

# EU Phare Twinning project “Strengthening Enforcement of Maritime Safety

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## **Abstract**

In year 2000, about 6 million passengers and around 35 million tons of cargo was handled by Estonian ports. Twenty million tons of it was oil products, which can be defined as a dangerous cargo. It has been estimated that the maritime traffic will increase two-fold in 2010-2015. In addition to vessels visiting Estonian ports, a large number of tankers visiting new Russian ports sail along the Estonian coastline. The risk of accidents is high due to the high concentration of traffic, the number of substandard vessels and the difficult navigational conditions, especially in winter. Twenty-seven casualties or incidents occurred in Estonian waters or involved vessels under the Estonian flag in 2000. These indicate importance of having Flag State Control (FSC) and Port State Control (PSC) more efficient.

Estonian Maritime Administration (MA) and Estonian Maritime Academy (EMA) prepared and carried out the EU Phare Twinning project “Strengthening Enforcement of Maritime Safety”. The duration of the project was 24 months and it included 9 sub-projects and an investment component, which included the procurement of a VTS simulator. The objective of the project was to improve the skills of the personnel of the Ministry of Economic Affairs and Communications, the Estonian Maritime Administration and the Estonia Maritime Academy. Main partners in the project were Finnish Maritime Administration (FMA) and Centre for Maritime Studies (CMS) at the University of Turku. The junior partner of the project was the Maritime and Coastguard Agency of the United Kingdom (MCA). In addition to experts from FMA, CMS and MCA, experts from the Denmark, Germany and Sweden took part in the project. The budget of the project amounted to €1,7 million.

*Keywords: Phare Twinning, maritime safety, VTS, GOFREP, flag state control, port state control, ism, winter navigation, continual training, simulator.*

## **1 Introduction**

Estonia has a very long maritime tradition. After the Soviets won their long-lasting control of this region in 1944, they proceeded to shut down the region's domestic maritime industry. The closure of the sea affected the entire region's way of life. Before the Red regime, Estonia's merchant fleet had 340 boats with total capacity of nearly a quarter-million tons. Two hundred sixty-three registered shipping companies were operating out of 26 international ports. On a per capita basis, Estonia was the third-largest commercial marine power on the Baltic Sea. Sweden and Denmark were ahead of Estonia, Germany, Poland and USSR were well behind.

During the occupation time, hundreds of fishing boats were nationalised, almost all international ports were closed, with only three remaining open, ship owners, captains and many seamen were deported to Siberia. The islands of Saaremaa and Hiiumaa were cleared of people and made closed regions. It has been calculated, that about 12 million dollars (calculated in 1940 dollars) in marine assets were confiscated.

On December 31, 1940, the Waterways Department (name of the Maritime Administration that time) had to conclude its work when the Ministry of Defence of the Soviet Union assumed the responsibility. The hydrography and aids to navigation sector was subordinated to the Hydrography Service of the Soviet Union Navy. Cartography and navigational information was subordinated to the Navy's central administrative board.

On December 1, 1989, the Estonian Maritime Administration took over full responsibility for maritime issues. It was the time to start building up the system again.

Traffic on the Gulf of Finland has been increasing every year since. In year 2000 about 6 million passengers were handled by the Port of Tallinn alone. Thirty-five million tons of cargo was handled by Estonian ports and 20 million tons of it was oil products, which can be defined as dangerous cargo. There were 8400 port visits to Estonian ports that year, which makes over 23 visits per day. There were around 50 arrivals/departures of passenger vessels per day during the peak season. Today there are 40 departures from Tallinn alone. The average number of tanker calls was 3-4 per day. By the years 2010-2015, the maritime traffic will increase almost two times to about 105000 vessels. There will be about 290 vessels transiting the Gulf per day. During the summer period the number can be even higher.

Do these numbers scare you? I am scared... It is only a matter of time before something big happens. Are we prepared to act quickly and efficiently? Do we have enough of resources; are we trained properly to respond quickly?

## **2 Preparation of the project**

Estonian Maritime Academy and Estonian Maritime Administration decided to start with the EU Phare Twinning project to improve the maritime safety in Estonia by improving the skills of the personnel of the Ministry of Economic

Affairs and Communications, Estonian Maritime Administration. Additionally was decided to purchase a simulator for training of the VTS operators and future GOFREP (Gulf of Finland Reporting) operators. There were numerous objectives and they were very ambitious. The duration of the project was 2 years and during that time 9 components or sub-projects were planned to be carried out.

