MODERNISING THE MODEL OF VESSEL CERTIFICATE

Motivations, principles and roadmap

Benjamin Boyer and Bernhard Bieringer
CESNI Secretariat

1. **Basic functionalities of the Vessel Certificate**

2. **Why a New Model of Vessel Certificate?**

3. **Concrete examples for improvements**

4. **Principles endorsed by CESNI**

5. **Roadmap - process underway for several years**

1. Basic functionalities of the Vessel Certificate

The Vessel Certificate shall ensure at least the following functionalities:

- provide accurate identification of the vessel and its technical characteristics,
- record vessel ownership (often in duplication of registration certificate),
- prove that the vessel complied with ES-TRIN during its last inspection,
- permit operation on European inland waterways (all or only some),
- provide information on the minimum crew, necessary equipment or operational restrictions,
- ensure legal certainty regarding derogations permitted by the inspection body,
- serve as reference document for inspections by control authorities.

2. Why a New Model of Vessel Certificate? (1/4)

- **Unflexible and outdated format**
  - Fixed number of pages → entire pages / sections without entry
  - Overcrowded No. 52, e.g.
    - Derogations
    - Transitional provisions
    - Data on internal combustion engines (type-approval etc.)
    - Data on on-board sewage treatment plants
    - Radar navigation installation
    - …

- **Evolution of technical requirements** (ES-TRIN)
  - sometimes triggers need for additional entries (but not created in practice in the model)
  - usually workaround via No. 52 (even more overcrowded)

2. Why a New Model of Vessel Certificate? (2/4)

- **Significant experience gained by the stakeholders**
  - Essential information missing on front page
    - Easy identification of vessel not possible, only number of certificate visible
    - Many certificates „improved" by hand by unauthorised persons by writing vessel name and ENI
  - Difficulty to represent conditions for different navigational zones
    - Freeboard requirements
    - Convoy formations
    - Crewing
  - Replacement of certificates' individual pages by different authorities as source of fraud and uncertainties

2. Why a New Model of Vessel Certificate? (3/4)

- **Paper-based design and layout, not ready for digital documents**

  - NAIADES III, Flagship 6: „A roadmap for digitalisation and automation of IWT

  - CCNR Mannheim declaration:"press ahead with development of digitalisation, […], thereby contributing to the competitiveness, safety and sustainability of inland navigation"

  - National initiatives for the deployment of digital documents

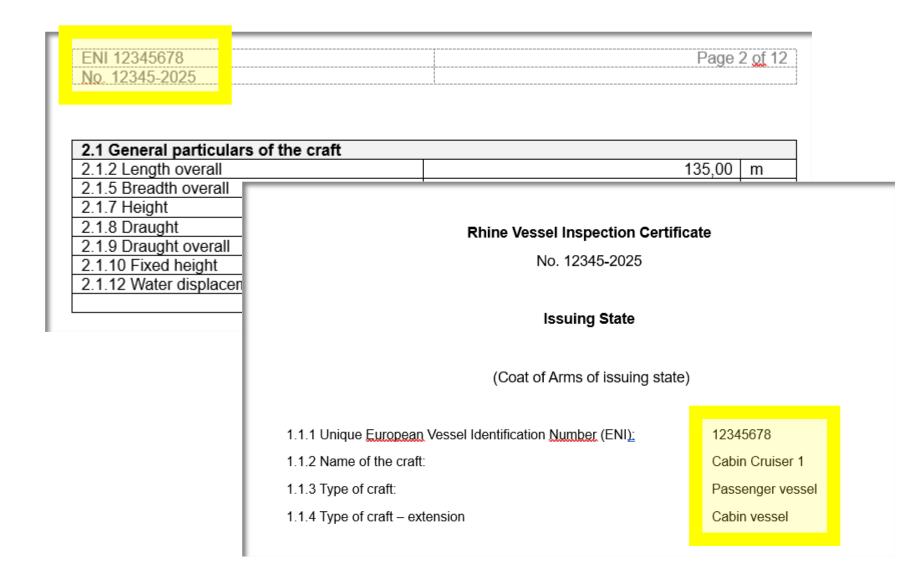 - Recent recast of the European Hull Data Base

2. Why a New Model of Vessel Certificate? (4/4)

- **Not very suitable for multilingual environment**

  - Certificates potentially in 14 official languages (= RVIR/EU Directive)

  - Too many free text fields

  - Challenge for enforcement (e.g. one certificate with pages in different languages)

  - Challenge for renewal of certificates (loss of information)

