Introduction

Worldwide, the significance of lighthouses as aids to navigation has reduced but more and more attention is being paid to them as historic buildings, icons of maritime heritage and tourism attractions. And yet, how can we preserve historic lighthouses and other navigation aids for the future generations when we know that maritime administrations are mainly responsible for the safety of navigation and cannot prioritise preservation of lighthouses as historic architectural objects? National institutions of heritage conservation are also lacking in funds for renovation of peripheral cultural monuments.

People have always been attracted to panoramic vistas – we could enjoy magnificent views from tops of many lighthouses if they were open to public. However, all over the world, including Finland and Estonia, the process of opening historic lighthouses for the public is only beginning. In Finland, seven lighthouses are open for visitor, while in the year 2007 in Estonia boasting a larger number of historically and architecturally valuable lighthouses than Finland, there are only three of them open for tourists – all in Kõrgessaare rural municipality, Hiiumaa Island.

Many local governments with a lighthouse in their territory have an opportunity to develop their historic lighthouse into a tourism product. However, it needs a lot of effort, enthusiasm and determination from local authorities to coordinate the cooperation between the owner of Estonian lighthouses, Maritime Administration and local entrepreneurs, heritage conservation officers and nature protection officials towards one goal: opening historic lighthouses for the public.

To facilitate creation of national historic lighthouse preservation programmes IALA (International Association of Marine Aids to Navigation and Lighthouse Authorities) has issued a special “IALA Lighthouse Conservation Manual” (see www.iala-aism.org), which served as guidelines for compilation of this development plan.

1. Lighthouses in Finland

The first lighthouse of Finland on the rocky island of Utö, located on the shipping lane running to Turku was completed in the year 1753. Half a century late, in 1809 when Finland became an autonomous part of Russia the network of coastal lighthouses started to be developed. At the beginning of the 20th century there were 24 lighthouses and 12 light-vessels on the coast and in the waters of Finland. The most recently completed manned lighthouse is that of Kylmäpihlaja near Rauma dating from 1953.

A major change in the operation of aids to navigation took place in the 1950s when light-vessels were replaced light-beacons fixed to the sea bottom. Such automated beacons can survive the enormous pressure of ice floes floating in arctic waters.
In first lighthouses, candles and oil lamps served as sources of light, charcoal glowing in iron baskets helped to add light. In Finland lens became into use in lighthouses in the early 1860s with kerosene lanterns as sources of light. In 1906 changeover to acetylene gas began and a flashing light regulation control device worked out by the Swedish engineer Gustaf Dalen was introduced.

At present, Finland has 60 lighthouses, 49 of which are administered by Finnish Maritime Administration. In addition to lighthouses, the 8500-km-long Finnish waterways have a total of 2500 smaller aids to navigation. All Finnish lighthouses are unmanned. 12 lighthouses have an electricity supply from the power network, two lighthouses have their own power generator, 16 lights operate on wind energy and 19 on solar energy. The last gas lighthouses were transferred to electricity supply in 1992.

Maritime Administration has sold three lighthouses: since 2001 the Bengtskär lighthouse belongs to the Turku University Foundation, the Kylmäpihlaja lighthouse is in property of Rauma city, and Söderskär near Porvoo has been in private property since 2003. The Kallbådan lighthouse in Porkkala was leased for one year (2006) but the commercial lease contract was discontinued.

The developers of lighthouse tourism have to take into consideration the fact that due to the indented coastal area, in Finland, 90% of lighthouses are located on islands. The lighthouses of Finland, including those of Bengtskär on Hiittis Island, Utö (Korppoo Municipality), Isokari (Kustavi Municipality), Kylmäpihlaja (city of Rauma), and Tankar (Kokkola), have been open for visitors for eight years only. There are 20 architecturally and historically valuable lighthouses in Finland.

Bengtskär has been a pioneer of lighthouse tourism in Finland, with actually also the largest number of visitors. In 1995, the year of its opening, 1000 people visited the lighthouse. According to the strategic development plan, it is anticipated that by the year 2016 the number of Bengtskär visitors will have risen to 20,000.

Though there is no official statistics on lighthouse tourism, the lighthouse operators have estimated the number of visits to Finnish lighthouses to have been about 40,000. There has been an increasing trend in lighthouse tourism.

Finnish lighthouses have been depicted on several postage stamps, in 1999 was published a book on Finnish lighthouses.

