



Cooperation-Network for logistics and nautical education focusing on
Inland Waterway Transport in the Danube corridor
supported by innovative solutions

NELI Logistics Course - curriculum -

(Act. 3.2, Period 4)

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1. List of abbreviations

- **ELA** - European Logistics Association
- **IWT** - Inland water transport
- **EWITA** - European Web platforms and Training Concepts for Intermodal Inland Waterway Transport
- **NELI** - Cooperation Network for Logistics and Nautical Education focusing on Inland Waterway Transport in the Danube Corridor supported by innovative solutions

2. Scope of document

The following document contains the curricula of a logistics course in inland waterway transportation. It integrates and addresses the standards of the ELA certification for Logistics Professionals.

3. Objectives

According to the ELA Certification for Logistics Professionals a classification of the learning material at hand is made.

Supervisory/Operational level

At this level students will fulfil the following points according to ELA:

- Comply with relevant legislation and regulations
- Contribute to the implementation of a change initiative
- Make recommendations for the improvement of operational effectiveness

At the senior level in the transport management section the following points will be achieved:

- Evaluate the impact of environmental factors on transport activity
- Plan the coordination of multi-modal operations
- Develop transport plans and proposals evaluating costs and added value

On the supply chain flow and network management level the following compulsory points will be met:

- Model supply chain networks as a holistic, flow-oriented system.

4. Course framework

4.1 Target group

The target group for the logistics course is:

- students at universities with appropriate logistics topics in their curriculum.
- inland navigation personnel – management level
- port management personnel
- personnel from administrative authorities
- transport operators personnel – management and execution level
- managers or consultants planning, coordinating and controlling different parts of the logistics network
- supervisors in an operational role

Trainee requirements:

The candidate is required knowledge and skills in a broad range of work activities, usually performed in a wide variety of tasks, some of which are complex and non-routine.

Could be responsible for the control or guidance of others.

The candidate must:

- understand logistics strategies and processes, the interrelationships between and within logistics networks (generic knowledge)
- have special functional skills and knowledge
- to be able to optimise activities within his/ her area of responsibility.

4.2 Instructors

Instructors should be acquainted with instructional techniques and training methods. The instructors have to have knowledge and experience in logistics and inland waterway navigation.

4.3 Training facilities and equipment

An elaborated document (pdf) is prepared and available for students.

4.4 Teaching aids

N°	Title	Author	year	Format
1	General characteristics	FHOÖ	2011	.ppt/pdf
2	Intermodal transport	FHOÖ	2011	.ppt/pdf
3	Port technology – Terminals	FHOÖ	2011	.ppt/pdf
4	Market & organization	FHOÖ	2011	.ppt/pdf
5*	www.ines-danube.info *	EWITA/NELI project consortium	2009	online

(5)*: optional

5. Teaching syllabus

I. Module: General characteristics

Students are acquainted with the advantages and disadvantages of inland waterways as traffic carrier and get to know about basic figures concerning transport volumes on inland waterways.

According to ELA¹ standards students should be able to contribute to the evaluation of transport environment (operational level).

Thematic plan

¹ ELA – European Logistics Association.

- Basic data about European waterways
- Reasons for inland waterway transport
- Main corridors
- Key figures
- Importance of inland waterway transport
- Advantages
- Disadvantages

II. Module: Intermodal transport

General target: Students are acquainted with transport processes as well as basic information concerning measuring and loading units, vehicles etc. Furthermore, advantages and disadvantages of intermodal transport chains are known.

According to ELA standards, students should be able

- *to select modes of transport (operational level),*
- *to agree transport performance objectives (operational level),*
- *to plan the coordination of multi-modal operations (senior level),*
- *to evaluate the impact of environmental factors on transport activities (senior level).*

Thematic plan

- General information
- Systematization of transport processes
- Types of intermodal transport
- Measuring units
- Transport chains
- Players in intermodal transport
- Infrastructural aspects
- Loading units in intermodal transport
- Vehicles in intermodal transport
- Advantages/Barriers in intermodal transport

III. Module: Port technology – Terminals

Students are familiar with ports and the technology implemented and necessary to handle cargo. Students get to know how goods are handled from a consignor's point of view.

According to ELA standards, students should be able

- *to plan transport transshipment operations to meet objectives (operational level),*
- *to manage transport loading and unloading operations (operational level),*
- *to contribute to the evaluation of the transport environments (operational level).*

Thematic plan

- Terminal functions

- Functional area
- Terminal services
- Transshipment equipment in terminals
- Container terminals - characteristics

IV. Module: Market & Organization

Students are familiar with general market conditions and frameworks concerning inland waterway transport. Furthermore, relevant policies and laws, essential for organizing intermodal transport are known.

According to ELA standards, students should be able to

- *make recommendations for the improvement of operational effectiveness (operational level,*
- *to contribute to the*
- *to develop transport plans and proposals evaluating costs and added value (senior level),*
- *to plan the coordination of multi-modal operations (senior level),*
- *to evaluate the impact of environmental factors on transport activity (senior level).*

Thematic plan

- Documents in intermodal transport
- Legal framework in intermodal transport
- Information and communication technology
- Organization of logistics processes
- Inland waterway transport solutions
- Best practice examples in intermodal transport
- Basic principles of cost calculation in inland waterway transport

6. Timetable of the course

Module	ratio [%]	Teaching aids used
General characteristics	15	ppt, pdf
Intermodal transport	35	ppt, pdf
Port technology	30	ppt, pdf
Market & Organization	20	ppt, pdf
Total	100	

7. Sources and references

- ELA Standards
- INeS Platforme for Danube Corridor – EWITA project