

# BlueHealth

Linking environment, climate & health



## BlueHealth Environment Assessment Tool (BEAT)

Simon Bell

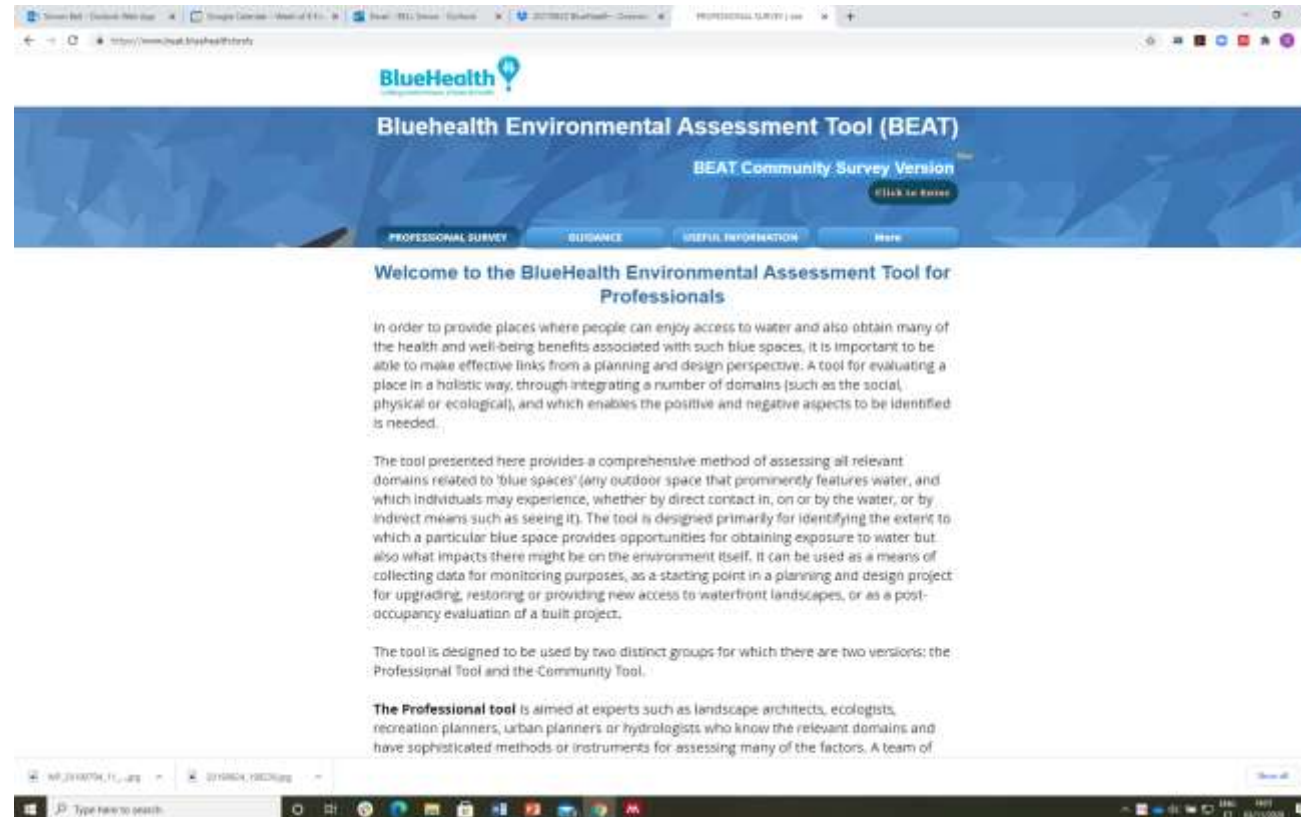
BlueHealth is funded by the European Union's Horizon 2020 research and innovation programme, grant agreement No 666773



# BlueHealth Environmental Assessment Tool (BEAT)



Aim: To develop a practical tool to assess the environmental quality of the blue spaces for design and planning, and to explore the health potential of those spaces. One survey round, can be applied as post-occupancy evaluation tool.



