets is also quite small – only 19 respondents, hence it would be impossible to generalize and derive any serious implications from below results.

Environmental Skills	
Current Level of Proficiency. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Knowledge of climate change 2. Conservation of biodiversity 3. Ability to minimise the use and maximise efficiency of energy and water consumption AND Promotion of environmentally friendly activities and products <p>Least:</p> <ol style="list-style-type: none"> 1. Ability to manage waste, sewage, recycling and composting 2. Promotion of sustainable forms of transport (e.g. public transport) 3. Ability to minimise the use and maximise efficiency of energy and water consumption AND Promotion of environmentally friendly activities and products
Future level of proficiency in 2030. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Promotion of environmentally friendly activities and products 2. Conservation of biodiversity 3. Knowledge of climate change <p>Least:</p> <ol style="list-style-type: none"> 1. Promotion of sustainable forms of transport (e.g. public transport) 2. Ability to minimise the use and maximise efficiency of energy and water consumption 3. Ability to manage waste, sewage, recycling and composting
Training Provision for these skills?	50% (4) of the F&B companies responding to this question report to having had Environmental Management skills training.

Most popular/ three main types of training	On the job 50% (4) Online course, One day on-site training by external provider, Apprenticeship – each 12,5% (1)
<p>F&B product compiles both tangible and intangible elements, and the necessity to optimize resource use and process efficiency attaches particular importance to the primacy of environmental skills. Still, the Bulgarian F&B employees have not reached the proper level of <i>Ability to manage waste, sewage, recycling and composting, Ability to minimise the use and maximise efficiency of energy and water consumption AND Promotion of environmentally friendly activities and products</i>, as per results in Table 19. The future prospect of skills proficiency, however, does not focus exclusively on those groups of skills. Instead, there is a higher level required in <i>Promotion of environmentally friendly activities and products; Conservation of biodiversity and Knowledge of climate change</i>, which does not demonstrate an active position of F&B in the environment protection, but rather enlarge the knowledge and awareness of the people. Still, the gaps between current and future proficiency in green skills are higher, than in the previous subsectors, ranging from 19,23% to 38, 36% (see Table 19).</p> <p>Reported training in green skills is quite limited (only 4 companies), but could stem from the fact, that in Bulgaria recycling technologies are very scarcely presented, hence few outlets consider a need to perform and organize training on activities related to environmental protection.</p>	

Table 19. ENVIRONMENTAL SKILLS. Food & beverage

ENVIRONMENTAL SKILLS. Food & beverage	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Ability to minimise the use and maximise efficiency of energy and water consumption	3,63	4,5	0,88	24,14%
Ability to manage waste, sewage, recycling and composting	3,25	4,5	1,25	38,46%
Conservation of biodiversity	3,75	4,63	0,88	23,47%
Promotion of sustainable forms of transport (e.g. public transport)	3,50	4,38	0,88	25,14%
Promotion of environmentally friendly activities and products	3,63	4,88	1,26	34,62%
Knowledge of climate change	3,88	4,62	0,74	19,23%
TOTAL	3,60	4,59	0,98	27,21%

Personal, Communication and Diversity Skills	
Current Level of Proficiency. Three most and three least proficient per category	<p>PERSONAL SKILLS - Most:</p> <ol style="list-style-type: none"> 1. Ethical conduct and respect 2. Customer orientation 3. Promoting a positive work environment <p>PERSONAL SKILLS - Least:</p> <ol style="list-style-type: none"> 1. Willingness to change 2. Creativity 3. Willingness to learn and to perform AND Initiative and commitment <p>COMMUNICATION SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Skills related to intercultural host-guest understanding and respect 2. Skills related to awareness of local customs (e.g., food, arts, language, crafts) 3. Oral communication skills <p>COMMUNICATION SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Skills related to cultural awareness and expression 2. Ability to speak foreign languages 3. Written communication skills <p>DIVERSITY SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Gender equality skills 2. Age-related accessibility skills 3. Skills related to diversity in religious beliefs <p>DIVERSITY SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Skills related to disabilities and appropriate infrastructure 2. Diets and allergy needs skills

	3. Age-related accessibility skills
Future level of proficiency in 2030. Three most and three least proficient	<p>PERSONAL - Most:</p> <ol style="list-style-type: none"> 1. Promoting a positive work environment 2. Ethical conduct and respect 3. Customer orientation <p>PERSONAL - Least:</p> <ol style="list-style-type: none"> 1. Creativity 2. Willingness to change 3. Problem solving AND Willingness to learn and to perform <p>COMMUNICATION – Most:</p> <ol style="list-style-type: none"> 1. Skills related to intercultural host-guest understanding and respect 2. Skills related to awareness of local customs (e.g., food, arts, language, crafts) 3. Active listening skills <p>COMMUNICATION – Least:</p> <ol style="list-style-type: none"> 1. Written communication skills 2. Oral communication skills 3. Ability to speak foreign languages <p>DIVERSITY– Most:</p> <ol style="list-style-type: none"> 1. Gender equality skills 2. Diets and allergy needs skills 3. Skills related to diversity in religious beliefs <p>DIVERSITY– Least:</p> <ol style="list-style-type: none"> 1. Age-related accessibility skills

