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Lithostratigraphy of the Neogene succession of the Danish North Sea

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Neogene sediments, recording c. 20 million years of basin history, are ubiquitous in the subsurface of the Danish North Sea and represent the westward – predominantly marine – continuation of coastal and fluvial deposits known from quarries and boreholes in western Denmark. Recent interest in the offshore Neogene succession has been triggered by the ongoing energy transition and the assessment of potential sites for CO₂ storage and offshore wind farms.

The aim of this bulletin, therefore, is to present a formal lithostratigraphic framework, extrapolating westwards from the onshore marginal succession (described in GEUS Bulletin 22 in 2010) and defining new units in the distal marine setting; this has resulted in a new group (the Pliocene Eridanos Group), six new formations and a new member. The integrated lithostratigraphic scheme in this volume sets the scene for an improved understanding of the basin history of the Danish North Sea, particularly the shifting of major deltaic systems from the Miocene to the Pliocene. It also provides a framework for research into climatic evolution prior to the most recent Ice Age.

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