# BEAT development



Theory: affordances and potentials for blue spaces to deliver health and well-being to the population

Review: of existing tools for assessing spaces: identification of standard components to all tools and gaps we needed to fill

Development: of new tool structure and components

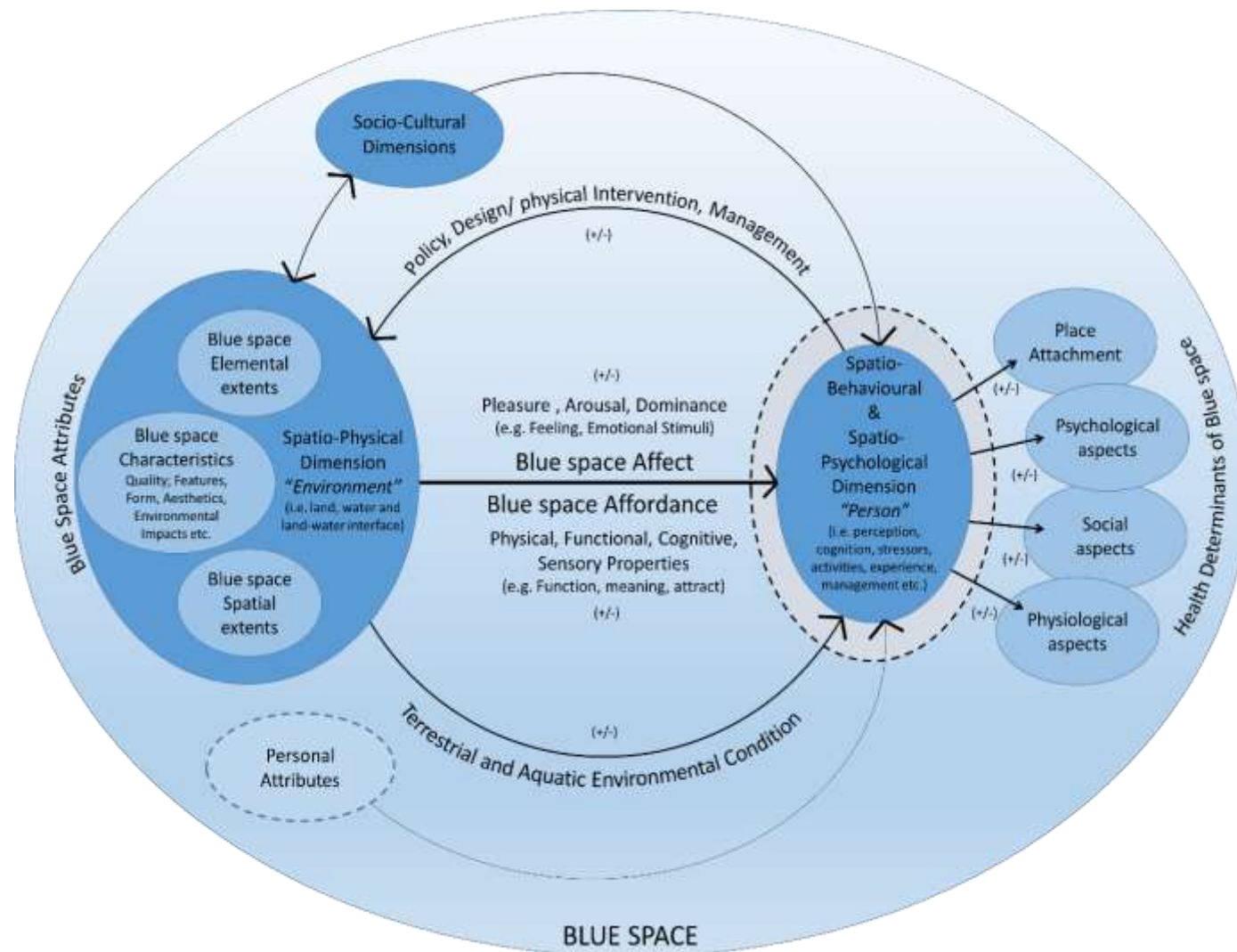
Construction: of web-based interface for users