3. Concrete examples for improvements (1/3)

- Easy identification of the craft
  - ENI, name and type of craft on the front page
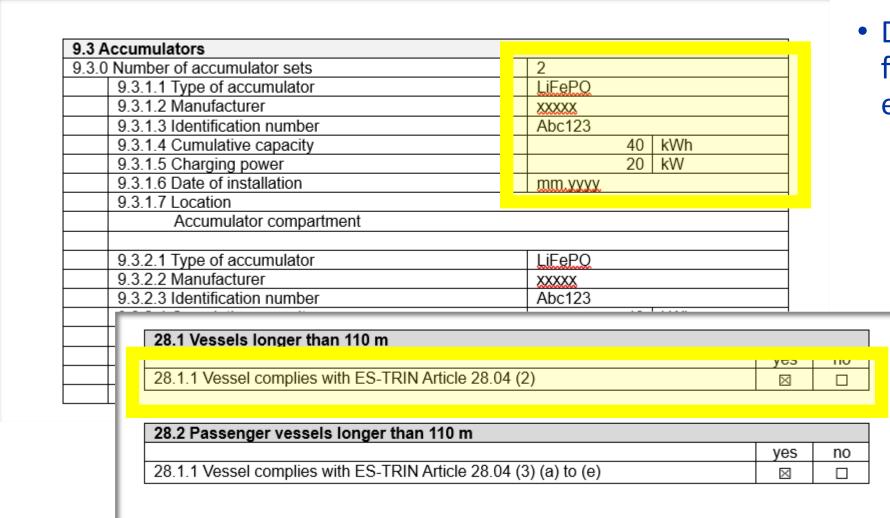 - ENI repeated on each page

3. Concrete examples for improvements (2/3)

13.4 Life-saving equipment			
13.4.1 Total number of life-buoys		3	
13.4.2 Number of life-buoys with light		2	
13.4.3 Number of life-buoys with line		1	
13.4.4 One lifejacket for every person who is regularly on board			
		yes	no
13.4.5 Ship's boat		☒	☐

13.5 Fire-fighting equipment			
13.5.1 Number of portable fire extinguishers in accordance with ES-TRIN		10	
13.5.5 Permanently installed fire-fighting systems engine rooms, boiler rooms and pump rooms		1	
13.5.6 Extinguishing agent for fire-fighting systems engine rooms, boiler rooms and pump rooms	FK-5-1-12		

- Improved recording of required equipment
  - Clear legal references to reduce ambiguity where more than one set of rules is applicable (e.g. ADN)

3. Concrete examples for improvements (3/3)

9.3 Accumulators

9.3.0 Number of accumulator sets		2	
	9.3.1.1 Type of accumulator	LiFePO	
	9.3.1.2 Manufacturer	XXXXX	
	9.3.1.3 Identification number	Abc123	
	9.3.1.4 Cumulative capacity	40	kWh
	9.3.1.5 Charging power	20	kW
	9.3.1.6 Date of installation	mm.yyyy	
	9.3.1.7 Location		
	Accumulator compartment		
	9.3.2.1 Type of accumulator	LiFePO	
	9.3.2.2 Manufacturer	XXXXX	
	9.3.2.3 Identification number	Abc123	

28.1 Vessels longer than 110 m

	yes	no
28.1.1 Vessel complies with ES-TRIN Article 28.04 (2)	☒	☐

28.2 Passenger vessels longer than 110 m

	yes	no
28.1.1 Vessel complies with ES-TRIN Article 28.04 (3) (a) to (e)	☒	☐

- Dedicated data fields for current No. 52 entries, e.g.
  - Details for Li-Ion-accumulators
  - Compliance with requirements for craft longer than 110 m

4. Principles endorsed by CESNI

- Data driven process – „beyond paper" vision
  - Certificate seen as a snapshot from a database
  - No more replacement of individual pages (e.g in case of certificate renewal)

- Modular approach (no longer a fixed number of pages) with a fixed minimum dataset common to all vessels

- Modules following structure of ES-TRIN

- Minimised need for free text (fewer linguistic issues)

5. Roadmap - process underway for several years

- **2005-2006** – Review of RVIR and adoption of Directive 2006/87: First discussions on review of model of the vessel certificate

- **2018-2019** – Study including a survey to collect the opinion of inspection bodies, police forces, shipowners ...

- **2020** – Principles agreed at CESNI/PT level - new model approached from a data-driven perspective

- **2021** – Set up temporary working group (CESNI/PT/Mod)

- **2022-2025** – Preparatory work within CESNI/PT/Mod to develop a list of data fields

- **2025 –** List of data fields approved by CESNI/PT and mandate to organise a workshop

- **Sep 2025** – Workshop to collect feedback from various stakeholders and establish a viable base for fine-tuning of the draft model

- **From 2026 –**
  Final amendment for introducing the new model of certificate in ES-TRIN 2029
  CESNI work to refine the procedures, especially the instructions ESI-I-1 in ES-TRIN.
  Possible evolution of the legal frameworks Directive/RVIR, as well as EHDB, to allow a digital certificate

- **Jan 2030 –** Entry into force of the new model (ES-TRIN 2029)

THANK YOU FOR YOUR ATTENTION!

CESNI website: https://www.cesni.eu/