



## **Public tendering of ferry services in Europe**

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### **Abstract**

This paper outlines the EU regulatory framework and analyses current practice in four European countries in respect of public procurement and tendering of ferry services. Tender management for major ferry services resides with national government agencies, while tenders for smaller volume regional and/or inter-isles services are generally managed by local authorities and/or regional transport authorities. Operator selection criteria increasingly emphasises service quality aspects, and environmental impacts, as well as price (i.e. amount of subsidy required). There is a continued trend towards privately-owned operators providing and investing in essential ferry services, with an increasing role played by larger international integrated transport organisations. For transport authorities, ferry service procurement involves a continuous evolutionary process of specifying, offering, selecting, monitoring and reviewing services supplied. Based on the information collected and analysed, the authors have developed a 'tender route map' which explains the different stages and key issues concerning public procurement of ferry services.

*Keywords:* Ferry services; Public tendering; Procurement; Europe.

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### **1. Introduction**

This paper outlines the regulatory framework concerning the tendering of ferry services by public transport authorities in the European Union (EU) and thereafter analyses the tendering regime and tender processes employed in four European countries - Denmark, Greece, Sweden and Norway - based on a case study approach. The research formed part of a project undertaken by the authors on behalf of the Scottish Government during its Scottish Ferries Review (Transport Research Institute, 2010). The aim of the work was to review the delivery and operation of subsidised ferry services.

From a public sector perspective, the delivery of essential ferry services poses a dilemma. The public sector may seek to guarantee a minimum level of service to a

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particular community even though such a service might not be commercially viable, and thus requiring of public subsidy. At the same time the public sector needs to secure an operator that provides a continued service at an efficient cost level, but with the lowest subsidy rate possible, whilst also ensuring that important aspects of service quality are maintained or improved.

Based on the results from the case study analyses the authors develop a tendering route map which is considered to offer useful guidance to public authorities tendering ferry services in future.

## **2. EU Regulatory Framework**

### *2.1. Regulatory overview*

Any solution for state subsidised delivery of ferry services in the EU must be compatible with national and EU laws. Of particular relevance to the design and implementation of any solution are the following:

- Council Regulation (EEC) No 3577/92, also known as the ‘Cabotage Regulation’ (European Commission, 2006)
- Public Service Obligations (PSO)
- Public Service Contracts (PSC)
- EU and national procurement law; and
- limitations on the provision of state aid.

These legal and regulatory requirements must be taken into account by transport authorities when developing procurement strategies and finalising decisions on how ferry services should be procured.

### *2.2. Cabotage Regulation*

The ‘Cabotage Regulation’ (European Commission, 2006) regulates the transportation of passengers and goods by sea between two points within Member States of the European Union (“Member States”). The ‘Cabotage Regulation’ applies the principle of free movement of services to maritime transport and obliges Member States to allow community shipowners to operate freely in the European market.

The ‘Cabotage Regulation’ recognises that maritime transport of passengers and goods is vital for the inhabitants of island and peninsular communities. As such, exceptions to the principle of free movement of services are allowed where, owing to special circumstances, market forces would not provide a satisfactory level of service. Recognising the need to protect such ferry services to islands and remote peninsular communities, the ‘Cabotage Regulation’ allows Member States to intervene in particular markets by imposing PSOs and/or providing funding to undertakings who take on public service obligations through entering into PSCs.

### *2.3. Public Service Obligations*

Member States may impose public service obligations (PSOs) in order to ensure provision of an adequate regular ferry service to and from a given location where community shipowners, in considering their own commercial interests, would not provide an adequate level of service or under the same conditions. It is for individual Member States to determine on which routes the market would otherwise fail to provide adequate ferry service and, thus, which require PSOs to ensure that the required ferry services are provided. The nature of PSOs that a Member State may impose is limited to the following aspects:

- requirements concerning ports to be served;
- requirements in relation to regularity, continuity, frequency and capacity to provide the service in question;
- rates to be charged for the services; and
- manning of vessels.

PSOs can be imposed by Member States in a variety of ways, although mainly this will involve one of the following approaches being adopted for the route in question:

- entering into PSCs with individual operators for a given route; or
- applying PSOs to all operators for a given route by way of a declaration regime, a licensing system or authorisation system.

PSOs may be implicit within PSCs, by virtue of the specified service obligations included in the contracts (European Commission, 2009). It has been argued that the PSO is a separate matter from PSCs, and that a PSO must first be established for each route which is considered to require intervention in some form or other in order to meet the needs of the community concerned (Kay, 2008). However, the Commission has concluded in line with the Altmark criteria that PSOs will be clearly defined within PSCs (European Commission, 2009). A PSC can therefore be used to impose public service obligations, with the obligations set out in the contract.

In a European Court Judgement it was stated that the combined provisions of Article 1 and Article 4 of Regulation No 3577/92 applying the principle of freedom to provide services to maritime transport within Member States (maritime cabotage) permit the provision of regular maritime cabotage services to, from and between islands to be made subject to prior administrative authorisation only if (European Court, 2001):

- a real public service need arising from the inadequacy of the regular transport services under conditions of free competition can be demonstrated;
- it is also demonstrated that a prior administrative authorisation scheme is necessary and proportionate to the aim pursued;
- such a scheme is based on objective, non-discriminatory criteria which are known in advance to the undertakings concerned.

### *2.4. Public Service Contracts*

Public service contracts (PSCs) are the instrument generally used to impose PSOs where the imposition of a PSO on all ship owners would not support an area's transport needs. A PSC will be used where compensation is payable for providing PSOs. A PSC can cover broader issues than those covered by PSOs and may include a requirement to

satisfy fixed standards of continuity, regularity, capacity and quality and require services to be provided at specified rates.

PSCs can be used to ensure that ferry operators provide year-round services, where the market would not otherwise provide such services. In limited circumstances, exclusivity to provide a service may be appropriate. The PSC:

- is shipowner specific;
- is concluded between the State/Region and a specific operator on a given route or routes.

A Member State may impose PSOs that affect some shipping companies operating on the route(s) concerned and, at the same time, conclude PSCs with others for the same route(s) to ensure appropriate service levels are in place for the carriage of traffic to, from or between islands. This is possible provided:

- a real public service need can be demonstrated; and
- the application of the two methods concurrently is not discriminatory and is justified in relation to the public interest objective being pursued.

The ‘Cabotage Regulation’ requires that, for both imposing PSOs and concluding PSCs, the Member State shall do so on a non-discriminatory basis in respect of all community ship owners. Any subsidy for ferry services must be available to all community ship owners. All community ship owners are entitled to apply for compensation in exchange for accepting PSOs and (given that subsidies are paid via a PSC) all community ship owners should be entitled to tender for the provision of services for which subsidies will be paid.

## 2.5. State Aid

Where any support granted falls within the following conditions, it is deemed to constitute state aid and will need to be assessed to establish whether it is compatible with EU rules (European Commission, 2004):

- the measure is granted by the state or through state resources;
- the measure confers an advantage to an “undertaking” – “undertaking” covers any entity engaged in economic activity, and the legal status of the undertaking is not important;
- the measure is liable to distort competition by favouring certain undertakings – the competitive position of the undertaking being selectively targeted is improved by the giving of the aid in relation to other competitors; and
- the measure must have the potential for affecting trade between Member States.