Testing: the tool in numerous different locations

# Person-Environment interaction model

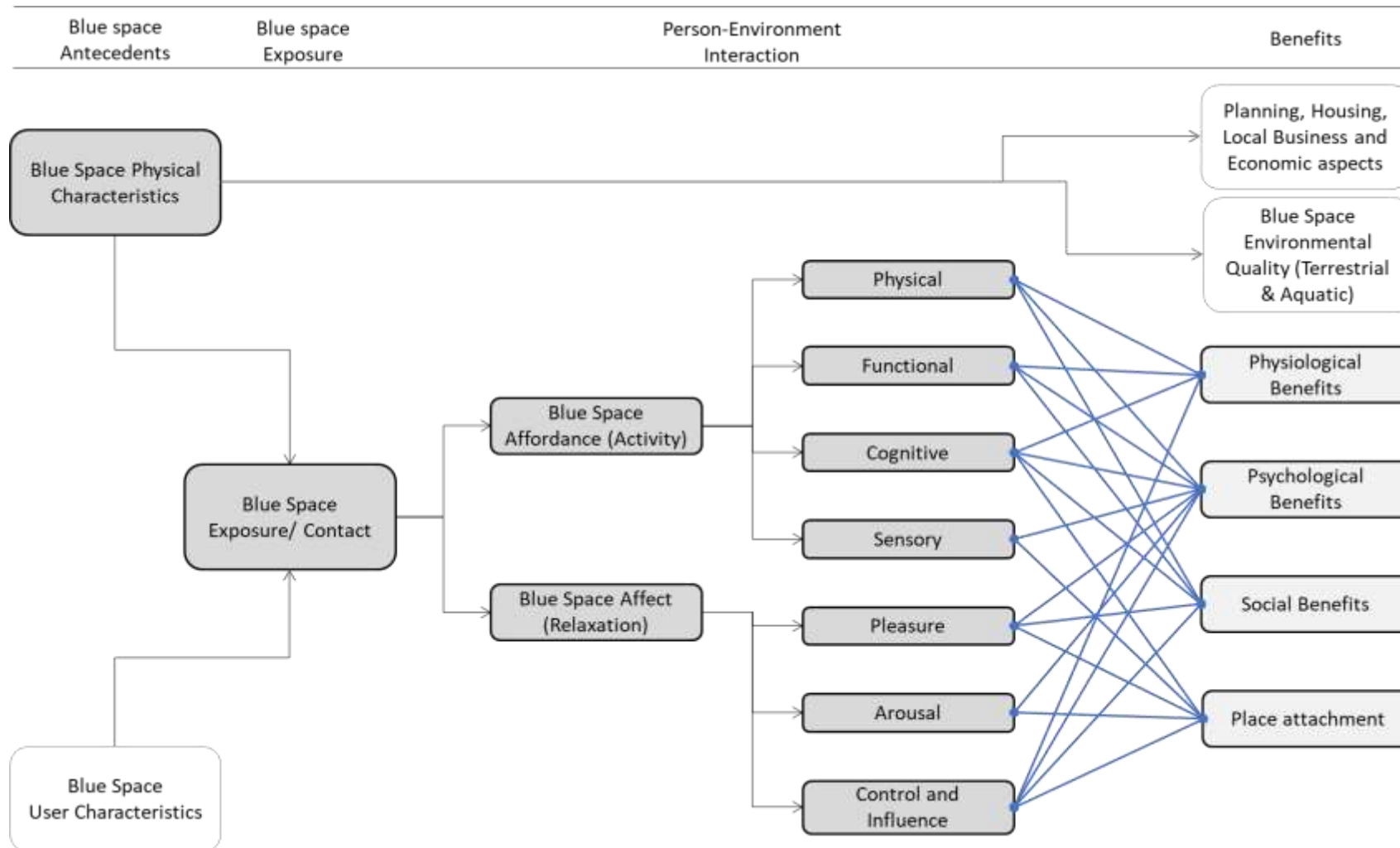


The Person-Environment interaction model for Blue Space and health outcomes which forms the theoretical basis for the BEAT. On the left are the blue space attributes assessed by the tool and the rest of the model shows the pathways which lead to the expected health outcomes