I joined the project in autumn 2002, when the project was already approved by the European Commission. It was time to choose the partner(s) with whom to implement the idea. I have maritime background – 2 years of sailing world-wide as a mate on Dutch-flagged ships. I graduated Estonian Maritime Academy in year 2000 and had decided to bind myself with the sea and the maritime sector. It was very challenging to start working as an Estonian project leader of this big project.

There were 5 proposals from the “older” EU member states: Sweden, Denmark, Germany, Spain and Finland together with United Kingdom. We met with all the delegations from each country at the Ministry of Transport and Communications in Tallinn and later at the Delegation of the European Commission to Estonia. It was a difficult decision to make, as the proposals were all good and the people in the key organisations were involved in the future project implementation. Finally, the consortium of Finland and United Kingdom was selected as the partner of the project. From Finland two institutions were taking part: Finnish Maritime Administration and Centre for Maritime Studies of the University of Turku. From United Kingdom Maritime and Coastguard Agency was the junior partner. Additionally experts from Denmark, Sweden and Germany were invited to participate in the project.

It took almost 9 months to prepare the Twinning Covenant. It included details of the administrations and departments involved, officials responsible for different components and tasks, the availability of the appropriate office space and logistics, the budgetary resources and the timetable for the work to be carried out. It was the contractual framework for implementing the project and specified the obligations both the Member State and the Candidate Country. On July 25, 2003 we got the notification from the EU Commission to start with the implementation of the project and on the August 3, 2003 the Pre-Accession Adviser (now Resident Twinning Adviser) moved to Tallinn, Estonia to live for two years. This was the starting point.

### **3 Implementation of the project**

#### **3.1 Objectives of the project**

The project had as its overall objective the improvement of maritime safety. This called for the following:

- 1) Analysis of national maritime safety legislation and assistance in harmonising it with EC Directives. Adaptation process initiated by Estonian authorities;

- 2) Reviews and recommendations concerning operational procedures & management structure of the Maritime Administration (MA) for monitoring enforcement of maritime safety standards being finalized and delivered to the Maritime Administration (in particular with regard to vessel traffic service, Flag State Control, International Safety Management Code, Port State Control, quality management issues). Implementation process started by the MA;
- 3) Training of Estonian Maritime Administration's staff through Twinning, seminars and study-visits completed, with about 80 certificates issued. Process of implementing new procedures and methods of work initiated by the MA;
- 4) Reviews and recommendations concerning national winter navigation policy. Additional investment needs completed and delivered to the MA. Implementation process initiated by the MA;
- 5) Preparation of four new continual training course curricula for the MA staff completed and delivered to the MA and the Estonian Maritime Academy. Preparation of new training activities, based on the new curricula started by the Estonian Maritime Academy;
- 6) Support concerning establishment of a sustainable and continual training capacity at the Maritime Academy, for delivering training to the MA on basis of a new HRD plan, finalized. Enhancement of the continual training capacity initiated by the Estonian Maritime Academy.

### **3.2 Components of the project**

Project consisted of 2 different contracts: the Twinning project and investment in infrastructure. The Twinning part includes 9 components: vessel traffic service, winter navigation, quality management, human resource development, maritime legislation, Flag State Control, Port State Control and the carriage of dangerous goods, International Safety Management code and training organisation. For every component, there was a responsible person for the topic from the Member State as well from the Estonian side. An exact timetable was drawn for every component and agreed with by all involved persons from the administrations. All components consisted of a detailed work plan, with expert names involved and a budget.

### **3.3 The budget of the project**

Total budget of the Twinning part was, by the Covenant, 1.135.700€ (Phare contribution) and 130.000€ (Estonian co-financing). Phare financing for the investment part was 280.000€ and Estonian part was 115.000€. Altogether it amounted to 1.660.700€. Estonian co-financing was divided between Estonian Maritime Administration and Estonian Maritime Academy.

### **3.4 Project management**

The main reason why the project was so successful is the very good and open cooperation among the Member States, the Estonian project leaders and the administrations. Each Twinning project has a Resident Twinning Adviser (RTA), who worked full-time in the candidate country or in new member state to implement the project and along with a senior Project Leader responsible for the overall coordination of the project. Very useful tool of project management appeared to be weekly RTA meetings with beneficiary contact persons from Estonian Maritime Administration and Estonian Maritime Academy. On those meetings the visits of the short-term experts (STE) and management issues were discussed. The full commitment of both Estonian and foreign experts involved was very high, e.g. the Director General of the Maritime Administration, Rector of the Maritime Academy and several Deputy Secretary Generals from the Ministry of Economic Affairs and Communications were participating on a regular basis.