Where a member state intends to give lawful state aid, it should notify the Commission and seek authorisation for the aid. Otherwise, it may be treated as unlawful unless it is deemed to be *de minimis* or otherwise exempt. *De minimis* relates to the assessment of state aid and not the ‘Cabotage Regulation’s. Issues raised by each of the ‘Cabotage Regulations’ procurement regulations and state aid rules need to be considered.

The “Altmark” decision confirmed that a State measure will not be treated as state aid where it compensates an undertaking for discharging PSOs in a way that the undertaking does not enjoy a real financial advantage in exchange for discharging PSOs

(European Court, 2003). To fall outwith the definition of state aid, the following four conditions must be satisfied:

- the receiving undertaking must actually have PSOs to discharge and these must be clearly defined;
- the basis of compensation must be calculated in an objective and transparent manner;
- compensation cannot exceed what is necessary to cover the costs in discharging the PSO, taking into account relevant receipts and a reasonable profit;
- if the undertaking concerned is not chosen under a public procurement procedure, then the level of compensation needed must be determined on the basis of an analysis of costs which an efficient undertaking would have incurred.

If a subsidy does not comply with one or more of the four Altmark criteria it must be regarded as state aid. In such cases, the measure will have to be notified to and approved by the Commission before it can be implemented. In any case involving public service compensation where the measure is within Article 87(1) of the Treaty, it may nevertheless be exempt under Article 86(2) of the Treaty where the conditions of that exemption are satisfied.

### **3. Public tendering of ferry services**

#### *3.1. Methodology*

This section of the paper investigates, based on a case study approach, the practical functioning and evolution of tender procedures in four European countries - Denmark, Greece, Sweden and Norway. For each country a brief introduction to the respective ferry sector and the delivery of PSO/PSC ferry services is given. This is followed by discussion and analysis of the procurement procedures, the methods/types of support given to ferry services, the public agencies involved, and the outcomes of tendering experiences as appropriate.

Much of the information presented has been gained through direct contact with the tendering authorities and ferry operators in each of the respective countries. This has been supplemented by publicly available information. The four countries were selected because they each have recent experience of ferry service tendering and procurement in compliance with the above regulations.

The aim is to identify the main strengths and weaknesses of each procurement approach, and to review the outcomes, in an effort to facilitate development of our conceptualisation of what could comprise an 'optimal' approach to tendering/procurement of subsidised ferry services within the context of EU regulations.

#### *3.2. Tendering of ferry services in Denmark*

Denmark has more than 400 islands, some of which are connected to the mainland or other islands by bridges while others are connected by ferries. There are a total of 65 domestic ferry routes in Denmark (and approximately 20 international routes).

The Public Transport Authority (Trafikstyrelsen), an agency within the Danish Ministry of Transport, is engaged in national as well as international commitments. Its remit includes the administration of public procurement of railway and ferry transport services through organising tenders for operating contracts in accordance with Government decisions and to monitor the contractors' performance (Trafikstyrelsen 2009).



Figure 1: Danish Ferry network.

Source: <http://www.trafikstyrelsen.dk>.

Until 2005, many ferries in Denmark were operated by the Danish state. In 2005, limited liability companies were created. The delivery of services today is summarised in Table 1, also giving an overview on the type of contract in place on different routes. Previously, most of the routes were both owned and run by local authorities. Consequently, many of the ferry companies have now been split into two entities: one company (often owned by the ‘state’, mostly at municipal level) which owns the ferry (or ferries) and berth facilities and another “operating” company which runs the service. However, on certain routes the operator also owns the ferries.

Subsidies paid by the Danish State in accordance with PSCs are based on “net cost contracts”, where the shipping company receives the income from tickets. The tendering

authority in Denmark regulates the maximum and average ticket price for all tickets per ticket group. The level of operating subsidies for three PSCs in 2009 was as follows:

- Rønne-Køge, Rønne-Ystad (ferry services Bornholm) – about €18.4 million p/a.
- Samsø-Kalundborg - About €1.2 million p/a.
- Bøjden-Fynshav - About €1 million p/a.

Table 1: Ferry service delivery in Denmark.

<i>Route/area</i>	<i>PSO/PSC</i>	<i>Duration</i>	<i>Comments</i>
2 routes (Rønne-Ystad and Rønne-Køge)	PSO/PSC	5 years	PSC operated by Bornholmstrafikken A/S
18 routes	PSC/PSO	On average 5 years	PSC not exclusive, with the exception of route Spodsbjerg-Tårs.
16 routes	PSC	-	Operated by local authorities; 16 tender procedures cancelled due to lack of interest from operators.
11 routes	PSC	-	Operated by local authorities; never submitted to tender procedures.

Source: Derived from Trafikstyrelsen.

Table 2 illustrates route characteristics for the Bornholm ferry services, including key service requirements, capacity and other relevant information.

Subsidies in Denmark come out of the state budget and are split in terms of running costs and investment grants (for investments in port facilities, new ferries etc.). In the case of local government's investments in ships and port facilities, the state, the regional government and the local government each contribute 1/3<sup>rd</sup> of the annual repayments.

There is no protection for the PSO operator as such, but the local authorities can reduce fares on, for example, cross-fjord ferry lines, in order to attract more passengers and to change transport patterns. Any operator is free to establish a ferry line on a commercial basis as long as it is not in a 'monopolised area'. Monopolised areas are concession areas where operators have the exclusive rights to operate. A few ferry lines (e.g. public service lines to the islands Ærø and Anholt) and the line Sælvig (on the island Samsø)-Hou (in Jutland) are monopolised. Tendering is based on small bundles of routes (as in Bornholm's two routes tendered together) or for single route operations.

The first round of Danish tenders run according to EU regulations was realised in 1997. Tendering in the Danish context aims at benefitting users and communities and at decreasing subsidy levels. Public tendering is used as the means to ensure cost efficient transport services for citizens in all sectors of public transport in Denmark where today buses, trains, planes and ferries are all tendered. By 2009 the 3<sup>rd</sup> round of tenders was under way with the 4<sup>th</sup> round being prepared for. Specific tender contract requirements are shown in Figure 2.

Table 2: Route & service characteristics for Bornholm ferry services.

	<i>Ronne Koge</i>	<i>Ronne -Ystad</i>
Distance	91.6 nm	38.8 nm
Type of traffic	Primarily freight + passenger	Mainly passengers with cars + freight
Time	Night sailing (1130 – 0600) in both directions 1 weekly trip for dangerous cargo	High speed traffic, 2-5 sailings a day all year round Additional round trip with Ro-Pax per week in low season Extra sailings on key holidays with conventional car ferry
Passenger	Max. ca. 200, rarely > 100 in low season, rarely > 50 with berths	Up to 7000 per day and direction Minimum ca. 3-400 per day in winter
Freight	Up to 75 trailers/night in each direction	Up to 20 lorries a day/each direction
Effects		Introduction of high speed craft has almost doubled passenger numbers in summer

Source: Trafikstyrelsen.