	<p>2. Skills related to disabilities and appropriate infrastructure</p> <p>3. Skills related to diversity in religious beliefs</p>
Training Provision for Social Skills	37,5% (3) of the F&B companies have had social skills training, whereas 62,5% (5) did not have such training.
Most popular/ three main types of training for social skills	<p>On the job 37,5% (3)</p> <p>Online course 12,5% (1)</p>
<p><i>Personal skills</i></p> <p>Currently, F&B employees in Bulgaria seem proficient enough in <i>Ethical conduct and respect; Customer orientation and Promoting a positive work environment</i>, but need additional training in <i>Willingness to change; Creativity and Willingness to learn and to perform AND Initiative and commitment</i> (see Table 20). The most notable gaps in personal skills are observed for the Willingness to change (29,59%) and Creativity (25,14%), which is somewhat surprising, provided the default propensity of the F&B industry to invent new and extraordinary products, and the constant dynamics in the sector. Future projected need of skills actually repeats the current results, although the top three groups of skills are in a different order.</p> <p><i>Communication skills</i></p> <p>The highest ranked communication skills cater to the deeper understanding of cultural diversity and local customs (<i>Skills related to intercultural host-guest understanding and respect; Skills related to awareness of local customs (e.g., food, arts, language, crafts) and Oral communication skills</i>, see Table 21), which together with the core communication abilities (<i>Oral communication and Active listening skills</i>) top both current and future evaluation of skill needs. The biggest gaps appear for Skills related to cultural awareness and expression (28,57%) and Ability to speak foreign languages (28,57%), indicating a possible potential to provide education and training in these fields.</p> <p><i>Diversity skills</i></p>	

Along with the current trends *Diets and allergy needs skills* rise in importance and need for proficiency from current to the future decade (from 3,50 to 4,13, 18% gap), together with *the Skills related to disabilities and appropriate infrastructure* (from 3,00 to 4,00, 33,33% gap), see Table 22. The latter represents also the highest relative gap, confirming once again the sharp need of such skills in Bulgaria, cited by all the sub sectors.

Training

Training of social skills in the F&B sector in Bulgaria is almost missing. Only 3 companies reported to have such. Hence, there is a big necessity for improvement in this direction.

Table 20. PERSONAL SKILLS. Food & beverage

PERSONAL SKILLS. Food & beverage	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Problem solving	3,88	4,5	0,62	15,98%
Initiative and commitment	3,75	4,62	0,87	23,20%
Customer orientation	4,13	4,75	0,62	15,01%
Ethical conduct and respect	4,37	4,75	0,38	8,70%
Willingness to change	3,38	4,38	1,00	29,59%
Promoting a positive work environment	4,13	4,75	0,62	15,01%
Creativity	3,5	4,38	0,88	25,14%
Willingness to learn and to perform	3,75	4,5	0,75	20,00%
TOTAL	3,86	4,58	0,72	18,58%

Table 21. COMMUNICATION SKILLS. Food & beverage

COMMUNICATION SKILLS. Food & beverage	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Written communication skills	3,63	4	0,37	10,19%
Oral communication skills	3,88	4,5	0,62	15,98%
Active listening skills	3,75	4,5	0,75	20,00%

Skills related to cultural awareness and expression	3,5	4,5	1,00	28,57%
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	4,13	4,5	0,37	8,96%
Ability to speak foreign languages	3,5	4,5	1,00	28,57%
Skills related to intercultural host-guest understanding and respect	4,38	4,62	0,24	5,48%
TOTAL	3,82	4,45	0,62	16,25%

Table 22. DIVERSITY SKILLS. Food & beverage

DIVERSITY SKILLS. Food & beverage	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Gender equality skills	3,88	4,25	0,37	9,54%
Age-related accessibility skills	3,63	3,88	0,25	6,89%
Diets and allergy needs skills	3,5	4,13	0,63	18,00%
Skills related to disabilities and appropriate infrastructure	3	4	1,00	33,33%
Skills related to diversity in religious beliefs	3,63	4,13	0,50	13,77%
TOTAL	3,53	4,08	0,55	15,59%

Digital Skills	
Current Level of Proficiency. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Skills to monitor online reviews 2. Operating System use skills (e.g., Windows) 3. Microsoft Office skills (e.g., Word, Excel, Powerpoint) <p>Least:</p> <ol style="list-style-type: none"> 1. Artificial Intelligence (AI) and robotics skills 2. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality 3. Computer programming skills

