ANNEX 1. DESCRIPTION OF PROCUREMENT OBJECT

1. Background information

1.1. Archipelago Access project

The Archipelago Foundation, Skärgårdsstiftelsen, owns and manages large areas of the Stockholm archipelago. Its purpose is to preserve the natural values and cultural heritage of the archipelago. It creates opportunities for tourism and outdoor activities in the archipelago.

City of Turku has organized its tourism marketing and management under Visit Turku which is a Tourist and Congress Bureau for Southwest Finland. Turku Touring Ltd operates as the technical and responsible side in the sales of the City's tourist office, Visit Turku.

City of Turku and Stockholm Archipelago Foundation have joined their forces in the Archipelago Access project to increase the attractiveness of the archipelago. It aims to develop archipelago tourism in a sustainable way and to make the archipelago between Turku and Stockholm a more cohesive and accessible destination for tourists.

Archipelago Access -project is funded by the Interreg Central Baltic 2014-2020 -program.

1.2. Joint challenges and opportunities in archipelago tourism

Today, most visits in the archipelago areas in Finland and Sweden are related to leisure boating and private summer cottages. Archipelago tourism is characterized by a large number of small micro-enterprises, numerous municipal actors, uncoordinated marketing and scattered information. Thus, the archipelago as a destination does not seem very attractive to tourists and tourist information is hard to find. As a result, nature- and culture-based tourism has remained small-scale compared to this area's cultural and natural values, destinations and services.

Archipelago tourism is still relatively small scale compared to its potential. Nature-based tourism has been increasing rapidly in the past years. Travelers are looking for unique and authentic experiences, which the archipelago can offer. Most visitors in the archipelago area come via Turku and Stockholm which are the main travelling hubs of the region.

The archipelagos in Turku and Stockholm are very similar. In both countries, the archipelago is a vast geographical area and its travel information is scattered in many digital channels. It is difficult for visitors to get an idea of what kind of destinations, services and experiences it has to offer.

At the same time, customer behavior has changed from mass tourism to individual choices. Travelers who make their travel plans and bookings themselves are called Free Independent Travellers, FITs. This group uses a lot of time to plan their trips in digital channels. More often, the trip planning starts on mobile devices. They look for reviews and peer-to-peer recommendations and base their travel decisions on them. To untap the tourism potential of archipelago, there's a need to answer to the changes in customer behavior.

1.3. Vision for Archipelago Access digital service

To address the challenges, Archipelago Access aims to create a comprehensive digital service to facilitate tourist information in the Turku and Stockholm archipelagos. It will help visitors, both domestic and international, interested in the archipelago to plan their visit and share experiences and reviews easily.

The vision of Archipelago Access digital service is to offer ONE digital entrance to all travel information that the visitor needs for his or her stay.

The map-based digital service will bring together various sources of information about the services in the archipelago, places to visit, and how to access the archipelago. The digital service will utilize social media content and recommendations, which are increasingly influencing tourists' decision making. The digital service will use location data and show information on a map to facilitate trip planning. Also, it will show more information in an “inspiration” view that inspires users to visit the archipelago.

Figure 1. Customer Journey

Archipelago Access digital service should support the customer journey (figure 1) from the planning phase to sharing phase. The idea is that it can be used at home before reaching the destination or during the trip at the destination. It will help visitors to find the destinations and services in both the Stockholm and Turku Archipelagos, to plan their trip, and to share and review their experiences. It could be used as a tool for the customers to find the information they need but also, it will offer marketing and business opportunities for the destinations and tourism companies in the archipelago. The user and usage data collected through the digital service can be used for content production and marketing purposes in the future.

The idea of the digital service has been developed in collaboration with e.g. Visit Finland, Visit Stockholm and other partners. The aim is to form a base for future collaboration and business development. In the future, the solution should evolve according to needs and for example support the booking phase and work as an online sales platform.

The following requirements are based on the development and conceptual work that has been done previously together with key stakeholders.

2. Archipelago Access digital service

2.1. Architectural vision

Figure 2 shows the suggested architecture to give an idea of the Client’s vision. It is not an exact description of how the architecture should be implemented, but it shows the needs for automation and manual input, different user roles and different sources of data.

