

Decree of the Flemish Government on innovative navigation

Legal basis

This Decree is based on:

- the Flemish Shipping Decree [Scheepvaartdecreet] of 21 January 2022, Articles 55 and 57.

Procedural requirements

The following procedural requirements have been met:

- The Inspectorate of Finance has issued its opinion on 3 April 2025.
- The Flemish Supervisory Committee for processing personal data gave opinion No ... on ... (date).
- The Council of State gave opinion xxxxx/x (opinion number) on ... (date), pursuant to Article 84(§1)(1)(2) of the Council of State Acts, coordinated on 12 January 1973.

Initiator

This Decree is proposed by the Flemish Minister for Mobility, Public Works, Ports and Sport.

After deliberations,

THE FLEMISH GOVERNMENT HEREBY DECREES THE FOLLOWING:

Chapter 1. General provisions

Article 1. In this Decree, the following definitions shall apply:

- 1° remote control: navigation tasks of a vessel that are performed by a person or a machine, either fully or partially, from a location that is not on board the controlled vessel;
- 2° inland waterways: the inland waterways referred to in Article 2(4) of the Flemish Shipping Decree of 21 January 2022;
- 3° Committee of Experts: the Committee of Experts referred to in Article 2.01 of the Rhine Vessel Inspection Regulation (ROSR), which is also the inspection body, referred to in Article 2.01 of Annex 7 of the Decree of the Flemish Government of 5 October 2018 laying down the technical requirements for inland waterway vessels;
- 4° automated vessel: a vessel capable of operating for one or more vessels functions using technology that replaces or supports human intervention for the entire voyage or part thereof;

- 5° innovative vessel: a vessel that uses remote control, an automated vessel, or a vessel with an alternative form of propulsion.

Article 2. §1. This Decree shall apply to innovative vessels, irrespective of the type of vessel, which, by reason of their technology, seek to derogate from laws, decrees or implementing acts on all of the following elements:

- 1° the crew and the operation of the vessel;
- 2° the technical characteristics or equipment of the vessel;
- 3° the regulation of maritime traffic;
- 4° the requirements for on-board and on-shore operations;
- 5° the on-board vessel documentation.

Without prejudice to the application of Article 68 of the Flemish Shipping Decree of 21 January 2022, this Decree also applies to innovative vessels transporting dangerous goods on inland waterways.

§2. This Decree shall not apply to:

- 1° naval vessels;
- 2° seagoing vessels;
- 3° recreational vessels.

Article 3. §1. For the purposes of this article, the following terms shall apply:

- 1° conventional vessel: a vessel with a full crew in accordance with the Royal Decree of 9 March 2007 laying down the crew requirements on the shipping routes of the Kingdom and that meets all of the following conditions:
 - a) it is not controlled remotely;
 - b) it may not deviate from the applicable technical requirements for inland waterway vessels for any route;
- 2° equivalent level of safety: the vessel has a level of operational safety that is guaranteed to be at least equivalent to that of a conventional vessel of the same type;
- 3° navigation tasks: all tasks such as planning, steering, monitoring and manoeuvring, that are carried out in order to move a vessel from one place to another in the waterway.

§2. In this paragraph, the term 'remote control centre' refers to a location that is not on board the controlled vessel and that meets one of the following conditions:

- 1° the vessel can be controlled remotely from that location;
- 2° navigation tasks can be coordinated from that location.

The owner of an innovative vessel or their representative may submit a file to the Committee of Experts to prove that an equivalent level of safety is ensured in the operation of the vessel.

In the file referred to in paragraph 2, the following elements are to be demonstrated:

- 1° the technologies used are capable of taking into account the available and existing infrastructure and other waterway users without endangering them;
- 2° the communication technologies enable conventional communication between vessels, between the vessel and the shore and, where

- appropriate, between the vessel and the remote control centre; ensured through secure networks;
- 3° risks have been correctly evaluated, as demonstrated by the following elements:
- a) the technical resources on board ensure that:
 - 1) appropriate responses and actions can be taken in the event of a disaster or emergency;
 - 2) The crew on the vessel can always be properly protected;
 - b) depending on the technology concerned, the evaluation of the risks is based on one or more of the following risk analyses:
 - 1) 'HAZID': hazard identification in accordance with the international standard IEC/ISO 31010:2019;
 - 2) 'HAZOP': risk and operability study in accordance with international standard IEC 61882:2016;
 - 3) risk management with regard to information security, cybersecurity and privacy protection in a body in accordance with the international standard ISO/IEC 27001:2022;
 - 4) 'FMECA': analysis of potential failures and their critical impact on on-board and shore-based systems in accordance with international standard IEC/ISO 31010:2019;
- where dangerous goods are also transported, the risk analysis referred to in point b) shall take into account the potential risks of the goods transported and the additional requirements applicable to the transport of goods with high potential risks;
- 4° the technologies used have fallback systems that allow the vessel to be brought to a safe condition in the event of technical issues. Evidence shall be provided with the technical documents of the system used;
- 5° when used as remote control, the system clocks allow synchronisation with a remote control centre based on a reference clock and enable monitoring thereof.