On the Estonian side, the Programme Officer representing the Ministry of Economic Affairs and Communications was responsible for the overall project coordination, implementation management and local monitoring. There was an established Steering Committee (SC) by the MoEA&C to support the Estonian project leader on issues connected with monitoring the project activities and approving reports and the budget on Estonian side. The members of the committee were from Ministry of Finance, Delegation of the European Commission in Estonia, Ministry of Education and Research, Ministry of Economic Affairs and Communications, Estonian Maritime Administration and Estonian Maritime Academy. Meetings were held once every three months.

### **3.5 Work carried out**

Altogether 29 experts from 5 “old” EU Member States took part in the implementation of the project. They carried out nearly 300 visits to Estonia during the 24 months. There were four maritime administrations involved: Finnish Maritime Administration, Maritime and Coastguard Agency of the United Kingdom, Danish Maritime Authority and Swedish Maritime Administration.

Twinning is the principal tool of pre-accession assistance for Institution Building. It aims to help the candidate countries in their development of modern and efficient administrations, with organizational structure, human resources and management skills needed to implement the *acquis communautaire* to the same standards as Member States. The Estonian Maritime Administration and Finnish Maritime Administration were acting like “twins”. Everyday there was close cooperation between the experts of the two administrations, an exchange of expertise and experiences. Within 5 project components, 8 study visits to the EU Member State administrations and training centres were carried out. A considerably higher amount of workshops were carried out by the short-term experts than was planned in the Covenant. All involved persons from the beneficiary administrations were working on this project in addition to their

everyday work. But everybody knew the importance of the project and was fully committed. By the Covenant 106 workshops were planned. The actual number of the workshops was 257. It means that the colleagues from the EU Member State countries and Estonia were willing to work more and gain more.

### **3.6 Results**

The results of the Phare project can be divided into two groups: planned and additional values. By the end of the project, 100% all guaranteed results were achieved. The main results achieved of the nine components were as follows:

#### **3.6.1 Vessel Traffic Service– VTS**

Finnish VTS experts delivered and introduced the Finnish legislative acts concerning the VTS and GOFREP (Gulf of Finland Reporting). During the project, a Document of Joint Procedures (DJP) was developed and introduced to both Finnish and Estonian operators. Coverage of the Automatic Identification Systems (AIS) was determined in order to avoid duplication by Estonian and Finnish equipment. Three study visits were made to Finland, of which two visits were additional to the Covenant plan. A preliminary study was prepared by the short-term experts concerning the VTS activity, including a short-term study of the Estonian traffic profile and maritime traffic in ports and fairways. Staff of the VTS department was given advice on the preparation of qualification requirements and manuals for VTS operators, in conformity with IMO. Other requirements were carried out by the STE's in workshops dealing with training and certification of VTS personnel and a joint test of the GOFREP system was carried out.

An additional and very important result is the effective cooperation now present between Finnish and Estonian VTS operators. Additionally, the Estonian side succeeded to finish contract 2 of the project: investment in infrastructure. A VTS simulator was procured before the end of the project and 4 new VTS operators were trained in Estonian Maritime Academy on the new simulator supplied by Transas Eurasia Ltd. and based on the new curriculum developed during the project in component 4 (human resource development).

#### **3.6.2 Winter navigation**

Analysis and a preliminary study of the current situation of winter navigation services and the connecting infrastructure was carried out by the Finnish STE's during workshops and field visits with Estonian colleagues. A training programme for the ice-breaker managers, operators, masters and mates of the Maritime Administration was drafted. A winter navigation concept for Estonia was drafted in cooperation with staff of Estonian Maritime Administration and Ministry of Economic Affairs and Communications. Additional results of a winter navigation component were practice for a period of 10 days by the Mater of I/B Tarmo in Finland onboard I/B Fennica. Together with Finnish STE's, the first ice-breaking seminar (Ice Day) for ports, operators, ship owners and civil servants was planned and arranged. This began the start of the regular seminars with the purpose to inform all parties about the icebreaking services in Estonia.

For the first time, the information about the icebreaking services in Estonia for the coming season were published free of charge in the Finnish Maritime Administration's information booklet for the shipping industry.

