#### SUMMARY

The vessel ALMIRANTE STORNI was loaded with timber and en route from Orrskär outside of Ljusne, Gävleborg County, to Alexandria in Egypt. On 4 December 2021, the vessel was to bunker at Vinga off Gothenburg. While bunkering was taking place, the bunkering vessel detected flames emerging from the deck cargo on ALMIRANTE STORNI. The bunkering vessel alerted VTS Göteborg and an extensive maritime search and rescue and environmental rescue operation was initiated shortly thereafter.

The firefighting operation ended up taking more than one week and involved several vessels with major firefighting capabilities. However, it was not possible to extinguish the fire at sea because the deck cargo needed to be unloaded in order to get at the seats of the fire. On 11 December, the vessel was able to put into the Port of Gothenburg where it was possible to unload parts of the cargo and extinguish the fire. A municipal rescue operation, which had been initiated when the vessel entered the port area, was concluded on 14 December. Once the fire was extinguished and the cargo unloaded, the vessel went to a shipyard for repairs.

The fact that it took more than one week to extinguish the fire was due in part to the timeconsuming process of getting the vessel into port. The assessment was made as early as the initial day of the firefighting operation that the cargo needed to be unloaded in order to get at the seats of the fire. It was only possible to unload in port, but the question of which port ended up taking time to resolve. Aside from uncertainties about the approach to resolving this, there were, among other things, questions relating to the legal circumstances and how the risks would be managed.

Implementation of the operational measures was largely effective in relation to the prevailing conditions. No people were injured and no hazardous substances were discharged. However, vessels were damaged during the firefighting operation.

The management of this vessel fire was one of the most extensive in modern times in Sweden and provided opportunities for unique lessons to be learned. Consequently, it is essential that the management of the fire be investigated jointly by several of the organisations involved in order to ensure that these lessons are learned. The investigation indicates that there are also grounds to make the management of ships in need of assistance more robust. However, further investigation is required in order to establish what action needs to be taken as a result of the questions brought to the fore by the investigation.

A fire scene investigation was conducted during unloading in Skandia Harbour. An extension cable that was found during this investigation was probably the remains of a cable that had been used for lighting during loading in Orrskär. When the vessel departed, the extension cable broke off and was left live.

Following further investigation, after other causes of the fire had been ruled out, the assessment was made that the probable cause of the fire was that an electric arc in the extension cable had ignited the timber cargo. The way in which the packages of timber were loaded also meant that the fire was able to rapidly increase in intensity and spread through the cargo.

# SAFETY RECOMMENDATIONS

# The Swedish Government is recommended to:

- Investigate and, where necessary, take the action required to ensure the efficient accommodation of ships in need of assistance (section 3.5.5). *(SHK 2023:01 R1)*
- Investigate and, where necessary, take action to bring about the legislative changes required in order to ensure that affected municipalities are included in the work to draw up plans for the accommodation of ships in need of assistance (section 3.5.5). (SHK 2023:01 R2)

# The Swedish Transport Agency is recommended to:

• Prioritise and expedite the completion of the work to draw up plans for the accommodation of ships in need of assistance. Representatives from the affected municipal rescue service organisations, the Swedish Civil Contingencies Agency and the Swedish Association of Local Authorities and Regions should participate. The aim of this work should be to streamline the administration and decision-making processes concerning the accommodation of ships in need of assistance (sections 3.5.1, 3.5.2 and 3.5.5). (SHK 2023:01 R3)

# The Swedish Coast Guard is recommended to:

- Initiate cooperation with the Swedish Transport Agency, Greater Gothenburg Rescue Service, Swedish Maritime Administration and other relevant organisations in order to evaluate the operation with respect to aspects including the legal circumstances, the process of bringing vessels into port, assessment of the rescue operation criteria during an operation, forms of cooperation, allocation of roles and need for joint training and exercises (sections 3.4.2 and 3.5). (SHK 2023:01 R4)
- Evaluate firefighting methods and the design of vessels for this type of operation (section 3.4.2). *(SHK 2023:01 R5)*