Service requirements differ by contract/route and an evolution of criteria can be observed when comparing the 2<sup>nd</sup> and 3<sup>rd</sup> round of tenders. The set requirements refer to the specific characteristics of each service. One change from the 2<sup>nd</sup> to the 3<sup>rd</sup> round is the contract length from 5 years (2003/2004) to 5 years plus a one year extension option.

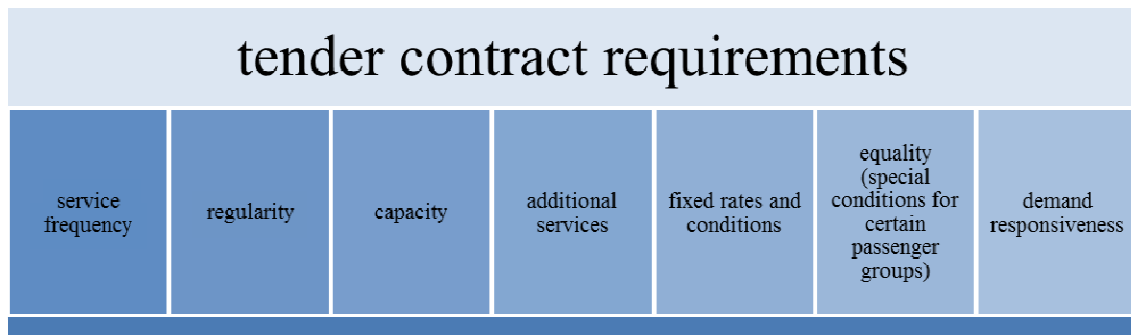


Figure 2: Tender contract requirements in Denmark.

Source: Authors.

The selection criteria have evolved from “lowest price” to a selection of the “economically most advantageous application” in the 3<sup>rd</sup> round. The criteria as used in the latter are:

- price, quality (70%),
- flexible frequency and security of supply (20%) and
- ferry quality (10%).

Additionally, the technical and financial conditions of the bidding company are taken into account. This includes turnover in the shipping business for the last 3 years and a reference list regarding the most important shipping business service contracts for the last 3 years as well as a declaration regarding debt.



Operators are required to ‘bring their own ships’ and, in the case of the new Bornholm contract a new catamaran currently under construction in Australia is entirely funded by the company, financed by Nordea Bank. Bornholmstrafikken is however 50% owned by the state and 50% by the private sector, so at least some of the commercial risk still rests with the state.

Procurement procedures differ by route, depending on the political focus and if the tender asks for deployment of new ferries. The current set up requires other bidders to bid against a government controlled operator (Bornholmstrafikken) that is also backed in the Nordic Ferry Services (NFS) joint venture by the 2nd largest Danish shipping company (Clipper A/S).

Table 3: Bornholm ferry tender process, service requirements and selection criteria.

<i>Tender process</i>		
	<i>Current contract</i>	<i>Upcoming contract</i>
Contract signed	06/04	02/09
Traffic start	05/05	09/11
4 qualified operators: Scandlines Sydfynske A/S, Bornholmstrafikken/Nordic Ferry Services A/S, Mols-Linien A/S, Rederi Gotland AB		
1 application – Bornholmstrafikken (annual turnover ca. 70.6 mill €)		
Contract price/year:	ca. 17.9 mill. €, 2004 prices	ca. 27.0 mill. €, 2009 prices
<i>Service requirements</i>		
	<i>Current contract</i>	<i>Upcoming contract</i>
Ronne – Ystad route		
Capacity (max)	32 d/a with full capacity – 8 275 pax/d and 1 575 cars/d in each direction	At least 32-38 d/a with min. 10 000 pax/d and 2 200 cars/d in each direction
Ship requirements	84 days with 1 high speed and 1 conventional car ferry	84 days with two high speed ferries
Frequency and crossing time	Min. 3 trips/d – 2 @ 75 min. and 1 @ 150 min.	Min. 3 trips/d @ 80 min.
Ronne – Koge route		
Capacity (max)	Min. 1235 lm, 400 pax/d per direction	Min 1500 lm, 400 pax/d per direction
<i>Selection criteria</i>		
Criteria	Lowest price	Economically most advantageous application
Negotiation	No negotiation	Negotiation
Capacity	Number of trips/ship, ship capacity, crossing times etc.	Capacity/day and crossing time
Risk	Operator takes all economical risks, including consequences of rising oil prices	Possibility of adding fuel-surcharges as a consequence of rising oil prices
Duration	5 years	5 years with option for 1 year

Source: Trafikstyrelsen.

The specific service requirements for the 2<sup>nd</sup> and 3<sup>rd</sup> tender round of the Bornholm service are shown in Table 3. Besides minimum daily capacity, seasonal adjustment of

crossing time, frequency and freight capacity, the requirement for an increase in capacity for the upcoming contract are included.

Figure 3 provides an example of the timescale involved in the procurement procedure for the major ferry services to the island of Bornholm. The whole process took about 1.5 years from time of publication of contract notices to contract signing. In the case of Bornholm the contract was signed in 2009, an order for an additional vessel was signed by the operator also in 2009, and this ship was due for delivery in 2011 in time for the new contracted service to commence.

It is important to reflect that there was then an additional 2.5 years until the contract started – so a total of 4 years lead in time. This effectively means that 1 year into a 5 year contract the tendering authority would be starting the tendering of the next contract, and that 2.5 years into a 5 year contract the existing operator might find he will no longer be the ferry operator. This creates a certain planning security for the winning operator and also provides time to effectively source tonnage for the service, if required. If the incumbent operator loses his contract to a competitor he then also has the possibility to prepare for a smooth exit and to look for alternative business.

In the latest tender round, shipping companies are to a certain extent protected against the increasing price of oil as the operator is allowed to partly raise the price of the tickets in accordance with rising costs of oil. That is, the service users pay any oil surcharge, not the state.

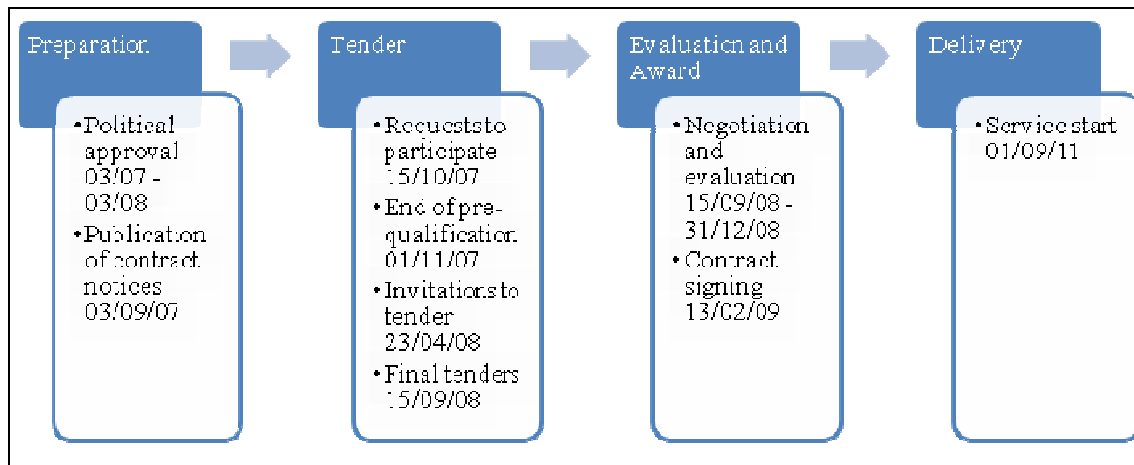


Figure 3: Procurement procedure/timescale for Bornholm ferry services.