2. The current position of lighthouses in Estonia

According to the official record of the currently functioning aids to navigation, there are 61 lighthouses, 184 light beacons and approximately 200 buoys in Estonia. Besides these marks there are several lighthouses/seamarks of historic and/or architectural significance that are out of operation, e.g., the lighthouses of Laidunina, Kiipsaare, Käsmu etc.
A great majority of Estonian lighthouses belong to the state and are operated by the Estonian Maritime Administration (EMA) (http://195.50.203.61:8010/SLAID1.HTM). EMA has five regional departments responsible for navigation marking. North Estonian Aids to Navigation Department at 9, Lume Street, Tallinn (Hundipea harbour) takes care of the maintenance of the lighthouses of Harju and Viru Counties; the lighthouses of Hiiu and Läänemaa Counties are the responsibility of Läänemaa Aids to Navigation Department at 2, Uus-Sadama Street, Haapsalu; the Saaremaa Aids to Navigation Department (Pärna 6, Kuressaare) maintains lighthouses in Saare County; Pärnu Aids to Navigation Department (Merekalda 16, Pärnu) those of Pärnu County; and Tartu Aids to Navigation Department at 4, Väike-Turu Street looks after the navigation marks of the internal water bodies.

The IALA list of 100 lighthouses as historic and architectural monuments contains six Estonian lighthouses, those of Kõpu, Ruhnu, Tahkuna, Keri, Pakri, and Suurupi. The lighthouse of Kõpu is among the world’s three oldest navigation marks still in operation. The oldest functioning lighthouse is the so-called lighthouse of Hercules in the vicinity of port La Coruña in Spain, which was presumably founded by Phoenicians at the beginning of the Christian era.

At present 16 lighthouse complexes are protected under heritage conservation: Kõpu, the upper and lower lighthouse of Suurupi, Keri, the upper and lower lighthouse of Tallinn, Vilsandi, Mohni, Vormsi, Ristna, Tahkuna, Ruhnu, Pakri, Käsmu, Laidunina, and the ruins of Kunda lighthouse. It is anticipated that the lighthouses of Kihnu, Abruks, Sorgu, Vaindloo and Sõrve will also be taken under protection. Both the heritage conservation authorities and EMA have planned the restoration of the lighthouses of Keri, Mohni, and Sorgu, but the work cannot start until the funds have been raised. The renovation of the historic Vilsandi lighthouse by EMA seems to be more realistic. Unfortunately the nearby lifeboat station now in private ownership, is not included in the renovation plan.

Prior to restoration, an additional inventory and in case of necessity also inspection or examination of the lighthouses protected under heritage conservation is carried out, followed by planning and design work by a licensed architect who also has to exercise construction supervision.

A number of lighthouses are located in nature conservation areas, but according to nature conservation officials, in case of rational land use and well-prepared visitor routes this does not prevent developing lighthouses into tourism attractions.

Estonian Post has issued a series of stamps introducing the most remarkable lighthouses of Estonia. The stamps printed so far depict the lighthouses of Pakri, Vaindloo, Ruhnu, Kunda, Vilsandi, Ristna, Kõpu, Mohni, Laidunina, Keri, Sorgu and Tallinn (http://www.post.ee/tuletornid).

Due to losing their significance as essential aids to navigation and thanks to the application of electronic operation systems there is no need for a permanent lighthouse keeper residing in the lighthouse complex and the traditional outbuildings are not used for lighthouse maintenance any more. In Estonia, most of the outbuildings with their surrounding land have been privatised by the former lighthouse keepers, which can often hinder visitor access to the lighthouse tower. At present there are only three manned lighthouses, those at Narva-Jõesuu, Ristna and Naissaare. In 2008, will also be closed the lighthouse keeper’s position at Naissaare.
On the other hand, in lighthouses or their vicinity there can still be found historically valuable technological equipment and facilities, such as lifeboat stations, special-purpose saunas, etc. that might be of interest to visitors, but only in case of the developers who have the wish, knowledge and skills to turn these objects into tourist attractions and to instruct guides.

Of Estonian lighthouses only three – all of them in the territory of Kõrgessaare rural municipality, Hiiumaa Island -- are presently open for visitors: the lighthouses of Kõpu, Tahkuna, and Ristna (www.korgessaare.ee). The table in the Appendix of the Development Plan refers to several other Estonian lighthouses having great potential for tourism development. The lighthouse of Sõrve in Saaremaa Island would certainly be popular with tourists, as well as the lighthouses located on small islands (Kihnu, Ruhnu, Vormsi, Vilsandi, Naissaare, Osmussaare) where opening of a local lighthouse for the summer at least would add another tourist attraction to the list of sights. Access to the lighthouses standing on uninhabited islands with no harbour is another question. At present you can only admire the lighthouses of Keri or Vaindloo islands from a distance, landing is impossible unless you have a small vessel.