Future level of proficiency in 2030. Three most and three least proficient .	<p>Most:</p> <ol style="list-style-type: none"> 1. Skills to monitor online reviews 2. Operating System use skills (e.g., Windows) 3. Microsoft Office skills (e.g., Word, Excel, Powerpoint) <p>Least:</p> <ol style="list-style-type: none"> 1. Computer programming skills 2. Artificial Intelligence (AI) and robotics skills 3. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality
Training Provision for digital skills?	37,5% (3) of the F&B companies have had digital skills training, whereas 62,5% (5) did not have such training
Most popular/ three main types of training for digital skills	<p>On the job 25% (2)</p> <p>One day off-site training by external provider and Vocational training – each 12,5% (1)</p>
<p>In contrast to the rest of the sector Bulgarian F&B companies state as the most important skills as the <i>Monitoring online reviews</i> – both for the current and future situation. This result might be explained with the rising importance of review sites in building the image of a company and thus the popularity and bottom line of restaurants and F&B outlets among tourists and locals. The lowest ranking of digital skills not surprisingly belongs to <i>Augmented and virtual reality, as well as Artificial intelligence</i>.</p> <p>Among the biggest gaps in relative, we detect <i>Website development</i> (38,55%), <i>Computer programming skills</i> (35,20%) and <i>Data analytics, business intelligence and big data skills</i> (34,72%).</p> <p>All of them represent a field for training and education among F&B companies in Bulgaria. Moreover, the training of digital skills in Bulgarian F&B companies is negligible (only 3 of them reported to have had such).</p>	

Table 23. DIGITAL SKILLS. Food & beverage

DIGITAL SKILLS. Food & beverage	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Operating System use skills (e.g., Windows)	3,63	4,13	0,5	13,77%
Microsoft Office skills (e.g., Word, Excel, Powerpoint)	3,63	4,13	0,5	13,77%
Skills for implementing online safety procedures	3,13	3,88	0,75	23,96%
Online marketing and communication skills	3,13	4	0,87	27,80%
Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	3,5	3,88	0,38	10,86%
Desk top publishing skills (for designing brochures, catalogues, etc.)	3,38	4	0,62	18,34%
Computer programming skills	2,5	3,38	0,88	35,20%
Website development skills	2,62	3,63	1,01	38,55%
Social media skills	3,63	4	0,37	10,19%
Skills to monitor online reviews	3,88	4,37	0,49	12,63%
Data analytics, business intelligence, big data skills	2,88	3,88	1	34,72%
Artificial Intelligence (AI) and robotics skills	2,13	3,38	1,25	58,69%
Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	2,38	3,5	1,12	47,06%
TOTAL	3,11	3,86	0,75	26,58%

In summary, Bulgarian F&B companies suffer the most from a lack of proficiency not only in digital skills (like all companies analysed beforehand), but also in green skills (*Ability to manage waste, sewage, recycling and composting, 38,46% in relative gap; and Promotion of environmentally friendly activities and products, 34,62% relative gap*) and social skills (*Skills, related to disabilities and appropriate infrastructure, 33,33% relative gap, Willingness to change, 29,59% relative gap, and Cultural awareness and expression, 28,57% relative gap*) (see Table 24). Considering the lack of adequate training in any of the sustainable skills among F&B companies in Bulgaria, this might be a good initial step to identify starting points in such education and training needs.

Table 24. GAPS IN RELATIVE TERMS. FOOD & BEVERAGE

FOOD & BEVERAGE	GAP %
Artificial Intelligence (AI) and robotics skills	58,69%

Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	47,06%
Website development skills	38,55%
Ability to manage waste, sewage, recycling and composting	38,46%
Computer programming skills	35,20%
Data analytics, business intelligence, big data skills	34,72%
Promotion of environmentally friendly activities and products	34,62%
Skills related to disabilities and appropriate infrastructure	33,33%
Willingness to change	29,59%
Skills related to cultural awareness and expression	28,57%
Ability to speak foreign languages	28,57%
Online marketing and communication skills	27,80%
Promotion of sustainable forms of transport (e.g. public transport)	25,14%
Creativity	25,14%
Ability to minimise the use and maximise efficiency of energy and water consumption	24,14%
Skills for implementing online safety procedures	23,96%
Conservation of biodiversity	23,47%
Initiative and commitment	23,20%
Active listening skills	20,00%
Willingness to learn and to perform	20,00%
Knowledge of climate change	19,23%
Desk top publishing skills (for designing brochures, catalogues, etc.)	18,34%
Diets and allergy needs skills	18,00%
Oral communication skills	15,98%
Problem solving	15,98%
Customer orientation	15,01%