Source: Authors.

### 3.3. Tendering of ferry services in Greece

Domestic ferries link the economies of 114 inhabited islands in Greece to the mainland. There are approximately 150 ports at which a total of about a thousand ferry connections are made each day. The Greek ferry market is composed of 7 regions and 58 ferry operators operating 365 itineraries. These can be split into:

- 84 routes subsidised by the Greek State;
- 30 short haul routes covering distances of up to 15 nautical miles; and
- 242 free itineraries where competitive conditions prevail (i.e. no subsidy is provided).

About 70% of the coastal passenger ships operating in Greece are deployed in the Aegean Sea area. The Aegean network has a mono-hub structure based upon the Port of Piraeus. Additionally, 70% of the national passenger transport demand is served through the Aegean network.

One of the main developments in the Greek ferry sector over the past 10 years has been the restructuring and modernisation of the fleet. Relatively new ships account for about half the fleet. *On several high-volume routes fast ferries (i.e. ships with service speed > 24 knots) are now operating.* Examples of ferry renewal include:

- *in mid-1999 Strintzis (now Blue Star Ferries) introduced two domestic routes in the Cyclades and Northern Aegean served by new high-speed ships;*
- *Minoan introduced new fast ships on the Piraeus-Crete route in 2000;*
- *new high-speed ships began to operate for Hellenic in the Aegean from 2000; and,*
- *NEL introduced the first of three fast ships in 2000.*

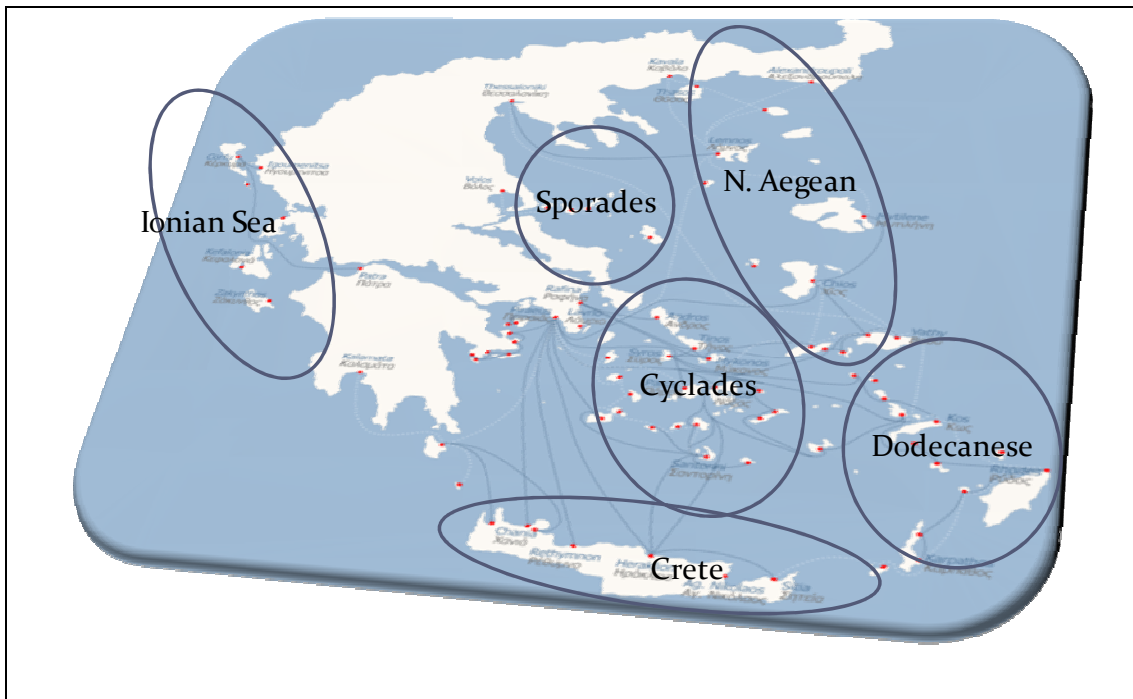


Figure 4: Greek ferry system.  
Source: XTRC 2008.

*Investment in new ships has also been closely linked with the development of the Athens Stock Exchange as a source of capital.* The financing of Greek ferry companies has been made mainly via syndication loans (Lekakou & Vitsounis, 2008). All non-listed companies have preferred bilateral loans. The new, faster vessels have in many cases greatly reduced travel time, e.g.:

- between Piraeus to Rhodes via Kos, down to 10 hours from 18 hours;
- Piraeus to Chania, down to 5¼ hours from 10 hours.

Corresponding with a move towards faster and larger capacity ships, the number of ships employed has significantly decreased over time. However, fleet renewal has slowed over the past several years. The average age of the fleet in 2008 was 16.8 years.

In the Greek market all ferry operators are privately owned. The state does not operate any ferry services in Greece, and does not own ferries. However ports are in public ownership. Ferry companies specialise in particular routes and sea areas, often reflecting their historical roots on particular islands. For example, Minoan (now majority owned by Grimaldi, Naples) and ANEK, both based in Crete, historically held all the licenses for routes to Crete from the mainland (OECD, 2000). But the situation has since changed with new entrants such as Blue Star permitted to come into the market. This results in a challenge for authorities when deciding to what extent entry barriers should be lowered, thereby allowing for greater competition on particular routes.

Domestic routes in Greece can be categorised as follows (Lekakou & Vitsounis, 2008):

- local, profitable and competitive routes
- local, remote and with limited traffic routes
- local, of average profitability routes

Profitable and competitive routes carry significant tourist and local traffic, as well as commercial traffic. Examples include the East Cyclades complex of islands (e.g. Siros, Tinos, Mykonos). Expensive, modern, fast, high quality vessels are deployed on these routes. Access for new entrants is restricted to the minimum and competition and innovation effectively “drives” non-performing operators out of the market (Lekakou & Vitsounis, 2008).

Vessels operating in the Aegean are mainly Ro-Pax type. The market has seen a strong concentration of operators over the last several years (Lekakou & Vitsounis, 2008), albeit a fringe of smaller companies remains. Figure 5 indicates the percentage share split for passenger volumes carried by the top 5 operators; the sum of small operators is considered to account for less than 10% of the overall market.

Demand for ferry services is highly seasonal and demand among the routes is highly skewed. August accounts for some 23% of total annual passengers carried, February for only 2%. This disparity is caused not only because of differences in tourism at the island destinations but also by differences in permanent population on the islands.

The routes with low, highly seasonal traffic volumes and limited commercial viability are subsidised by the state, e.g. North East Aegean routes. Operators selected from the bidding process provide services based on a fixed income for a certain period, with set itineraries and destinations. A tendency of “lower” quality vessels on subsidised routes can be observed.