Of coastal lighthouses are especially intriguing those at Pakri, Suurupi, Juminda, Narva and why not also the lighthouses located by Lake Peipus.

If a lighthouse cannot be opened or if it is not worth opening for the public, it could still become a part of a hiking trail offering a spectacular sea view from its base and providing information about maritime history.

3. Lighthouse tourism in the world

In the world there are nearly 15,000 lighthouses, 360 of which are in the Baltic Sea area. Interest in lighthouses as monuments of maritime heritage is increasing, to support preservation of historic lighthouses and to look for alternative ways of their use, a number of lighthouse protection organisations and societies have been founded in many countries. The Finnish Lighthouse Society has over 400 members, in Sweden the organisation has more than 600 members, in the United States of America there are...... members, in Australia ....

The World Lighthouse Society, (www.worldlighthouses.org) has the following goals:

- to encourage and promote the protection and preservation of historically significant aids to navigation, primarily lighthouses and light vessels at both national and international level;
- to promote communication and cooperation amongst all lighthouse organisations and enthusiasts, to share information, ideas and strategies and to offer support worldwide.

In developing lighthouse tourism two categories of visitors – ordinary tourists and lighthouse experts - need to be addressed. The visitors of the former group are usually interested in getting some general constructional information and enjoying the view of the surroundings from the top of the tower. An expert visitor has an interest in the lighthouse as a construction as well as in its light equipment (the lens room, the lens, etc.). Lighthouse tourism planners need to take this into account and develop different programmes and hiking routes for general-interest and expert visitors.
4. Possibilities for developing lighthouse tourism in Estonia and in Finland

Strengths

1. availability of active local governments and non-profit organisations interested in developing lighthouse tourism,
2. a large number of historically and/or architecturally significant lighthouses,
3. existence of some lighthouses that have been successfully turned into tourist attractions,
4. location of lighthouses in picturesque areas,
5. substantial background information on lighthouses,
6. active support from Finnish Maritime Administration,
7. lighthouse tourism creates new jobs in peripheral regions.

Weaknesses

1. Poor technical and constructional state of many lighthouses,
2. poor access to the lighthouses located on small islands,
3. lack of active support to the development of lighthouse tourism from Estonian Maritime Administration,
4. insufficient range of visitor services available at lighthouses,
5. tourist information on lighthouses is not easily accessible and is mostly in national languages,
6. many lighthouses with great tourism potential are in need of enthusiastic developers.

Opportunities

1. great public interest in lighthouses,
2. alternative use of lighthouses is becoming popular,
3. people have more funds for travelling,
4. financial support through EU programmes,
5. increase in free movement of people in Europe,
6. new lighthouse-related products have come to the market (birthday/wedding celebrations, conference services, nature observation, bird watch and related catering services),
7. international cooperation (including in the field of lighthouse tourism) is growing.

Dangers

1. The government will not guarantee adequate financial support for lighthouse maintenance as a result of which the lighthouses will perish,
2. due to disagreement and conflicts between owners of neighbouring lands access to lighthouses can be hindered,
3. strict nature and heritage protection requirements can restrict tourism growth in coastal region,
4. after privatisation lighthouses cease to be in public use.
Lighthouse Tourism Development Plan for Finland and Estonia 2008 - 2013

5. Safety of lighthouse tourism

Lighthouses have originally meant to be aids to navigation, due to which lighthouses do not always meet the technical and safety requirements set to sights of mass tourism. There are two aspects to be paid attention to considering safety measures. The first aspect is ensuring the operation of aids to navigation (optics) and blocking of visitor access to the optics and other technical equipment. Another important aspect is visitor safety. For each lighthouse respective safety regulations must be worked out. If necessary, the existing construction must be given additional strength, access to the lighthouse might need improvement, the number of visitors per group might need to be limited to a certain number, system of provision of first aid has to be considered, etc. Lighthouse visitors can be in different physical condition and ready for different level of physical effort.

In most cases, one should begin with organisation of vehicle parking and directing of walker flow considering the potential hazards connected with terrain and ground characteristics, the existing stairs and steps, sewage systems, etc. Lighthouse tourism area should be marked with danger warning signs, if necessary barriers need to be installed, information on first aid and emergency telephone numbers should also be available.