Promoting a positive work environment	15,01%
Skills related to diversity in religious beliefs	13,77%
Operating System use skills (e.g., Windows)	13,77%
Microsoft Office skills (e.g., Word, Excel, Powerpoint)	13,77%
Skills to monitor online reviews	12,63%
Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	10,86%
Written communication skills	10,19%
Social media skills	10,19%
Gender equality skills	9,54%
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	8,96%
Ethical conduct and respect	8,70%
Age-related accessibility skills	6,89%
Skills related to intercultural host-guest understanding and respect	5,48%

5. ACCOMMODATION ESTABLISHMENTS

In 2018 there were 3458 hotels and accommodation establishments (with more than 10 beds available) officially registered in Bulgaria. There are also more than 18 000 other accommodation units, which fall mostly in the secondary shire of hospitality (i.e. camping sites, apartments, cottages, rooms for rent, guest houses and very small family-run hotels). In this opulence of accommodation opportunities, the hospitality environment is highly competitive, requiring best performance indicators, in order to survive. The sample of accommodation establishments in the current survey is 86, the biggest one across all other tourism subsectors.

Environmental Skills	
Current Level of Proficiency. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Knowledge of climate change 2. Promotion of environmentally friendly activities and products 3. Ability to manage waste, sewage, recycling and composting <p>Least:</p> <ol style="list-style-type: none"> 1. Conservation of biodiversity 2. Promotion of sustainable forms of transport (e.g. public transport) 3. Ability to minimise the use and maximise efficiency of energy and water consumption
Future level of proficiency in 2030. Three most and three least proficient	<p>Most:</p> <ol style="list-style-type: none"> 1. Promotion of environmentally friendly activities and products 2. Knowledge of climate change 3. Ability to manage waste, sewage, recycling and composting <p>Least:</p> <ol style="list-style-type: none"> 1. Conservation of biodiversity 2. Promotion of sustainable forms of transport (e.g. public transport) 3. Ability to minimise the use and maximise efficiency of energy and water consumption
Training Provision for these skills?	45,2% (19) of the Accommodation establishments have provided Environmental Management training for their employees, and 54,8% (23) have not had such training

Most popular/ three main types of training	<p>On the job 40,5% (17)</p> <p>One day on-site training by external provider 11,9% (5)</p> <p>Online course, Several days on-site training by external provider, One day off-site training by external provider, Higher education – each 2,4% (1)</p>
<p><i>Bulgarian accommodation establishments estimate relatively highly the need for environmental skills in their industry. The top three current skills (Knowledge of climate change; Promotion of environmentally friendly activities and products and Ability to manage waste, sewage, recycling and composting) coincide with the future ones, only with slight difference in the order (Promotion of environmentally friendly activities and products taking the top, while Knowledge of climate change remains second), see Table 25.</i></p> <p>The gaps, however, even medium in size, remain almost at the same level (Total mean of relative gap=22,41%), implying that none of the green skills has a significantly premium position, but all of them considered as necessary enough for the future.</p> <p>In contrast to the rest subsectors, in accommodation establishments results we detect the highest number of conducted trainings, especially in green skills (19; 45,2%). Again, the majority of them happen on the job (40,5%, 17).</p>	

Table 25. ENVIRONMENTAL SKILLS. Accommodation establishments

ENVIRONMENTAL SKILLS. Accommodation establishments	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Ability to minimise the use and maximise efficiency of energy and water consumption	2,88	3,52	0,64	22,18%
Ability to manage waste, sewage, recycling and composting	2,95	3,55	0,60	20,24%
Conservation of biodiversity	2,76	3,48	0,72	26,00%
Promotion of sustainable forms of transport (e.g. public transport)	2,83	3,48	0,65	22,82%
Promotion of environmentally friendly activities and products	3,02	3,81	0,79	26,00%
Knowledge of climate change	3,10	3,64	0,54	17,60%
TOTAL	2,92	3,58	0,66	22,41%

Personal, Communication and Diversity Skills	
Current Level of Proficiency. Three most and three least proficient per category	<p>PERSONAL SKILLS - Most:</p> <ol style="list-style-type: none"> 1. Customer orientation 2. Ethical conduct and respect 3. Promoting a positive work environment <p>PERSONAL SKILLS - Least:</p> <ol style="list-style-type: none"> 1. Creativity 2. Willingness to change 3. Willingness to learn and to perform <p>COMMUNICATION SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Oral communication skills 2. Skills related to intercultural host-guest understanding and respect 3. Active listening skills <p>COMMUNICATION SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Skills related to cultural awareness and expression 2. Ability to speak foreign languages 3. Written communication skills <p>DIVERSITY SKILLS – Most:</p> <ol style="list-style-type: none"> 1. Gender equality skills 2. Age-related accessibility skills 3. Diets and allergy needs skills <p>DIVERSITY SKILLS – Least:</p> <ol style="list-style-type: none"> 1. Skills related to disabilities and appropriate infrastructure 2. Skills related to diversity in religious beliefs