Domestic ferry services are the responsibility of the Ministry of Mercantile Marine (MMM) and the Ministry of Aegean and Island Policy (MAIP), which were merged in 2007. They are responsible for regulating and overseeing the sector, including: market entry, licensing, pricing, route scheduling, manning (hotel as well as engineering), imposition of PSOs, determination of and tendering for unprofitable routes, enforcement of licence terms, certification, control, vetting and inspection of ferries for navigational and environmental safety. The Minister issues inter alia licenses and decrees controlling prices, albeit only after a tender on a specific route that has been identified as being one that requires subsidy.

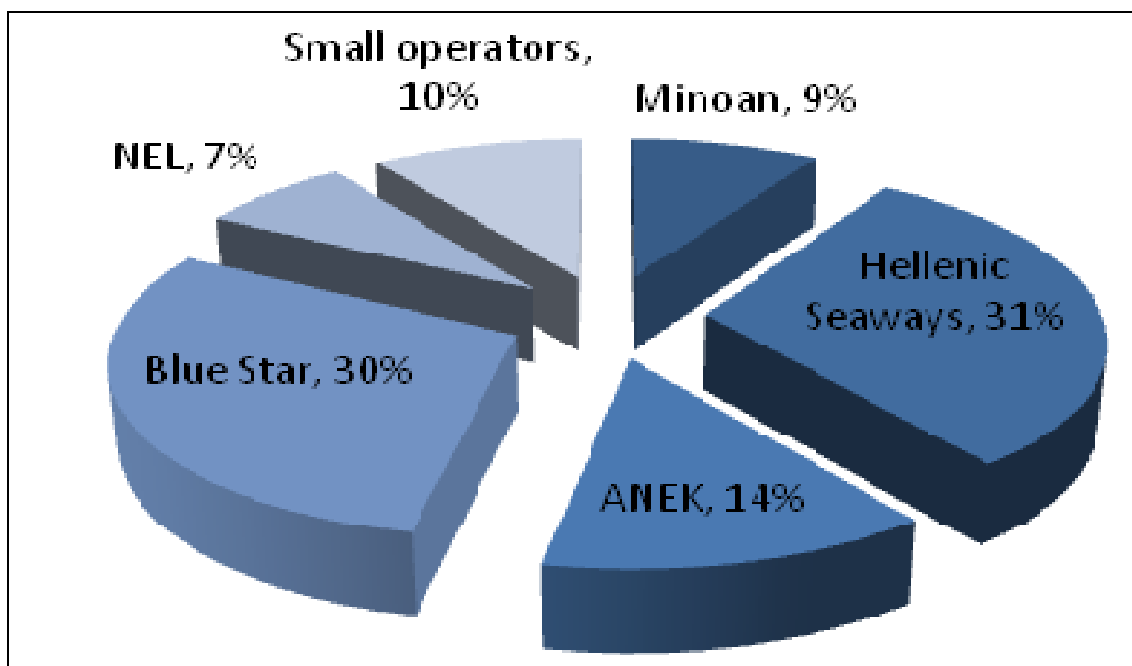


Figure 5: Market share of passengers, by ferry operator, Greece, 2005.  
Source: Lekakou & Vitsounis, 2008.

Figure 6 indicates the estimated development of total aid for non-commercially viable ferry services in Greece. While the aid appears to be increasing continuously, not all this aid is paid by the State. Each ferry ticket sold in the major competitive/profitable ferry sector includes a 3% passenger surcharge which is then used (i.e. hypothecated) to help subsidise ferry services that cannot be operated in an economically viable way. This effectively means that economically viable and profitable routes help to subsidise the least profitable routes. Lines that are not subsidised understandably have a tendency to resent this ‘tax’.

The overall subsidy level recorded an average annual increase of 8% between 2005-2008. The amount of public funds reached a level of over €35 million for the coverage of 84 service itineraries in 2008 (subsidised services being termed ‘thin lines’). As the total aid amounted to €70 million, this means that about €35 million of aid (i.e. 50%) was raised from the competitive, profitable operators/routes. Of the 84 routes, 31 were subsidised by MMM and 53 by MAIP. These routes were served by 40 ferry operators. In comparison with other states the level of subsidy paid per service in Greece appears very low. This in part helps to explain the relatively poor quality of service provided on subsidised routes. Moreover, it is evident that the vast majority of ferry services in Greece are not subsidised at all. Figure 7 outlines the development of subsidised routes since 2002.

The Greek State Law 2932/2001 anticipated the protection of public services in order to encourage the principle of competition. It was a first attempt to harmonize the political and state framework. However, the Greek ferry industry has not yet completely conformed to EU regulation 3577/1992 (Chlomoudis et al., 2007).

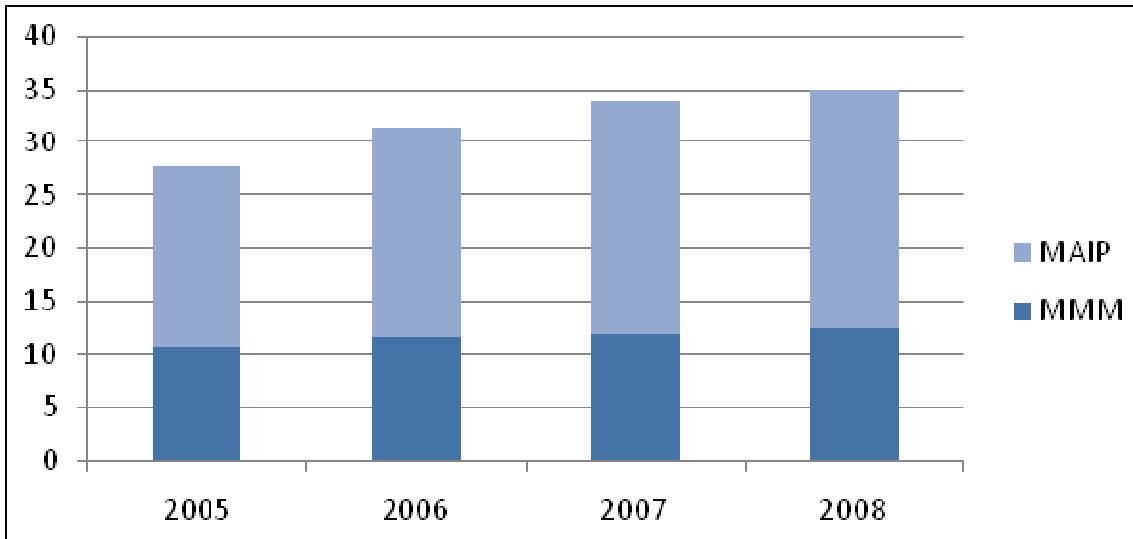


Figure 6: Greek Ferry Subsidies by number of routes (2005–2008), € Million.  
Source: Annual Greek budget reports.

