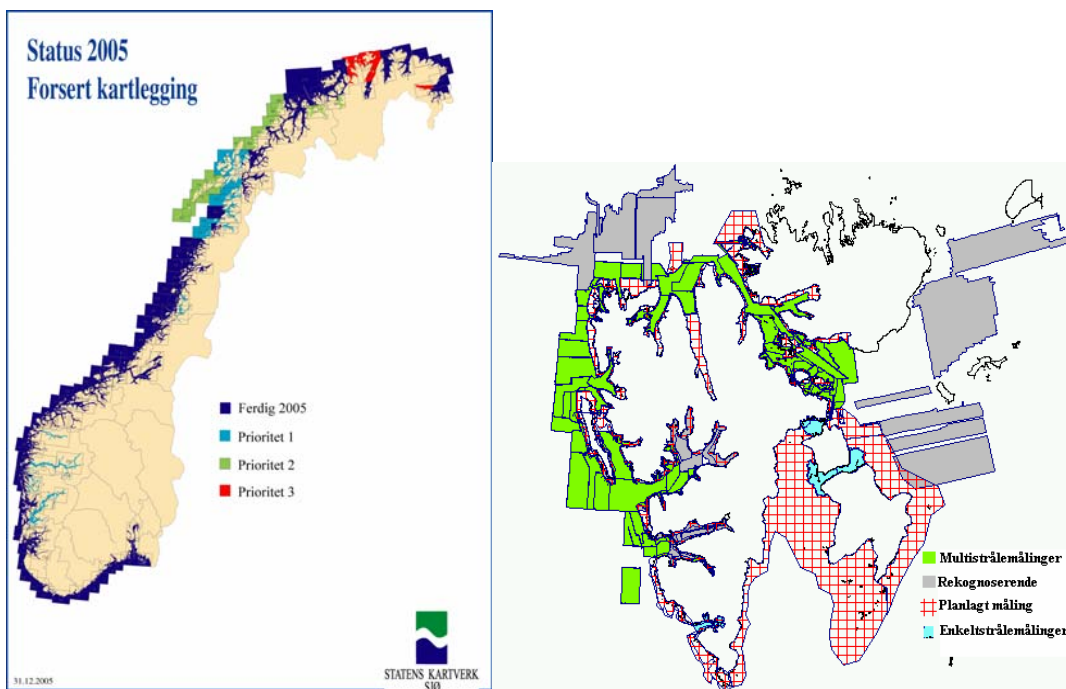


Hydrographic Surveys

Internal surveying:

EM 1002

In co-operation with NDRE, 2911 km² along the West Coast of Svalbard was surveyed. In addition, 1450 km² were surveyed by NDRE along the coast of Norway and submitted to NHS. . In addition a survey launch equipped with EM 1002 has been operating along the Norwegian coast.



EM 3000D

Two survey launches equipped with EM 3000D and one with EM 1002 have been operating on a 12-hour daily operation throughout 2005. The efficiency has been very good and a total of 1476 km² has been surveyed along the Norwegian coast, mostly in areas with water-depths less than 20 meters.

Plans 2006:

NHS has commissioned a new surveying launch, and during 2006 three launches will be operational. 2 will be equipped with EM3000D, and 1 with EM1002. The internal survey will continue in the northern part of Norway and the plan is to survey 1000 km² in shallow areas.

External sea surveying:

Status:

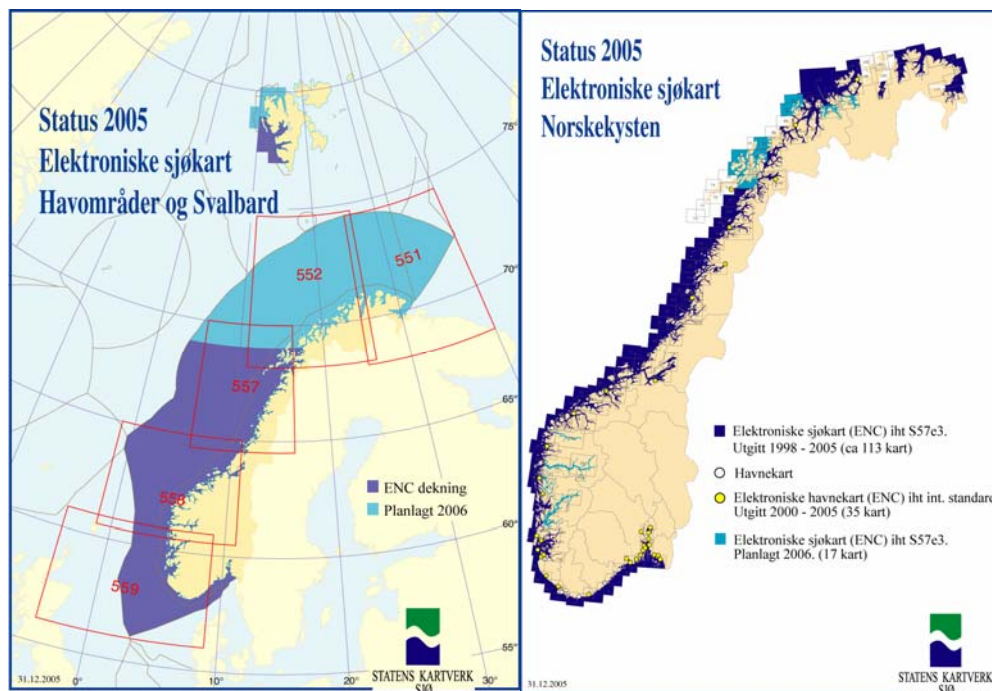
Blom with subcontractor Tenix LADS have surveyed 950 km² (combined LIDAR and MBE) in shallow waters.