	3. Diets and allergy needs skills
Future level of proficiency in 2030. Three most and three least proficient	<p>PERSONAL - Most:</p> <ol style="list-style-type: none"> 1. Customer orientation 2. Promoting a positive work environment 3. Willingness to learn and to perform <p>PERSONAL - Least:</p> <ol style="list-style-type: none"> 1. Initiative and commitment 2. Problem solving 3. Willingness to change AND Creativity <p>COMMUNICATION – Most:</p> <ol style="list-style-type: none"> 1. Skills related to awareness of local customs (e.g., food, arts, language, crafts) 2. Skills related to intercultural host-guest understanding and respect 3. Skills related to cultural awareness and expression <p>COMMUNICATION – Least:</p> <ol style="list-style-type: none"> 1. Written communication skills 2. Oral communication skills 3. Active listening skills AND Ability to speak foreign languages <p>DIVERSITY– Most:</p> <ol style="list-style-type: none"> 1. Skills related to disabilities and appropriate infrastructure 2. Age-related accessibility skills 3. Diets and allergy needs skills <p>DIVERSITY– Least:</p> <ol style="list-style-type: none"> 1. Skills related to diversity in religious beliefs

	2. Gender equality skills 3. Diets and allergy needs skills
Training Provision for Social Skills	59,5% (25) of the Accommodation companies have organized social skills training, and 40,5% (17) did not
Most popular/ three main types of training for social skills	On the job 50% (21) Online course 11,9% (5) One day on-site training by external provider 11,9% (5) Several days on-site training by external provider 7,1% (3) Apprenticeship and Higher education - each 4,8% (2)
<p><i>Personal skills</i></p> <p>Regarding personal skills evaluation, we have stable positions of <i>Customer orientation</i> and <i>Promoting a positive work environment</i> in the top 3 for current and future situation, but the <i>Ethical conduct and respect</i> stepping back from current proficiency to the <i>Willingness to learn and perform</i> as future need. The latter skill group also has the second highest relative gap (21,95%), just after Creativity with 26,96%.</p> <p><i>Communication skills</i></p> <p>An interesting order of future communication skills need shows that all top three are related to <i>cultural awareness, diversity and intercultural communication</i> (see Table 27). Apparently, Bulgarian hotels appreciate very much the ability of their employees to address the diverse cultural preferences and peculiarities, in the search of providing best service quality. Furthermore, culture-related skills outperform even the classic communication skills like <i>Oral communication and Active listening skills</i>, which currently top the ranking, but are left behind for the next decade. Therefore, the biggest gap in communication skills appears for <i>Skills related to cultural awareness and expression</i> (28,00%).</p> <p><i>Diversity skills</i></p> <p>There is similar evolvement in the diversity skills as well - Skills related to disabilities and appropriate infrastructure rise from least developed in the current situation to the highest desired as skill for the future (from 3,36 to 4,52) (see Table 28). This the reason also for its highest relative gap (34,52%).</p>	

Training

A good number of accommodation establishments report having organized on the job trainings (21). The usage of online courses, Apprenticeship and Higher education are also considered as appropriate training tools for the accommodation sector.

Table 26. PERSONAL SKILLS. Accommodation establishments

PERSONAL SKILLS. Accommodation establishments	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Problem solving	3,71	4,36	0,65	17,52%
Initiative and commitment	3,71	4,33	0,62	16,71%
Customer orientation	4,07	4,62	0,55	13,51%
Ethical conduct and respect	4,02	4,48	0,46	11,44%
Willingness to change	3,67	4,38	0,71	19,35%
Promoting a positive work environment	3,9	4,52	0,62	15,90%
Creativity	3,45	4,38	0,93	26,96%
Willingness to learn and to perform	3,69	4,5	0,81	21,95%
TOTAL	3,78	4,45	0,67	17,70%

Table 27. COMMUNICATION SKILLS. Accommodation establishments

COMMUNICATION SKILLS. Accommodation establishments	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Written communication skills	3,64	4,31	0,67	18,41%
Oral communication skills	3,88	4,43	0,55	14,18%
Active listening skills	3,79	4,45	0,66	17,41%
Skills related to cultural awareness and expression	3,5	4,48	0,98	28,00%
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	3,76	4,5	0,74	19,68%
Ability to speak foreign languages	3,62	4,45	0,83	22,93%
Skills related to intercultural host-guest understanding and respect	3,83	4,48	0,65	16,97%

TOTAL	3,72	4,44	0,73	19,52%
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Table 28. DIVERSITY SKILLS. Accommodation establishments