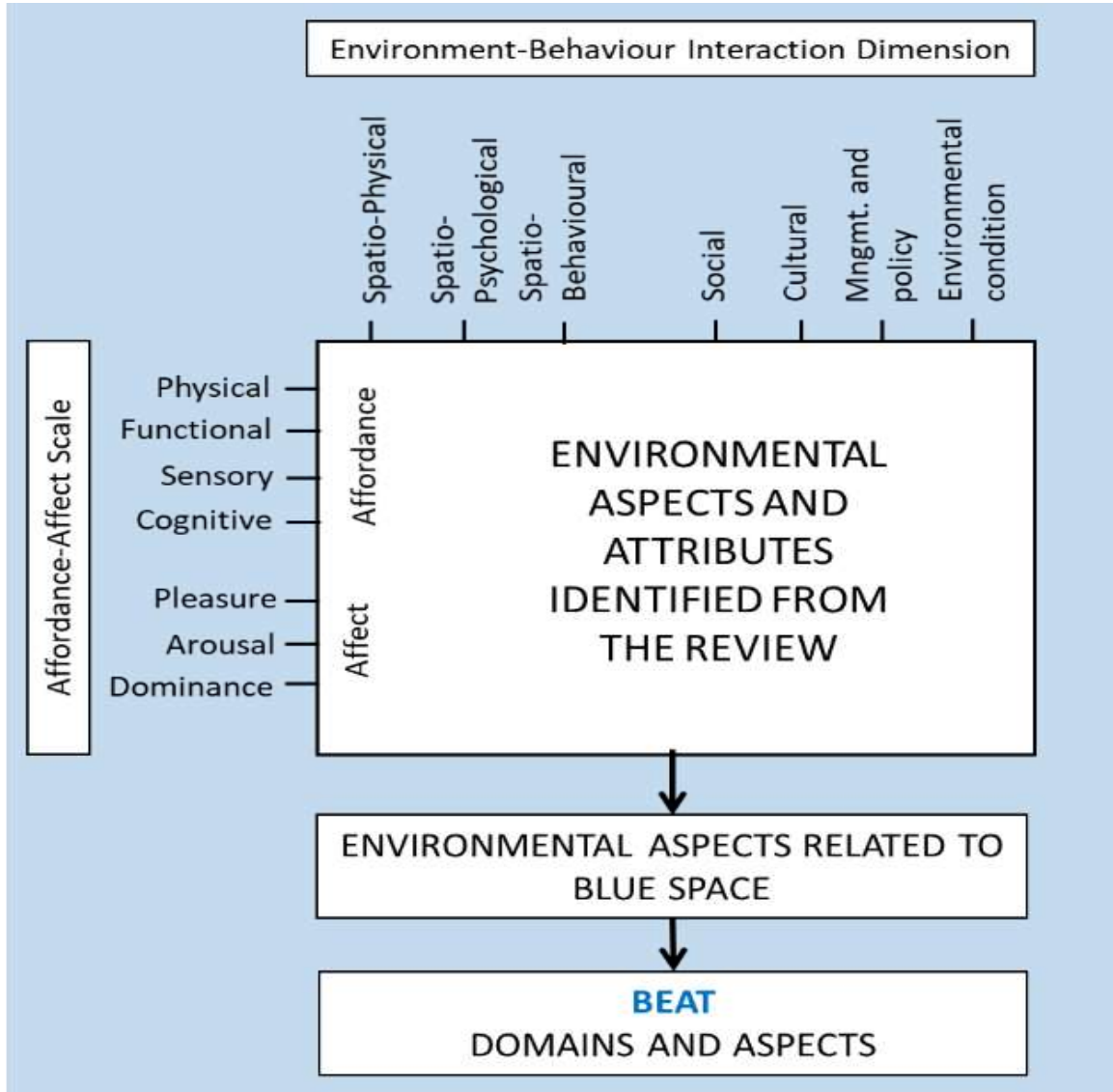




# Interaction model



An interaction model for Blue Space use for physical activities and relaxation. The unshaded boxes are potential blue space benefits unrelated to the person-environment interaction



Scheme presenting the model for selection and categorisation of important physical environmental aspects extracted from the tool review for their relevance to health outcomes (also how it then feeds into the BEAT development process).