In the third paragraph, point 2°, conventional communication traffic refers to any form of vessel communication by means of VHF radio, AIS or other technology resulting from the regulations.

§3. The following documents are added to the file referred to in paragraph 2:

- 1° a declaration on honour that the roles and responsibilities for the management of the vessel and the various navigation tasks are defined in all circumstances;
- 2° where applicable, the results of a pilot project as referred to in Article 70 of the Flemish Shipping Decree of 21 January 2022.

§4. The Committee of Experts shall check the file referred to in paragraph 2 and assess whether an equivalent level of safety is ensured in the operation of the vessel.

The Committee of Experts may require a navigation test and take into account the results thereof.-

The Committee of Experts may take into account the results of a pilot project as referred to in Article 70 of the Flemish Shipping Decree of 21 January 2022 or the evolution of the state of technology.

The Committee of Experts may waive all or part of the verification of the file if a valid certificate issued by a classification society recognised by the European Commission pursuant to Article 21 of Directive (EU) 2016/1629 of the European Parliament and of the Council of 14 September 2016 laying down technical requirements for inland waterway vessels, amending Directive 2009/100/EC and repealing Directive 2006/87/EC demonstrates that an equivalent level of safety is ensured.

The Committee of Experts may decide that:

- 1° an equivalent level of safety has been demonstrated for the entire application or part of the application, whether or not subject to conditions;
- 2° an equivalent level of safety has not been demonstrated. If the Committee of Experts determines that an equivalent level of safety can be achieved with limited adaptations, the file can be retained and the submitter can proceed to resolve the issue.
- 3° additional documents must be provided in order to be able to assess the application. There is no need to submit a completely new file.

Article 4. If personal data are processed through the submission of the file to the Commission of Experts, this shall be done in accordance with the General Data Protection Regulation.

The personal data referred to in paragraph 1 shall only be processed for the following purposes:

- 1° the exchange of information between the submitter of the file, the Committee of Experts and the waterway authorities;
- 2° the compiling of statistics;
- 3° the maintenance of safety and navigation comfort.

Anonymised information from the data referred to in paragraph 1 may be used to support policies for the promotion of inland waterway transport.

The agency De Vlaamse Waterweg nv is the data controller as referred to in Article 4(7), of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

The individuals whose personal data is processed will be informed of this in advance. These individuals will have access to their own personal data and will always receive a copy of this data upon request.

Personal data will not be retained for longer than ten years.

Article 5. This Decree does not alter the general legal liability of the owner, the renter, the charterer to whom the vessel is made available for their own use, and the operator of the vessel.

Chapter 2. Amending provisions

Section 1 Amendment to the Royal Decree of 9 March 2007 laying down the crew requirements on the waterways of the Kingdom

Article 6. In Chapter XI of the Royal Decree of 9 March 2007 laying down the crew requirements on the shipping lanes of the Kingdom, amended by the Decree of the Flemish Government of 5 October 2018, an Article 28/1 is added, which reads as follows:

Article 28/1. §1. In this article, remote control refers to: navigation tasks of a vessel that are performed by a person or a machine, either fully or partially, from a location that is not on board the controlled vessel;

§2. In this paragraph, the following terms and definitions shall apply:

- 1° automated vessel: a vessel that, regardless of the level of automation, can operate for one or more vessel functions with technology that replaces human labour or enables remote control for all or part of the voyage;
- 2° innovative vessel: a vessel that uses remote control, an automated vessel, or a vessel with an alternative form of propulsion.

The Committee of Experts may grant derogations from the application of this Decree for innovative vessels.