DIVERSITY SKILLS. Accommodation establishments	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Gender equality skills	3,95	4,48	0,53	13,42%
Age-related accessibility skills	3,9	4,5	0,60	15,38%
Diets and allergy needs skills	3,69	4,5	0,81	21,95%
Skills related to disabilities and appropriate infrastructure	3,36	4,52	1,16	34,52%
Skills related to diversity in religious beliefs	3,64	4,26	0,62	17,03%
TOTAL	3,71	4,45	0,74	20,06%

Digital Skills

Current Level of Proficiency. Three most and three least proficient

Most:

1. Operating System use skills (e.g., Windows)
2. Microsoft Office skills (e.g., Word, Excel, Powerpoint)
3. Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors

Least:

1. Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality
2. Artificial Intelligence (AI) and robotics skills
3. Computer programming skills

Future level of proficiency in 2030. Three most and three least proficient

Most:

1. Operating System use skills (e.g., Windows)
2. Microsoft Office skills (e.g., Word, Excel, Powerpoint)
3. Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors

Least:

1. Computer programming skills

	<p>2. Website development skills</p> <p>3. Artificial Intelligence (AI) and robotics skills AND Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality</p>
Training Provision for digital skills?	57,1% (24) of the Accommodation companies report to having had Digital skills training at their companies, whereas the rest 42,9% (18) did not have such training
Most popular/ three main types of training for digital skills	<p>On the job 42,9% (18)</p> <p>Online course 23,8% (10)</p> <p>Several days on-site training by external provider 11,9% (5)</p> <p>One day on-site training by external provider 9,5% (4)</p> <p>Higher education 7,1% (3)</p>
<p>In line with the rest of the subsectors, accommodation establishments identify highest current proficiency of digital skills in computer literacy and office software application (<i>Operating System use skills (e.g., Windows; Microsoft Office skills (e.g., Word, Excel, Powerpoint) and Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors</i>) (see Table 29). The least developed digital skills traditionally are <i>Artificial Intelligence (AI) and robotics skills AND Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality</i>, but with foreseen significant needs in the future, since they have the highest relative gaps (98,28% and 112,96% accordingly). Still, considering that the absolute evaluation of their significance does not go over M=4, the real impact of those skills in hospitality remains questionable.</p> <p>In contrast <i>Social media skills and Online reviews monitoring</i> receive absolute evaluation 4,45 and 4,24, although with lower relative gap (26,42% and 20,45% accordingly), implying that for now social media-related skills bring much more value to the hospitality companies, than the expected effect of augmented and virtual reality. Other huge gaps in accommodation digital skills we find in Computer programming skills (59,07% relative gap) and Website development skills (63,59% relative gap). Thus, the need of specialised digital skills is proved and should be relevantly addressed by future education or training.</p> <p><i>Training</i></p> <p>24 of the Bulgarian accommodation companies say they have had training of digital skills. There is higher number of those, using online courses (10) compared to Higher education (3) as a means to prepare skilful employees.</p>	

Table 29. DIGITAL SKILLS. Accommodation establishments

DIGITAL SKILLS. Accommodation establishments	Current level of proficiency Mean	Future level of proficiency Mean	GAP in absolute number	GAP %
Operating System use skills (e.g., Windows)	3,98	4,48	0,5	12,56%
Microsoft Office skills (e.g., Word, Excel, Powerpoint)	3,9	4,48	0,58	14,87%
Skills for implementing online safety procedures	3,21	4,36	1,15	35,83%
Online marketing and communication skills	3,52	4,5	0,98	27,84%
Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	3,79	4,48	0,69	18,21%
Desk top publishing skills (for designing brochures, catalogues, etc.)	2,9	3,83	0,93	32,07%
Computer programming skills	1,93	3,07	1,14	59,07%
Website development skills	1,95	3,19	1,24	63,59%
Social media skills	3,52	4,45	0,93	26,42%
Skills to monitor online reviews	3,52	4,24	0,72	20,45%
Data analytics, business intelligence, big data skills	2,95	3,93	0,98	33,22%
Artificial Intelligence (AI) and robotics skills	1,74	3,45	1,71	98,28%
Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	1,62	3,45	1,83	112,96%
TOTAL	2,96	3,99	1,03	42,72%

Overall, the biggest gaps of Bulgarian accommodation establishments are identified in the Digital skills (see Table 30), followed by the social and culture-related skills. A possible explanation for this phenomenon might be the changing understanding of quality service where the priority is put not only on the pure communication skills but also on the entire cultural comprehension of the customers, thus demonstrating empathy and hospitality.