Plans 2006:

Both Blom and OSAE will survey this season and cover a total of 1250 km².

3. Nautical Charts

External ENC and paper chart production:



Status:

In 2005 a total of 15 charts have been produced. 52 ENC's (D-cells) covering the same geographical areas has also been produced. Prior to the production of the charts, old data (in areas that has not been covered with new surveys) has to be merged with modern primary data. Such work has been carried out on a total of 35 D-cells. Production of

ENC's in the general usage band within the Norwegian economic zone, from 68 degrees north up to the Russian boarder have also been started. The main coast in Nordland is now covered with modern charts, and the main leads from Sweden all the way up to the city of Hammerfest are now covered.

Plans 2006:

In 2006 the external production of ENC's and paper charts will continue with the same magnitude as last year. Many of the outer charts in Troms and Finnmark, and some in Nordland will be produced. Further the production of ENC's in the general usage band within the rest of Norwegian economic zone will be finished by May 1

ENC and paper chart production in NHS (Internal)

ENC production:

The internal ENC and paper chart production was in 2005 continued in accordance with the NHS Long Term Plan. The ENC production has mainly been concentrated to areas in the northern part of Norway. (Nordland.) ENCs are compiled from source data (Primary Data) in a cell based and integrated production process.

Updating via ER profiles has been carried out in accordance with "Etterretninger for sjøfarende" ("Notice to Mariners"), and distributed through PRIMAR Stavanger. New Editions have been issued as required.

In order to achieve a further improvement of the co-operation with the industry a "divided" production model, where a greater part of the ENCs are produced by the industry, while paper charts for the same area are produced in-house, was tested out with good result.

The internal production environment has in addition supported the industry in quality controls and final approval of ENCs and paper charts.

The total number of ENCs released and distributed through Primar Stavanger is shown in the table below. (Status as at December 31st 2005.)

<i>Usage Band</i>	<i>ENC Cells Produced</i>	<i>% Total ENC Coverage</i>	<i>Equivalent Paper Charts</i>
Berthing	0	0	0
Harbour	87	83% (Approx)	33 (Approx.)
Approach	623	80% (Approx)	91 (Approx)
Coastal	17	See note 1	3 (Approx)
General	37	See note 2	8 (Approx)

Notes:

1. Covering areas of Svalbard West Coast

2. Covering areas within the Norwegian economic zone from Skagerrak and up to 68 degrees north

Technology:

As new technology (dKart technology from HydroService) will be implemented in the production environment during 2006, no improvements were carried out on the existing chart production technology in 2005.

Paper chart production:

In 2005 a total number of 5 new charts in the Main Chart Series were published (No. 58, 59, 61, 62 and 66.) In addition 2 harbour charts (No. 459 and 476) were published.

New charts published 2005. (External and internal):

Chart No.	Title	Scale
	<i>(Main Chart Series)</i>	
54	Vega – Bremsteinen - Skjærvær	1: 50 000
55	Straumøyen – Tjøtta	1: 50 000
56	Tjøtta - Dønna	1: 50 000
58	Skipbåtsvær - Træna	1: 50 000
59	Dønna – Lurøya	1: 50 000
61	Træna – Nesøya - Myken	1: 50000
62	Lurøya – Nesøya - Rødøya	1: 50 000
63	Myken - Ternholmen	1: 50 000
66	Landegode – Kjerringsøy - Leines	1: 50 000
95	Brynnilen – Loppa – Sørøya	1: 50 000
97	Sørøysund – Stjernesund - Rognsund	1: 50 000
98	Sørøysundet – Vargsund – Hammerfest	1: 50 000
100	Ytre Sørøya	1: 50 000
101	Hammerfest – Furuholmen	1: 50 000
135	Rødøya - Støtt	1: 50 000
136	Beiarn og Saltfjorden	1: 50 000
140	Tysfjorden	1: 50 000
141	Ofofjorden	1: 50 000
	<i>Coastal Chart Series</i>	
270	Lopphavet	1: 100 000
	<i>Harbour Chart Series</i>	
459	Kristiansand havn	1: 10 000
476	Bodø havn	1: 10 000

Reconstructions¹ (published as new Editions) 2005 – (External and internal):

Chart No.	Title, limits and other remarks	Scale
77	Tjeldsundet - Harstad - Lavangen	1: 50 000

1. Reconstruction: Reconstruct a chart from Primary Data

Remarks:

- All charts are referred to WGS84
- The charts are printed in 4 colours (CMYK)

Revised Reprints published in 2005:

87 charts were revised and reprinted.