The owner of an innovative vessel or their representative applying for a derogation as referred to in paragraph 2 shall submit to the Committee of Experts, in addition to the documents referred to in Article 3(2) and (3), of the Decree of the Flemish Government of [date] on innovative navigation, all of the following information:

- 1° an overview of the derogations requested for the vessel in question;
- 2° an overview of the navigation tasks that are performed in an alternative manner, with a description of the manner in which these are performed;
- 3° Proof that the vessel is insured against civil liability, whether operated manually or remotely, and that the policy includes a salvage obligation.

In the third paragraph, point 3°, salvage obligation refers to a clause in the policy ensuring that, if the vessel takes on water or sinks, the vessel will be removed from the water immediately at the expense of the insurer.

§3. If the Committee of Experts, without prejudice to the application of Articles 20 and 21 of this Decree, resolves to determine that, on the basis of the inspection referred to in Article 3(4), of the Decree of the Flemish Government of [date] on innovative navigation, an equivalent level of safety has been demonstrated, it shall inform each waterway authority responsible for the route or navigation area for which a derogation as referred to in paragraph 2(2) is requested of that intention.

After the waterway authorities concerned have received the intention referred to in paragraph 1, they may, for reasons specific to the waterway, submit an objection to the Committee of Experts on the grounds that innovative navigation is not possible on the waterway(s) in question. If the waterway authority in question has not lodged an objection with the Committee of Experts within 15 working days of receipt of the intention referred to in paragraph 1, the decision of the Committee of Experts shall become final.

The Committee of Experts may, on its own initiative, or after receiving an objection as mentioned in paragraph 2, restrict the route or area of operation for which the derogation mentioned in paragraph 2(2) is requested.

For the purposes of paragraph 2, 'working day' refers to every day, with the exception of Saturdays, Sundays and the statutory holidays mentioned in Article 1(1) of the Royal Decree of 18 April 1974 laying down the general procedure for implementing the Law of 4 January 1974 on public holidays.

§4. The Commission of Experts shall issue a supplementary Union inland navigation certificate in accordance with the model set out in ES-TRIN 2023/1. This certificate shall contain the following elements:

- 1° the derogations for the crew of the vessel and any conditions attached thereto;
- 2° the routes or areas of operation to which the derogations apply;
- 3° where applicable, the conditions for the qualifications of remote operators.

For the authorities responsible for supervision or detection, the statement on the certificate referred to in paragraph 1 shall serve as proof of authorisation for automated navigation or remote control.

§5. The Committee of Experts may withdraw any derogation granted under paragraph 2(2) in the following cases:

- 1° the vessel no longer complies with the technical requirements corresponding to the certificate, in particular the elements taken into account to assess the equivalent level of safety in accordance with Article 3(4), of the Decree of the Flemish Government of [date] on innovative navigation;
- 2° false, incorrect or incomplete information has been provided to the Committee of Experts to assess the equivalent level of safety in accordance with Article 3(4), of the Decree of the Flemish Government of [date] on innovative navigation;
- 3° there has been an incident or disaster.

In the event of changed circumstances for a waterway, or part thereof, to which a derogation as referred to in paragraph 2(2) applies, the waterway authority in question may temporarily suspend the derogation for that waterway or part thereof. The waterway authority shall immediately provide written notification of the measure to the owner of the vessel or its representative and the Committee of Experts. After examination, the Committee of Experts shall inform the waterway authority that came to the decision on the suspension of the measures it has taken or intends to take within seven days.

Section 2 Amendments to the Decree of the Flemish Government of 5 October 2018 establishing the technical requirements for inland waterway vessels

Article 7. In Article 23(2), first paragraph, of the Decree of the Flemish Government of 5 October 2018 establishing the technical requirements for inland waterway vessels, a point 4° has been added, which reads as follows:

'4° where applicable, check whether the vessel is navigating in accordance with the exemptions granted in accordance with Article 25/1, §2.'

Article 8. In the same decree, amended by the Decrees of the Flemish Government of 6 May 2022 and 25 November 2022, an Article 25/1 has been inserted, which reads as follows:

Article 25/1. §1. In this article, remote control refers to: navigation tasks of a vessel that are performed by a person or a machine, either fully or partially, from a location that is not on board the controlled vessel;

§2. In this paragraph, the following terms and definitions shall apply:

- 1° Automated vessel: a vessel that, for one or more vessel functions, regardless of the level of automation, is capable of operating with technology that replaces human labour or enables remote control for the entire voyage or for part thereof;
- 2° innovative vessel: a vessel that uses remote control, an automated vessel, or a vessel with an alternative form of propulsion.

The Committee of Experts may grant full or partial exemption from the provisions of this Decree for innovative vessels operating on limited routes of local importance on inland waterways or in port areas.