### **3.6.3 Quality management system and development of organisational structure**

In cooperation with German short-term experts, quality management indicators were established for the Maritime Administration in preparation for the upcoming external audit of the quality management system by the Lloyd's Register Quality Assurance Ltd. The indicators were fully approved during the audit. Many good proposals were given to the MA as to how to improve the work of auditors and how to delegate the different tasks among civil servants of the MA. Together with MA, colleagues STE's visited maritime training units in Estonia to assess the present situation and to develop possible recommendations. Based on the visits, a preliminary study was drafted with recommendations and conclusions.

### **3.6.4 Human resource development**

Four training curricula were developed: a 10-day course curriculum for VTS operators, a 3-day continual training course curriculum in ISM related issues, a 5-day course curriculum in flag state control and port state control, and a 3-day quality management training course curriculum for STCW purposes. "Training Need Analysis" was prepared and introduced to the Maritime Administration. Examples of Finnish and British solutions on drafting the human resource development plan and training policy were introduced in the workshops. Maritime Administration's quality management document, "Simplified Procurement Proceedings", was prepared which laid down the procedures for buying training services.

### **3.6.5 Legislation preparation**

Principles and relevant practice on the regulative mechanism and the requirements of the *acquis communautaire* concerning maritime transport and safety, casualty investigation and common maritime rules was introduced by the STE during joint workshops with the staff of Maritime Administration, Ministry of Economic Affairs and Communications and Estonian Maritime Academy. British STE prepared an interim report on the current state of the implementation of EC legislation. The work of STE was completed before the accession of Estonia in EU.

### **3.6.6 Flag State Control (FSC)**

Preliminary study about the current organisation of the flag state control services and the skills of inspectors was drafted by the STE's. The inspection procedures were evaluated and advice was given concerning development of ship inspection methods and manuals. Some recommendations made by the experts have been considered in the amendments to the Maritime Safety Act, which entered into force on June 3, 2005. One study visit was carried out to the Finnish Maritime

Administration Headquarters concerning FSC issues and the plan approval services of the FMA.

### **3.6.7 Port State Control (PSC)**

The staff of Dangerous Goods Section of the Maritime Administration was advised by the Finnish and British short-term experts concerning the EC legislative requirements, including the corresponding preparation of methods and manuals for inspection of ships carrying dangerous goods. Information databases used in the Finnish Maritime Administration and the Maritime and Coastguard Agency (MCA) were introduced. Two study visits were organised for the Estonian civil servants to Finland and to UK.

### **3.6.8 International Safety Management**

The Finnish and British experts evaluated the current situation and skills of the inspectors and advised the staff on the development of ship inspection methods and manuals.

One ISM auditor of the Maritime Administration spent 2 periods with the Maritime and Coastguard Agency auditors in British shipping companies (five days) and onboard ships (10 days). It was an additional benefit not planned in the Covenant.

### **3.6.9 Organisation of continual training**

A preliminary study of the current situation was drafted by the Finnish experts. During the joint workshops, topics were introduced and given advice on multimedia delivered training (MMDT) solutions and possibilities of e-Learning. Also, on organisation and management issues, on the continual training courses as well as on budgeting and cost calculation and planning a course and seminar. Additionally, a study visit for training staff from the Estonian Maritime Academy and the Estonian Maritime Administration was organised to Turku University in Finland.

## **4 Conclusions**

During these two years, all objectives set up in the Twinning Covenant were fulfilled along with many additional results. Very good and strong cooperation among Finnish, British, Danish, German, Swedish and Estonian colleagues took place. From this Phare Twinning project, not only Estonia benefited, but every administration taking part in it got something important: good relationship with others administrations in EU member states.

In every component short-term experts have made many recommendations on how to improve the work of the administrations and training units. Already during project lifetime, the Estonian Maritime Administration and the Estonian Maritime Academy have started actively implementing some recommendations. For an example, when preparing the seminars of the Twinning project, the Estonian Maritime Administration and the Estonian Maritime Academy applied new methods introduced by the STE's. Quality management indicators were

established and implemented and approved by the Lloyd's Register Quality Assurance Ltd. All results, conclusions and recommendations are pointed out in the Final Report of the project.

Phare Twinning project didn't just improve the cooperation among the administrations and colleagues from the EU member states, but also internally among the Maritime Administration, the Estonian Maritime Academy and the ministries. Good personal and working relationships were developed during those years when working on the project.

## **References**

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