# Entry page for Step 1



The screenshot shows a web browser window displaying the BlueHealth Environmental Assessment Tool (BEAT) website. The browser's address bar shows the URL <https://www.beatbluehealth.beat/survey-for-experts>. The website header features the BlueHealth logo and the title "Bluehealth Environmental Assessment Tool (BEAT)". Below the title, it says "BEAT Community Survey Version" with a "Click to Enter" button. Navigation buttons for "PROFESSIONAL SURVEY", "GUIDANCE", "USEFUL INFORMATION", and "More" are visible. The main content area is titled "Survey forms for the Professionals" and features a large graphic with the following text and buttons:

**STEP 1**  
Pre-site survey desk study

- F1: Location
- F2: Blue Space Types
- F3: Site Context
- F4: Site Accessibility
- F5: Neighbourhood Character
- F6: Population
- F7: Other Green/blue Spaces

**STEP 2**

The browser's taskbar at the bottom shows the Windows logo, a search bar with the text "Type here to search", and various application icons. The system tray on the right indicates the time as 14:00 and the date as 03/11/2020.

# Entry page for Steps 2 and 3



The screenshot shows a web browser window with the URL <https://www.bestbluehealthtools/survey-for-experts>. The page is divided into two main sections: STEP 2 and STEP 3.

**STEP 2: General description of the site**

- F8: First Impression on the Site

**STEP 3: The Site Survey**

- F9: Meta Data
- F10: Activities (direct evidence)
- F11: Activities (indirect evidence)
- F12: Site Users' Type
- F13: Anti-social Activities
- F14: Information and Education
- F15: Safety and Security
- F16: Visual Condition
- F17: Visual Quality
- F18: Non-visual Aesthetic

The browser's taskbar at the bottom shows the Windows logo, a search bar, and several application icons. The system tray on the right indicates the time is 14:00 on 03/11/2020.



# Entry page for Steps 3 and 4



Simon Bell - Outlook Web App | Google Calendar - Week of 6 Nov | Email - MLL Simon - Outlook | 20170622 BlueHealth - Overview | Portal for Experts | site

https://www.beat.bluehealth.tools/survey-for-experts

**STEP 4**  
**Water Ecosystem Assessment**

- F19: Access and Circulation
- F20: Accessibility for disabled
- F21: Terrestrial Recreation
- F22: Water Access and Recreation
- F23: Site Management
- F24: Standing water (shore zone)
- F25: Standing water Human Impact
- F26: Ecosystem Services
- F27: Standing Water Ecology
- F28: Running water (shore zone)
- F29: Running water Human Impact
- F30: Ecosystem Services

WP\_20190704\_11\_...jpg | 20190824\_150230.jpg

Type here to search | 14:10 | ENG | 02/11/2020

# Example of online form for one domain



Simon Bell - Outlook Web App | Google Calendar - Week of 8 Nov | Email - BELL Simon - Outlook | 20170622 BlueHealth - Overview | VISUAL CONDITION / site

http://www.beat.bluehealth.tools/copy-of-safety-and-security

[CLICK TO ENTER](#)

[PROFESSIONAL SURVEY](#) [GUIDANCE](#) [USEFUL INFORMATION](#) [More](#)

## Form 16. Visual condition of the surroundings of the site

[Survey Guidance](#)

Scoring Guidance: 0- not present, 1- very low, 2- low, 3- medium, 4- high, 5- very high

1) Visual quality of buildings and other structures visible along the site boundaries (land side): Description \*

Your answer:

Visual quality of buildings and other structures visible along the site boundaries \*

	0	1	2	3	4	5
Score	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2) Screening of eyesores by trees and vegetation: Description \*

Your answer:

