



## Baltic Marine Environment Protection Commission

*Ad hoc* Seal Expert Group

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### Background

The attached document contains information on Aerial estimating of abundance of ringed seals in the Russian part of the Gulf of Finland in April 2017.

### Action requested

The Meeting is invited to take note of the information.

## Aerial estimating abundance of ringed seals in the Russian part of the Gulf of Finland on April 2017

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Results of the conducted aerial surveys revealed the expected number of ringed seals on April 2017 in the Russian part of the Finland Gulf amounted to 71–90 individuals. More precisely, on April 11th between 10:30 and 14:30 a total of 1 639.84 km<sup>2</sup> was surveyed; the length of the flight route was 361.199 km. In total 22 transects of meridional direction were worked out; the average distance between transects was 4.5 km. The actual studied area was 289 km<sup>2</sup>, which corresponds to the number of elementary segments of the route (1 segment = 1 km<sup>2</sup>). There were seven ringed seals within the route on the right board (MV), and only two animals on the left board (LV). The total number of the met animals was nine specimens. Relative spatial density of individuals per 1 segment (= 1 km<sup>2</sup>) of the route was 0.031±0.004 (m±95% confidence interval), SD = 0.17. The expected number of ringed seals within the studied area was 51 individuals, with a 95% confidence interval of 44 to 57 individuals. On April 15th between 9:16 and 14:11 a total area of 2451 km<sup>2</sup> was surveyed; the length of the flight route was 490.2 km. In total 21 transect of meridional direction were worked out; the average distance between transects was 5 km. The actual studied area was 392.16 km<sup>2</sup>, which corresponds to the number of elementary segments of the route. There were six ringed seals within the route on the right board (MV), and nine animals on the left board (LV). However, two meeting points were excluded from the calculation of the relative density, because these animals were marked outside the transect. Thus, 15 individuals were recorded, but the calculation included only 13. The relative density of individuals per 1 segment was 0.033±0.004 (m±95% confidence interval), SD = 0.19. The expected number of ringed seals within the studied area was 81 individuals, with a 95% confidence interval from 71 to 90 individuals. The number of Baltic ringed seals in the Russian part of the Finland Gulf from 2012 to 2017 stably remains low, and amounts to approximately 71–90 individuals (maximum up to 95–100 individuals).

The survey have been done with the support of Nord Stream 2 AG