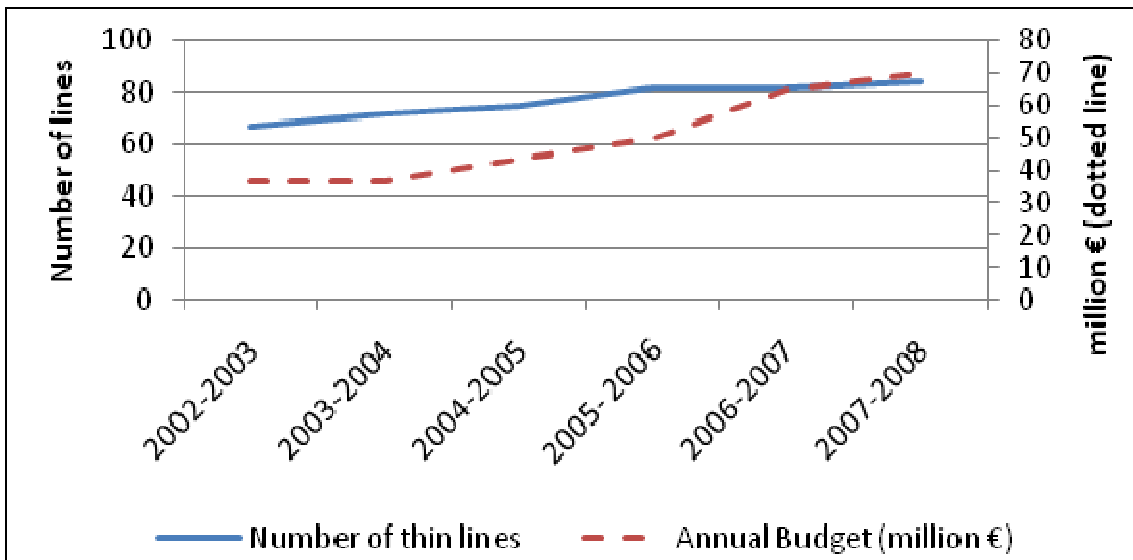


Figure 7: Aid for subsidised ferry services in Greece (2002-2008), € Million.  
Source: MMM.

Procurement of services starts with analysis of whether a route requires subsidy. This is identified if no operator asks for operating permission on a specific route. If no operator can operate that route profitably, competitive tenders are run that identify the bidder requesting the minimum subsidy. Government sets the maximum subsidy level for that specific route and the minimum requirements for “essential services” (i.e. effectively the PSO) which are shown in Figure 8.

Lekakou (2007) concluded that oligopolistic market features and ineffective state policies have resulted in an unstable coastal market in Greece and this has undermined the quality of the supplied shipping services. She stresses the essential characteristics that a passenger transportation network with a strong public interest has to fulfil (i.e. system accessibility, affordability, safety/security, quality requirements, etc.) and highlights the limited extent to which these criteria have been applied as pre-conditions for developing modern and efficient Greek coastal shipping. Fulfilling these criteria

would nevertheless seem to imply the need for a significant increase in public subsidies which, especially considering the current economic crisis, seems unlikely.

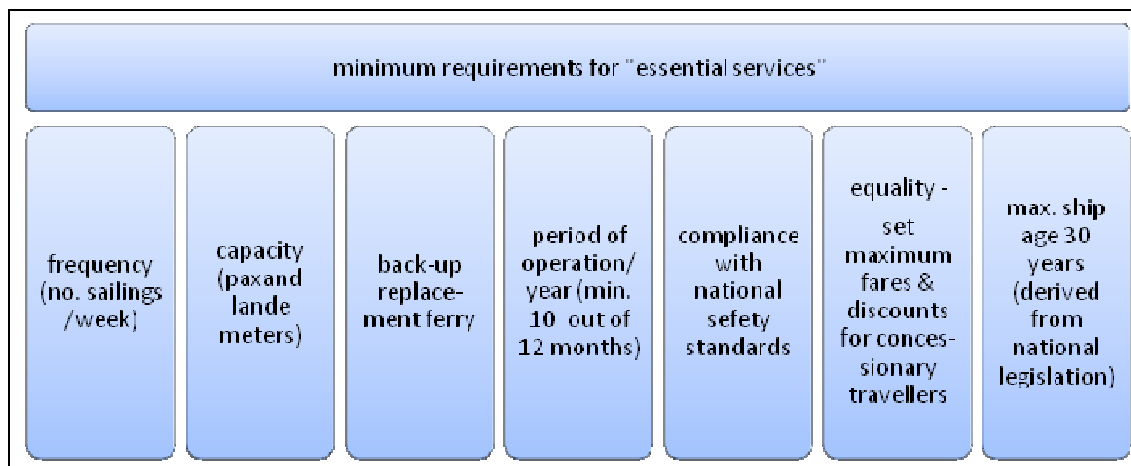


Figure 8: Minimum requirements for essential ferry services in Greece.  
Source: Authors.

### 3.4. Tendering of ferry services in Sweden

The major subsidised ferry service connecting an island with the mainland in Sweden relates to the island of Gotland. Ferry services to the island of Gotland are tendered by Swedish National Public Transport Agency Rikstrafiken. Gotland is situated in the Baltic Sea, about 100 km from the Swedish mainland. The island has over 57,000 inhabitants, or 0.7% of the population of Sweden (Commission des Isles, 2003).

Gotland has regular ferry services on two routes guaranteed via a PSC (Figure 9): Visby–Nynäshamn and Visby–Oskarshamn, plus summer traffic to Öland, all operated by the same ferry company – Destination Gotland.

Since 1998, the private operator-owned and financed fleet serving Gotland has been completely renewed (ShipPax, 2009). Destination Gotland carried 1.5m passengers, 450,000 cars, and 700,000 lane meters of Ro-Ro cargo (i.e. over 50,000 trailers) in 2008.

In June 1998 the Swedish Parliament decided on a new transport policy, resulting in a new agency – the National Public Transport Agency, or Rikstrafiken – being established. Rikstrafiken's transport policy objective is to achieve a socio-economically efficient and long-term transport supply for the entire country (Rikstrafiken, 2009). Working together with the rail, road, sea and aviation administrations and authorities, Rikstrafiken has two main tasks:

- to procure public transport services (air, rail, sea, bus); and
- to develop and coordinate public transport throughout the country

PSCs for ferry services to and from Gotland initially came into force towards the end of the 1980s, when services were first subjected to competitive procurement procedures. The current legislation (SFS 1996:19) on limiting the right to operate ferry services to Gotland dates from 1996 and the government's decree (1997:748) that specifies the regulation came out the following year.



Figure 9: Ferry routes to Gotland.  
Source: Destination Gotland.

Anyone who carries out regular sea transport between Gotland and the Swedish mainland must make a call at a mainland port at least five times a week year-round; this is a requirement of the route PSO. The purpose behind these provisions is to hinder anyone from carrying traffic only during periods when there is a great demand (i.e. summer tourists), to the detriment of the contracted services, or in other words ‘cherry picking’. Requirements in the regulation of year-round traffic means that the procured ferry services are, in practice, carried out without competition from other ferry traffic (i.e. they enjoy exclusivity).

The Swedish Government has developed specific support measures for the island with the objective of ensuring an affordable price for all types of transport. In Sweden, gross contracts are the dominant contract form. This means the operator provides an agreed amount of transport services, with compensation then paid to the operator while ticket income goes to the Public transport authority.

The tendering process that preceded the current contract for the Gotland traffic was a disappointment for Rikstrafiken. In the first round, no bids were received. In the second round, which took place in early 2006, Destination Gotland, the incumbent operator, placed the only bid that was received.