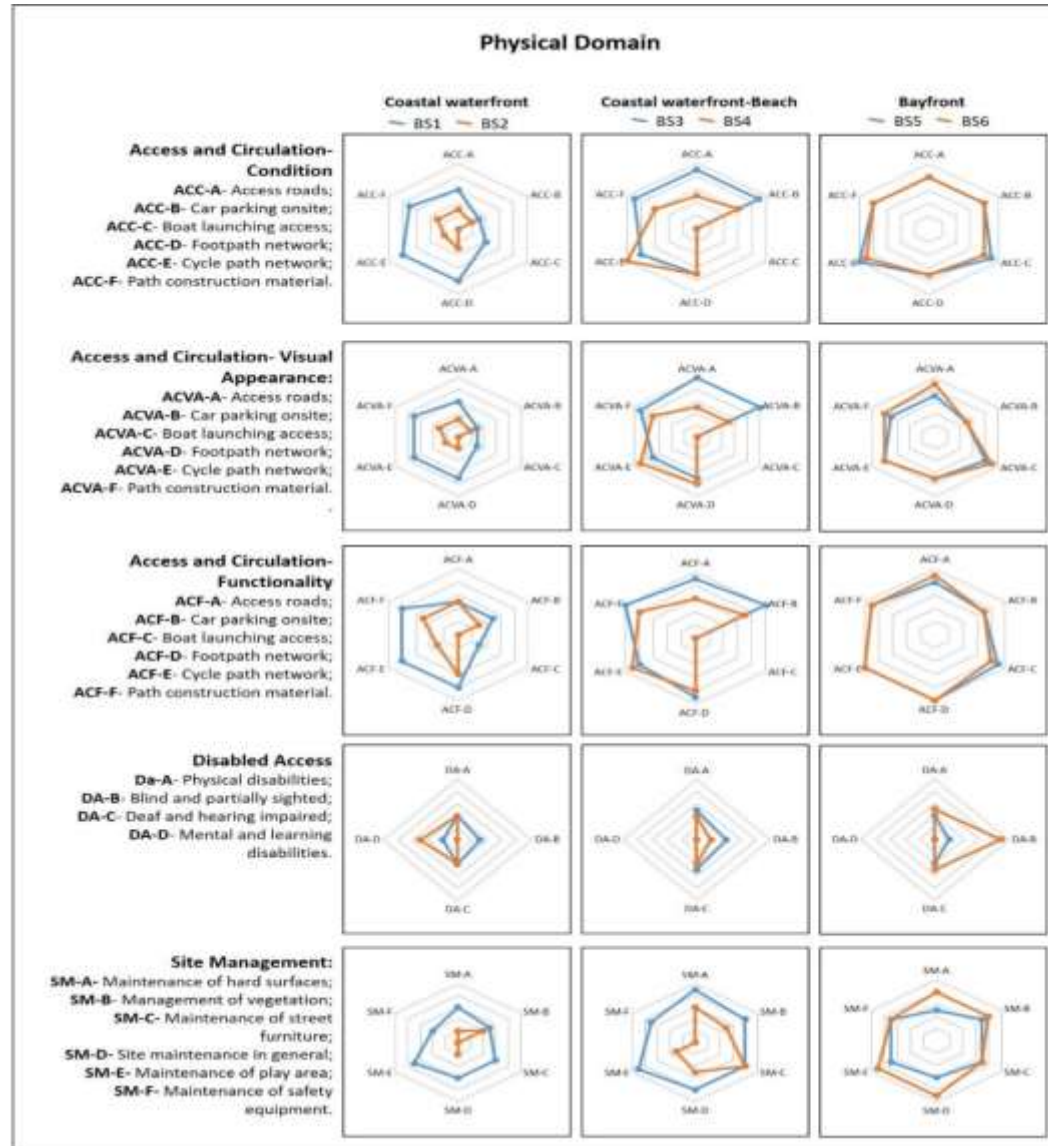
[Back to Survey List](#) [NEXT SURVEY](#) [Data](#)

© BEAT-Project BlueHealth  
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 666773

WP\_20190704\_11\_...jpg | 20190824\_190230.jpg

Type here to search | ENG 14:12 09/11/2020

# Outputs: spidergrams of each domain with all aspects





<https://www.beat.bluehealth.tools/>



# BlueHealth

Linking environment, climate & health



56/3 Kreutzwaldi,  
Chair of Landscape Architecture,  
Estonian University of Life Sciences,  
Tartu, Estonia  
Find out more at [www.bluehealth2020.eu](http://www.bluehealth2020.eu)

BlueHealth is funded by the European Union's Horizon 2020 research  
and innovation programme, grant agreement No 666773