Table 30. GAPS IN RELATIVE TERMS. ACCOMMODATIONS

ACCOMMODATIONS	GAP %
Skills related to applying digital hardware technologies, such as Augmented and Virtual Reality	112,96%
Artificial Intelligence (AI) and robotics skills	98,28%
Website development skills	63,59%
Computer programming skills	59,07%
Skills for implementing online safety procedures	35,83%
Skills related to disabilities and appropriate infrastructure	34,52%
Data analytics, business intelligence, big data skills	33,22%
Desk top publishing skills (for designing brochures, catalogues, etc.)	32,07%
Skills related to cultural awareness and expression	28,00%
Online marketing and communication skills	27,84%
Creativity	26,96%
Social media skills	26,42%
Promotion of environmentally friendly activities and products	26,00%
Conservation of biodiversity	26,00%
Ability to speak foreign languages	22,93%
Promotion of sustainable forms of transport (e.g. public transport)	22,82%
Ability to minimise the use and maximise efficiency of energy and water consumption	22,18%
Willingness to learn and to perform	21,95%
Diets and allergy needs skills	21,95%
Skills to monitor online reviews	20,45%
Ability to manage waste, sewage, recycling and composting	20,24%
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	19,68%

Willingness to change	19,35%
Written communication skills	18,41%
Skills to adjust digital equipment such as Wi-Fi connectivity, sound systems and video projectors	18,21%
Knowledge of climate change	17,60%
Problem solving	17,52%
Active listening skills	17,41%
Skills related to diversity in religious beliefs	17,03%
Skills related to intercultural host-guest understanding and respect	16,97%
Initiative and commitment	16,71%
Promoting a positive work environment	15,90%
Age-related accessibility skills	15,38%

6. OVERVIEW OF ALL TOURISM SECTORS IN BULGARIA

Bulgarian tourism industry performs relative well in comparison to other European countries. Although the country stays behind in some areas of skills development, the reasons are complex and might be overcome by further legal harmonization and penetration of new technologies in the country.

For the environmental skills the country relative gap is even lower than the Global European one (14,60% for Bulgaria, and 19,00% for Europe), while the sector, missing the most green skills is the F&B sector (27,21% relative gap) (see Table 31). This is because F&B sector's production requires everyday waste management, and employees need certain instructions and operations guidelines. The green skills with the highest gap for Bulgaria are *Ability to manage waste, sewage, recycling and composting* (0,54 in absolute and 18,25% in relative terms) proves the need for more detailed procedures and practical training.

Travel agencies, on the other hand, has the lowest relative gap (6,32%), but they work almost entirely with information and intangible resources, therefore, applying green skills for them is limited to proper communication and recommendations.

Still, it should be noted, that the need for green skills in Bulgaria appear at a much lower priority, than digital and social skills. The lack of mass application of waste separation, recycling and composting inevitably reflects on the tourism industry where those activities are neglected.

Table 31. SUMMARY OF SCORES PER ENVIRONMENTAL SKILLS GROUP AND SECTOR

	Current	Future	GAP	GAP %
ENVIRONMENTAL SKILLS GLOBAL EUROPEAN MEAN	3,16	3,75	0,59	19,00%
ENVIRONMENTAL SKILLS BULGARIA	3,14	3,60	0,46	14,60%
ENVIRONMENTAL SKILLS. Destination management	3,54	3,79	0,25	7,18%
ENVIRONMENTAL SKILLS. Food & beverage	3,60	4,59	0,99	27,21%
ENVIRONMENTAL SKILLS. Visitor attractions	2,79	3,27	0,48	17,13%
ENVIRONMENTAL SKILLS. Travel agents and tour operators	3,23	3,44	0,20	6,32%
ENVIRONMENTAL SKILLS. Accommodation	2,92	3,58	0,66	22,41%

The relative gap between Bulgaria and Europe in the personal skills is quite low, less than 1% (see Table 32). Personal skills appear as most developed in proficiency for the current situation. Ethical conduct and respect (M=4,12) and Customer orientation (M=4,10) top the highest current skills level for Bulgaria. They are also the leaders in the projected future skills levels, although with exchanged positions – Customer orientation (M=4,46) and Ethical conduct and respect (M=4,44), plus another personal skills group - Willingness to learn and perform (M=4,44). Apparently, Bulgarian tourism professionals value individual performance and perceive it as important for the future. In context of the tourism subsectors, the biggest relative gap in personal skills is found in the F&B industry (18,58%), followed by the Accommodation (17,70%).

Communication skills show the relative gap for Bulgaria (12,10%) is even lower than the European relative gaps (14,52%), implying that the Bulgarian tourism professionals consider themselves as well prepared for the next decade communication challenges. However, almost all communication skills are present in the top 10 highest projected future skills for Bulgaria (see Table 32), thus indicating the great appreciation of those social skills. In terms of

sectors we find the highest relative gap in Accommodation (19,52%) and in F&B (16,25%) (see Table 32), whereas the lowest appears for the Visitor attractions (only 4,84%).