Rikstrafiken has since stated its intention to alter the next bidding process. Under the new regime, there may be two separate tenders for the Gotland service – one will concern the supply of the vessels and the other will concern the operation of the ships



on the route (ShipPax, 2010). Rikstrafiken also proposes shorter routes and new vessels with lower speeds and emissions.

Stakeholders (i.e. groups mainly representing islanders and island businesses) have pointed out that there are several aspects of the proposed changes that would result in deteriorations viewed from the Gotland standpoint. Some basic elements include:

- if slower crossings are introduced this may put at risk development of tourism and the travelling possibilities for firms and Gotlanders, therefore swift crossings must be considered of high value in the bidding process;
- present capacity is believed to be inadequate for freight, for the peak travelling season and to take into account any increase of cargo, cars and passengers – this is crucial for development of the Gotland economy and community; and,
- already ferry charges are considered to be too high.

State subsidies for Gotland passenger traffic have grown substantially from about €3.1 million/year in the mid-1980s to the 2009 level of approximately €46.4 million/year. Rikstrafiken's compensation for the total term of the current contract (2009-2015) is €290 million for Gotland's two routes. The proceeds from ferry services in 2005 was approximately €79.8 million, divided 53% for passenger ticket proceeds, 9% for freight traffic proceeds and 38% for Rikstrafiken's compensation.

Subsidies paid to support Gotland's two routes therefore amount to more than half the total subsidy allocated in Greece, the latter supporting some 84 routes involving a subsidy of €70 million.

### *3.5. Tendering of ferry services in Norway*

Whilst Norway is not a member of the EU the country tends to adopt a similar approach to procurement of public services as countries within the EU.

There are estimated to be some 300 ferries operating in Norway today. Most of the ferries are owned and operated by private firms. But, like almost all other forms of public transport, many services operate at a loss and therefore require subsidy. The total annual subsidy for ferries in Norway is above €73.8 million (Minken & Killi, 2000).

Ferry links are considered to be a part of the Norwegian trunk road system. The National Public Roads Administration is responsible for supplying vehicle ferry services connecting trunk roads, and for regulating both prices and service parameters (e.g. operating hours, frequencies etc.). The Norwegian Public Roads Administration is divided into five departments each based in different parts of the country (North, South, East, West and Mid). In addition, tendering responsibilities have also been devolved to road agencies for local ferry services (mostly passenger ferries) operating in their areas (since 1994).

The traditional subsidy scheme has provided for improvements in services (e.g. frequencies, operating hours etc.), albeit at an increasing cost. Since the subsidy system was not considered sufficient in providing incentives to achieve cost efficiency, tender competitions have been introduced (Odeck & Bråthen, 2009).

It is argued that tendering has delivered substantial cost savings to the public sector in Norway (Bråthen et al., 2004). It is further suggested that where operating costs are perceived to be particularly high, or where there is a need for new vessels, tendering can prove successful as a correcting mechanism.

Ferry services are maintained by private ferry companies, each operating a monopoly franchise on a single route or across a relatively small bundle of ferry routes within a single region/area. Bundles/routes are therefore decided on a geographic area basis. A key distinction is that major trunk road ferry connections are tendered from the national level, whereas local/regional ferry services typically connecting outlying areas with the main regional towns in that area are tendered by local authorities (LAs) and/or local transport agencies.

While some single routes have been tendered (e.g. out of Tromsø), several tenders have involved small bundles involving between 2-5 routes linking outlying areas and islands to the same major regional town/city at which essential services for health, recreation, education, business, and government are accessed.

Until 1990 subsidies were paid ex post on a cost-plus basis, but this was considered a weak incentive in cost efficiency terms. Since 1990, subsidies have been paid ex ante to encourage cost efficiency (Bråthen et al., 2004).

Tender documents are designed within the local area transportation departments as sufficient expertise exists from tenders which these same departments run in other areas (e.g. for buses and airlines). Evaluation is undertaken by a group from the transport department and lawyers using a pre-specified template. The administrative management of the transport department makes the final choice of operator.

In the calls for tender (first six tenders after 1994), six to nine bids were received for each route. Significant differences in the required subsidy levels were found in the tenders for each route. In five of six cases, the incumbent operators won the tender.

All tenders were evaluated on the basis of multi criteria, with cost being only one of the criteria. Non-monetary criteria included: environmental impacts, safety, quality/functionality, capacity, ferry, and option of services (Table 4). Experience in Norway indicates that costs should be valued at no more than 40% overall.

Table 4: Møre - Romsdal tender evaluation criteria.

<i>Criterion</i>	<i>Weight (%)</i>	<i>Basis</i>
Price	35	Annual compensation and compensation by modified route production and consideration of changed hours
Age of vessels built	35	Age of reserve vessel also attributed
Delivery-quality	30	Emergency procedures for the reserve of supply vessels (cleaning programme, maintenance of passenger amenities)

Source: Sunde et al. 2008.

In recent years, trunk route ferry tenders have resulted in investment by private operators in more than 8 new large ferries (covering 6 routes) with an estimated capex of €91 million, as well as additional quality improvements (improved frequency etc.). And on local/regional routes several operators have introduced new vessels after winning tenders (e.g. Veolia, Tide).

The duration of tendered contracts varies between 5-8 years, depending on the need for asset-specific investments. The contract duration is not seen as a huge matter for the operator: if a private company invests in a vessel with a lifetime of 20-30 years it is expected to be able to use its ferry for more than one contract period, the lower depreciation cost affording some advantage in subsequent bidding rounds. Decisions on

specific ferry sizes/capacity and ferry acquisitions are left to the operating companies themselves.

Service timetabling is perceived as crucial in the tender processes, especially by ferry companies. The Norwegian Government sets quality standards. This includes retaining control of maximum prices and subsidies. A frequency premium is seen as a good incentive to overcome varying conditions (e.g. varying unit costs). Operators able to offer higher frequency are rewarded accordingly in the evaluation. Selection is based on the economically most advantageous offer, pursuant to Regulations Section Bidding. All criteria are assessed on a scale from 1 to 5, where 5 is the best score. Bidding criteria are almost evenly split between three aspects – price, vessel and quality.

Price is undoubtedly a legitimate award criterion. The vessels' age is basically a legal award criterion. It is questionable whether it is expedient to use age as the only award criterion linked to the vessels as it does not necessarily refer to a vessel's quality and suitability.

#### **4. Discussion and conclusions**

Our analysis of experiences in contracting ferry services indicates that ferry service procurement involves a continuous evolutionary process of specifying, offering, selecting, monitoring and reviewing services supplied. A number of common patterns are repeated across the range of countries under study.

Reflecting this commonality, the authors have developed on the basis of the research a 'ferry tendering route map' (Figure 10). The route map sets out what we consider to be the fundamentals of the ferry tendering process. In line with the aims of the paper, the case studies have helped facilitate development of our conceptualisation of what we consider should comprise an 'optimal' approach by transport authorities to tendering/procurement of subsidised ferry services taking into account EU regulations

The case studies suggest that Sweden, Norway and Denmark are continuously revising their procurement strategies. EU regulation is in general not seen as a barrier for development, but rather one more argument that supports the idea to secure efficient ferry services via tendering.