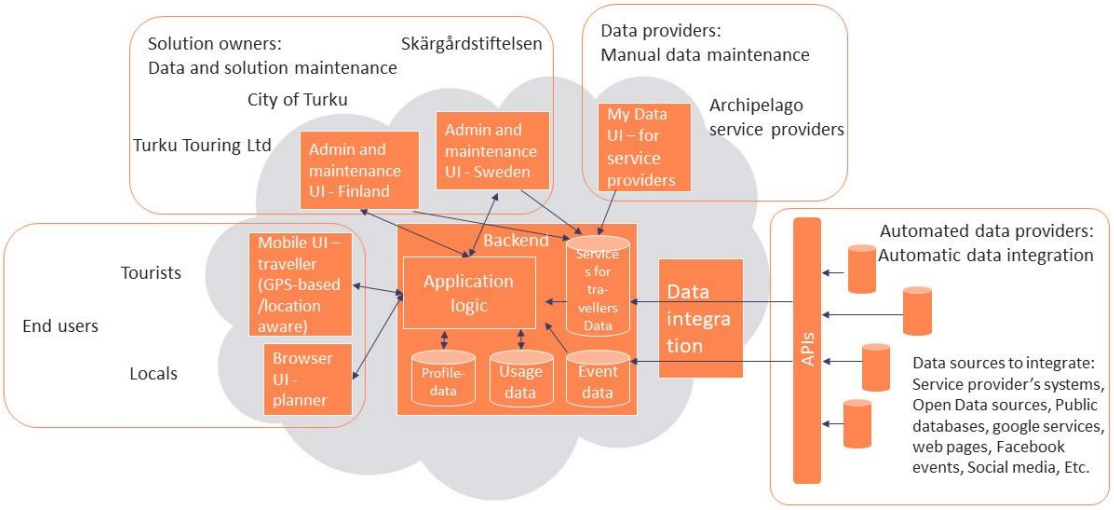

Figure 2. Architectural Vision for the Archipelago Access Digital Service

Tenderer is requested to use the architectural vision as the basis for the idea and solution description in the Tender.

The digital service should consist of a **back-end system** that stores, integrates and aggregates the information from different sources and a **front-end solution** with different **user interfaces** presenting and maintaining the data in different user scenarios, including end-users, admins and service providers as pictured in figure 2.

The **back-end system** needs to be able to compile information and data from different sources and integrate or extract information from existing content databases and other data sources (e.g. web pages, open data sources, etc.) with the possibility to update content manually. It should utilize open data for points of interests, trails and visiting information and take advantage of existing social media channels and services that most customers are already using in their travel planning, e.g. Google, TripAdvisor.

The data sources that could be used in this service will be defined during the process together with the Supplier. Examples of identified data types and data sources that could be used in the Archipelago Access digital service are listed in table 1 below.

Table 1. Examples of identified data types and data sources

Type of data	**Identified possible data sources**
Information about companies in the archipelago	Google MyBusiness, Visit organizations, Visit Finland Data Hub, Facebook, own website
Points of interest, sights	Google Places, Open Street Map, Visit organizations, open data
Connections (routes and timetables)	Public transportations such as: SL, Waxholmsbolaget, Föli, taxi boats and sightseeing tours

The back-end system should utilize APIs and automated means of fetching content from service providers whenever possible. However, there will be a need for manual input and content maintenance options as well. Archipelago Foundation and Visit organizations have a lot of existing marketing content that can be utilized but it requires manual input to enter it into solution.

2.2. Functional Requirements

The **end-user user interface** needs to present data drawn from the back-end system in an attractive manner – the aim is to increase the attractiveness of the archipelago. The UI/UX design needs to be visually attractive, easy to use, intuitive and needs to show the beauty of the many interesting destinations and islands in the archipelagos.

The end-user user interface shall present visitors personalized suggestions of where to go, where to stay, examples of what you can do in e.g. 1, 2, 3 days. The data should be extracted from many sources and offer information about e.g. destinations, their services and connections/ routes to the destinations. Services could include accommodations, restaurants, walking trails, boat connections, camping sites – basically all the information that visitors need for a pleasant and fulfilling experience.

The **content and data** should be presented in two ways, in a map-based view and in inspiration view. The information should be customized based on e.g. visitor's location, interests or time of visit and the platform should promote sharing of experiences during and after the stay in for example feedback and reviews.

The digital service should support the following **core user stories:**

- Visitor is at home planning a trip to Turku or Stockholm Archipelago and is looking for suggestion on what to do and where to go
- Visitor is on an island and wants to know what can be experienced here and on the islands nearby.
- Visitor is at the jetty looking for information about arrival times and destinations for the ferries.

User stories will be defined in more detail with the Supplier.

The minimum viable product should include information about destinations and hubs in the archipelago and how to get there and back. The focus is on the end-user and not the service provider – user-friendly is the key.

2.3. Mandatory requirements

All technical, architectural and data security requirements presented below are to be regarded as **mandatory requirements**.

Architecture of the digital service

- Solution must include a back-end system, content management system, map- and location-based planning tool for travelers (responsive), integration with different information and data/content sources
- Solution must be developed with standard tools and practices which are not supplier dependent and are usable in future development by Client and possible other partners.
- Solution is owned by Client who has all immaterial rights and copyrights to distribute, change and to further develop it.
- Solution must be compatible with most common browsers (Internet Explorer, Chrome, Microsoft Edge, Firefox, Safari) (including mobile) and their latest versions

- Solution must support multilanguage user interfaces (in the beginning at least English, Swedish, and Finnish, and possible additional languages later).
- Solution and its contents must be optimized for search engine visibility.
- Solution architecture must be modular, easy to modify and expandable (e.g. micro service architecture)

Capacity

- The main elements of the site must be downloaded in one to two seconds and rest of the elements in 3-5 seconds (plus the transfer time added by the network). Transfer time at specified download speeds max 2 seconds (=2MB page @ 0,5MB/s).