Inside a lighthouse, all rooms not meant for visitor access must be locked. As it is vital to guarantee the safety of children, lighthouses must be equipped with protective barriers making it impossible to climb or swing in the tower, all trapdoors must be safely locked. Lighthouse staff should be trained for giving first aid. It is recommended to limit the number of visitors staying in the tower at the same time.

6. Plans for the years 2008 - 2013

Vision

In the year 2013 there are:

- Finnish and Estonian lighthouses are internationally well-known;
- a minimum of 7 lighthouses open for visitors in Estonia and 12 in Finland;
- a minimum of 12 lighthouses included in tourism routes in Estonia and 20 in Finland;
- at least 60,000 lighthouse visitors both in Estonia and Finland;
- lighthouse tourism information centres are opened in Estonia and in Finland;
- all lighthouses having a potential of becoming a tourism destination have a quality programmes and visitor guides providing information on services available, environmental protection and safety.

Strategy

- Gathering of special interest groups around lighthouse societies.
- Cooperation with Maritime Administration and other state authorities towards preservation and opening for the public of lighthouses.
- Depending on the growth in demand, lighthouses suitable for the purpose will be developed into tourism products.
- Support from EU Structural Funds and domestic funds will be applied for investments and developing of new tourism products.
- Products will be developed and marketed within international cooperation networks.
Lighthouse Tourism Development Plan for Finland and Estonia 2008 - 2013


In Finland:
- Maritime Administration will identify the lighthouses that are suitable for using for the purposes of tourism and lease them commercially or sell, so that they could be opened for visitors.
- The lighthouse of Bengtskär continues in keeping with the existing vision.
- Strategic development plans will be drafted for all lighthouses that serve as tourism destinations.
- Lighthouse guides and rules will be compiled on the basis of the IALA manual.
- A joint Internet shop selling lighthouse souvenirs and collector items will be opened; new products will be worked out.
- Lighthouse tourism packages offering accommodation and transportation facilities will be prepared.
- Finnish lighthouse tourism will be introduced both domestically and internationally.
- Annual lighthouse seminars will be organised.

In Estonia:
- In Saaremaa, preparations will be made for opening the lighthouse of Sõrve and for developing the Sõrve lighthouse route as a tourism product; work towards restoration of the Laidunina lighthouse and inclusion of the latter in the South-Saaremaa tourism route;
- In Hiiumaa, the lighthouses of the Lighthouse circle and their services will be developed further;
- Efforts will be made towards opening of lighthouses on some small islands (Kihnu, Ruhnu, Vormsi, Vilsandi, etc.) with a smaller number of visitors, either at certain times/periods or upon booking, or towards linking them as attractions with local hiking trails (Abruka, Manija, Osmussaare);
- Attractive coastal lighthouses will be taken in public use as tourism attractions (the Tallinn lower lighthouse as a museum, Pakri and the Suurupi upper) or as a destination within a hiking trail (Suurupi lower lighthouse);
- Exclusive holiday facilities can be developed on uninhabited sea islands having a lighthouse, such as Mohni, Sorgu, Keri, Vaindloo and some others, though it needs enormous investments.

International cooperation:
- Developing of products, new ideas or application, information and commercial materials, etc.
- Common marketing and dissemination activities and networks for lighthouse tourism.
- Exchange of experience in preservation and alternative use of lighthouses.
Lighthouse Tourism Development Plan for Finland and Estonia 2008 - 2013

Potential financial instruments for lighthouse tourism development in Estonia and Finland:

- EU structural and cohesion funds (INTERREG IV A/B/C, Leader+);
- Nordic funds;
- Investment funds and banks

APPENDIXES:

Table 1. Estonian lighthouses – potential lighthouse tourism destinations (see Finnish and Estonian www-pages)

Table 2. Finnish lighthouses (see Finnish and Estonian www-pages)

References:

- Estonian Maritime Administration. Aids to Navigation—
  http://195.50.203.61:8010/SLAID1EN.HTM
- Project Lighthouse tourism in the Archipelagoes of South-West Finland and Estonia –
  www.lighthousetourism.net
- Lighthouses on Estonian islands – http://www.saared.ee/tt/
- Finnish Maritime Administration (Merenkulku)laitos), Suomen majakat –
  http://www.fma.fi/vapaa_aikaan/majakat
- Estonian Lighthouses – http://www.unc.edu/~rowlett/lighthouse/est.htm