The relative gap in diversity skills for Bulgaria (15,34%) seems the biggest one among all social skills, but it is almost equal to the European one (15,56%). Sectors, experiencing greatest need of diversity skills in the future decade are Accommodation (20,06%) and Destination management (18,01%).

Overall, social skills are perceived as crucial in the future business and well presented by the Bulgarian travel community.

Table 32. SUMMARY OF SCORES PER SOCIAL SKILLS GROUP AND SECTOR

	Current	Future	GAP	GAP %
PERSONAL SKILLS EUROPEAN MEAN	3,97	4,40	0,44	10,83%
PERSONAL SKILLS BULGARIA MEAN	3,94	4,39	0,46	11,59%
PERSONAL SKILLS. Destination management	3,98	4,31	0,33	8,32%
PERSONAL SKILLS. Food & beverage	3,86	4,58	0,72	18,58%
PERSONAL SKILLS. Visitor attractions	3,87	4,19	0,33	8,40%
PERSONAL SKILL. Travel agents and tour operators	4,25	4,56	0,31	7,36%
PERSONAL SKILLS. Accommodation	3,78	4,45	0,67	17,70%
	Current	Future	GAP	GAP %
COMMUNICATION SKILLS EUROPEAN MEAN	3,72	4,26	0,54	14,52%
COMMUNICATION SKILLS BULGARIA MEAN	3,91	4,38	0,47	12,10%
COMMUNICATION SKILLS. Destination management	3,88	4,30	0,42	10,89%
COMMUNICATION SKILLS. Food & beverage	3,82	4,45	0,62	16,25%
COMMUNICATION SKILLS. Visitor attractions	3,99	4,18	0,19	4,84%
COMMUNICATION SKILLS. Travel agents and tour operators	4,19	4,57	0,39	9,25%
COMMUNICATION SKILLS. Accommodation	3,72	4,44	0,73	19,52%
	Current	Future	GAP	GAP %

DIVERSITY SKILLS EUROPEAN MEAN	3,6	4,16	0,56	15,56%
DIVERSITY SKILLS BULGARIA MEAN	3,69	4,26	0,57	15,34%
DIVERSITY SKILLS Destination management	3,51	4,14	0,63	18,01%
DIVERSITY SKILLS. Food & beverage	3,53	4,08	0,55	15,59%
DIVERSITY SKILLS. Visitor attractions	3,66	3,97	0,31	8,58%
DIVERSITY SKILLS. Travel agents and tour operators	3,96	4,44	0,48	12,17%
DIVERSITY SKILLS. Accommodation	3,71	4,45	0,74	20,06%

The relative gap in digital skills shows highest level among the rest skill groups. For Bulgaria it is higher (31,63%) than for the rest of Europe (24,83%) (see Table 33). A notable relative gap is seen in the Accommodation sector, where it reaches 42,72%, but all the other sectors will need to catch up with the digital skills of their employees in the next decade.

However, although the gaps in digital skills are significant, very few of those skills are classified in the top 10 of highest projected skill levels in absolute evaluation (see Table 34). Also, in the analysis we can see that the most share of this gap comes from the lack of knowledge and skills for work with Artificial intelligence, augmented and virtual reality. These three generate very high gaps, which further result in gaps in the digital skills in general.

Table 33. SUMMARY OF SCORES PER DIGITAL SKILLS GROUP AND SECTOR

	Current	Future	GAP	GAP %
DIGITAL SKILLS EUROPEAN MEAN	3,02	3,77	0,75	24,83%
DIGITAL SKILLS BULGARIA MEAN	3,11	3,96	0,85	31,63%
DIGITAL SKILLS. Destination management	3,26	4,18	0,92	31,63%
DIGITAL SKILLS. Food & beverage	3,11	3,86	0,75	26,58%
DIGITAL SKILLS. Visitor attractions	2,96	3,64	0,68	27,94%
DIGITAL SKILLS. Travel agents and tour operators	3,34	4,01	0,67	25,00%
DIGITAL SKILLS. Accommodation	2,96	3,99	1,03	42,72%

Table 34. Top 10 HIGHEST PROJECTED FUTURE SKILLS LEVELS TOTAL BULGARIA

SKILL TYPE	Score
Customer orientation	4,46
Ethical conduct and respect	4,44
Promoting a positive work environment	4,44
Willingness to learn and to perform	4,44
Skills related to awareness of local customs (e.g., food, arts, language, crafts)	4,44
Skills related to intercultural host-guest understanding and respect	4,44
Oral communication skills	4,4
Skills related to cultural awareness and expression	4,4
Active listening skills	4,39
Operating System use skills (e.g., Windows)	4,39
Microsoft Office skills (e.g., Word, Excel, Powerpoint)	4,39