Usability and accessibility

- Solution usability is planned and develop by using service design principles and methods.
- Solution must be mobile first and user friendly. Solution should be usable on multiple different devices, UI implementation should be responsive.
- Solution must fulfil the accessibility standard of the EU-directive (https://eur-lex.europa.eu/legal-content/FI/TXT/?uri=CELEX%3A32016L2102) and the AA-standard of WCAG 2.1 guidance (https://www.w3.org/TR/WCAG21/). Accessibility testing will be done by Client before accepting the Solution delivery.

Data security

- The Supplier must describe the operating practices used to ensure data security and privacy.

Data connections

- The entire online service must be implemented using the HTTPS protocol. The internal HTTP links will be automatically redirected to utilize HTTPS.

Making and restoring backups

- The data in the Solution shall be backed up regularly so that the Customer can restore it if necessary.

Privacy

- The EU General Data Protection Regulation GDPR (Regulation EU 2016/679) must be taken into account in all of the Supplier's activities and especially in the Solution's architecture, all service development efforts and continuous service production.
    - Regulations related to the management of personal data and cookies must also be taken into account.

Maintenance of data security and transitioning to the maintenance phase

- The Supplier is responsible for ensuring and maintaining the data security of the environment during the project and for training the Customer's Admin-level employee or a third party for the maintenance phase tasks (incl. operating models, data security batches and other updates for the Solution and any of its software components).

3. Development process for the Archipelago Access digital service

Based on the tendered idea and solution description, Supplier and Client will define the concept of the Archipelago Access Digital Service together. Supplier will develop the digital service using service design and agile development methods.

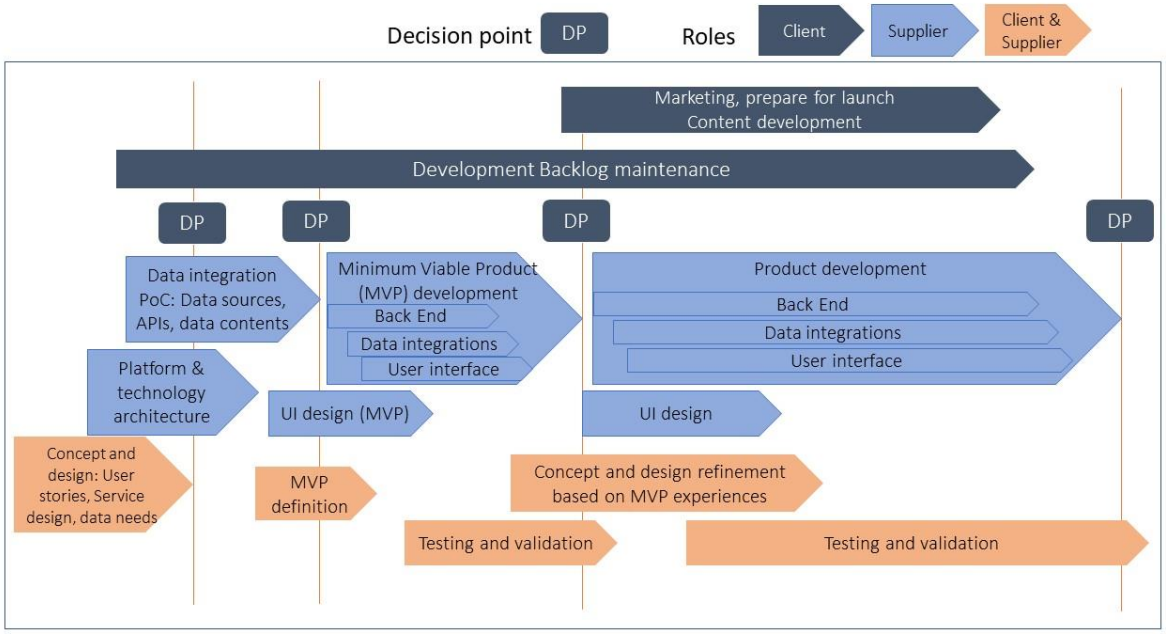

Figure 3 Development process

The development process should include at least the following phases and decision points (figure 3):

- Concept Definition and UI Design
- Proof of Concept
- Minimum Viable Product
- Product Development and Final Approval

In the Tender, Supplier will provide a project plan including the proposed timetable and required resources to accomplish the project.

The Client will have two product owners, one from Finland and one from Sweden, to manage development backlog. Client is responsible for content production and marketing.

The Supplier will implement a Proof of Concept (PoC) to test the architecture and data sources. The Minimum Viable Product (MVP) will showcase the experiences and services offered in the archipelago utilizing API-data from channels that customers are already using (e.g. Google MyBusiness, Instagram, Facebook, TripAdvisor). MVP will be used for testing but also to market the future launch.