The owner of an innovative vessel or their representative applying for one or more exemptions as referred to in paragraph 2, shall submit to the Committee of Experts, in addition to the documents referred to in Article 3, §2 and §3, of the Decree of the Flemish Government of [date] on innovative navigation, all of the following information:

- 1° an overview of the exemptions referred to in paragraph 2 requested for the vessel in question;
- 2° the description of the route or the area of navigation for which the exemption referred to in paragraph 2 is requested;
- 3° Proof that the vessel is insured against civil liability, whether operated manually or remotely, and that the policy includes a salvage obligation.

In the third paragraph, point 3°, salvage obligation refers to a clause in the policy ensuring that, if the vessel takes on water or sinks, the vessel will be removed from the water immediately at the expense of the insurer.

If the owner of an innovative vessel, or their representative, requests a derogation from the minimum crew requirements on the basis of Article 28/1 of the Royal Decree of 9 March 2007 on crew requirements on the shipping routes of the Kingdom, in addition to the exemptions referred to in paragraph 2, two separate files do not need to be submitted. In such a case, the owner of an innovative vessel or their representative may submit a single file containing all the documents referred to in Article 3(2) and (3) of the Decree of the Flemish Government of [date] on innovative navigation and in Article 28/1(2) of the Royal Decree of 9 March 2007 laying down crew requirements on the shipping routes of the Kingdom.

§3. If the Committee of Experts resolves to determine that, on the basis of the inspection referred to in Article 3(4), of the Decree of the Flemish Government of [date] on innovative navigation, an equivalent level of safety has been demonstrated, it shall inform each waterway authority responsible for the route or navigation area for which an exemption as referred to in paragraph 2(2) is requested of that intention.

After the waterway authorities concerned have received the intention referred to in paragraph 1, they may, for reasons specific to the waterway, submit

an objection to the Committee of Experts on the grounds that innovative navigation is not possible on the waterway(s) in question. If the waterway authority in question has not lodged an objection with the Committee of Experts within 15 working days of receipt of the intention referred to in paragraph 1, the decision of the Committee of Experts shall become final.

The Committee of Experts may, on its own initiative, or after receiving an objection from the water authorities as mentioned in the paragraph 2, restrict the route or area of operation for which the exemption mentioned in paragraph 2(2) is requested.

For the purposes of paragraph 2, 'working day' refers to every day, with the exception of Saturdays, Sundays and the statutory holidays mentioned in Article 1(1) of the Royal Decree of 18 April 1974 laying down the general procedure for implementing the Law of 4 January 1974 on public holidays.

§4. The Commission of Experts shall issue a supplementary Union inland navigation certificate in accordance with the model set out in ES-TRIN 2023/1. This certificate shall contain the following elements:

- 1° the applicable exemptions and any conditions attached thereto;
- 2° the routes or areas of operation to which the exemptions referred to in point 1° and paragraph 2(2) apply.

For the authorities responsible for supervision or detection, the supplementary Union inland navigation certificate referred to in paragraph 1 shall serve as proof of authorisation for automated navigation or remote control.

§5. The Committee of Experts may withdraw any exemption granted under paragraph 2(2) in the following cases:

- 1° the vessel no longer complies with the technical requirements corresponding to the certificate, in particular the elements taken into account in assessing the equivalent level of safety referred to in Article 3(4) of the Decree of the Flemish Government of [date] on innovative navigation;
- 2° false, incorrect or incomplete information has been provided to the Committee of Experts to assess the equivalent level of safety in accordance with Article 3(4), of the Decree of the Flemish Government of [date] on innovative navigation;
- 3° there has been an incident or disaster.

In the event of changed circumstances for a waterway, or part thereof, to which an exemption as referred to in paragraph 2(2) applies, the waterway authority in question may temporarily suspend the exemption for that waterway or part thereof. The waterway authority shall immediately provide written notification of the measure to the owner of the vessel or its representative and the Committee of Experts. After examination, the Committee of Experts shall inform the waterway authority that came to the decision on the suspension of the measures it has taken or intends to take within seven days.

Chapter 3. Final provision

Article 9. The Flemish Minister responsible for waterborne mobility and waterborne transport shall be responsible for the implementation of this Decree.

Brussels, 20 June 2025.

The Minister-President of the Flemish Government,

Matthias DIEPENDAELE

The Flemish Minister for Mobility, Public Works, Ports and Sport,

Annick DE RIDDER