The procurement of ferry services is based on the same principles as procurement of transport services across other modes. Transport authorities at local, regional and national levels are managing ferry tenders, as well as managing tenders for local bus services, air services, and at the national level rail services.

In Denmark, the public procurement strategy has been successful on a number of routes, albeit less successful on some small-scale routes. The tender exercise from a public sector perspective is seen as a tool to drive operations to higher efficiency levels. However, out of 27 ferry route tender exercises undertaken in Denmark, only 2 routes actually changed operator. Nevertheless, the number of bidders – when comparing the 2<sup>nd</sup> and 3<sup>rd</sup> round – has increased, and foreign bidders are now appearing in the process.

A move towards multi-criteria evaluation in order to identify the economically most advantageous bid reflects the need to consider service quality as well as cost. A high weighting given to cost may reduce the impact of quality in the selection process. Evidence suggests that the duration of the contract (5 to 6 years) is not a barrier to the deployment of new vessels, notwithstanding the fact that tendering authorities do not

necessarily require brand new tonnage at every round (e.g. used vessels may be acceptable).

The Greek approach provides for a number of interesting observations. The Greek ferry industry was able to significantly improve fleet structure, especially driven by the threat of external entrants and helped by sophisticated private finance strategies. While these improvements primarily reflect experience on higher volume profitable routes, they do not seem to have reached the more peripheral and less densely populated islands. For the latter, incentives given through the procurement process do not seem to be sufficient enough to stimulate service improvements (Lekakou & Vitsounis, 2008). Moreover, the one year duration of contracts is clearly insufficient to allow operators to make necessary investments in new or replacement vessels; this should be changed to longer periods of at least 5-6 years, as is now common practice in other states.

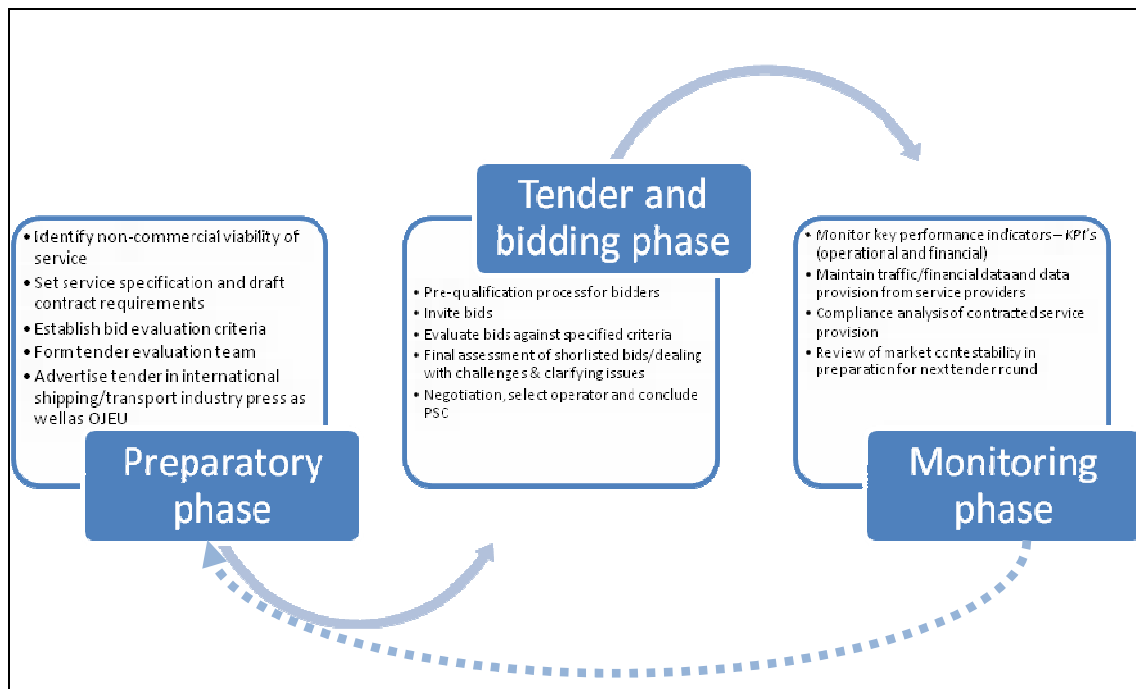


Figure 10: Ferry tendering route map.  
Source: Authors.

The level of customer satisfaction in respect of subsidised routes/services in Greece is rather low, with complaints about the limited frequency of service, the poor quality of vessels and slow speed (Chlomoudis et al., 2007). The evidence further suggests that overall subsidy levels in Greece may be inadequate in terms of improving service quality. Moreover, the strategy of forcing profitable ferry operators (and their customers) to help subsidise unrelated non-profitable services also seems questionable, primarily as this effectively penalizes/taxes successful non-subsidised services.

In Sweden, the case of Gotland demonstrates that the contracted operator has delivered improvements to the service in terms of modern ships and service quality, and achieved growing passenger numbers, albeit at rather high ongoing cost to the public sector. On the other hand the responsible agency, Rikstrafiken, is continuously pushing for more competition in the market, albeit the latest move to open up the market seems somewhat confused (i.e. the proposal to have separate tenders for ships and operations).

The lack of interest from other bidders (aside from the incumbent operator) suggests the possibility of barriers to entry (e.g. access to vessels).

The Norwegian experience in procurement of ferry services illustrates that: competitive tendering of individual routes has been perceived as a means to improve cost efficiency; it is a challenge to design the right measures that enhance allocative efficiency (allocative efficiency occurs when there is an optimal distribution of goods and services, taking into account consumer preferences), and; tender specification and procurement expertise needs to evolve over time and requires constant adjustment based on market development and experience. The Norwegian case gives clear evidence of improvements achieved in terms of service quality through tendering, including private investment in new ships. It also defies the myth that subsidies necessarily increase after deploying tendering procedures. We consider the Norwegian experience to represent probably the most successful and best developed approach to procurement of ferry services in Europe.

A tendency towards the further expansion of pan-European integrated transport providers into ferry markets via tenders can be observed. These entities are increasingly familiar with tender procedures, across different transport modes, throughout Europe. This is mainly because such firms are now frequently involved in tendering for public transport bus, rail, as well as ferry services, throughout Europe.

Submitting an operator to a tender compels it to reassess the value for money it is providing, and the efficiency of its services, thus leading to better services; this is especially true when there is the “threat” of effective competition. Also noticeable is the increasing role of private operators, with private firms willing to invest in new vessels, in turn limiting the need for state managed/owned operations.

Tendering is clearly a continuous process which is repeated over set periods. Arguments that the process is found to be too complex, long in duration and too expensive may be related to procurement in countries with a weak or discontinued procurement strategy. The timing of tendering procedures is decisive, since only strict timelines can provide the necessary framework for operators to prepare attractive bids.

Finally, it should be remembered that public tendering of ferry services is only necessary when the market is unable or unwilling to provide an adequate service on a given route. There are many routes throughout Europe where the market does indeed provide an adequate service, without subsidy, and which therefore negates in these circumstances any need for tenders.

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