

Navi Programme for Accurate Fairway Data

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Background for Navi programme

- New satellite based navigation/positioning systems were coming in use
- Seefarers and navigators need accurate chart information (fairways and nav aids)

Starting situation (1994)

Numeric charts were coming in use

The fairways (the infrastructure) were in good condition but the data of fairways was not

Data storages and data systems were insufficient and lacking, only part of the data was in numeric form

Data was stored in many different archives, blocks etc. and was partly unaccurate, contradictionary, faulty and the quality was unknown

Aim of the navi Programme

Check and verify all the fairway data

Develop and build data systems

Get the data maintenance (maintenance processes) in order

Tasks in practise

Survey and measurements of fairways

- sounding
- sweeping
- position measurements

Fairway design (re-design)

Building of data systems

Storing the checked data in data storages

Defining guidelines and verification/quality criteria

Target situation

Fairway lining and fairway area is defined for all fairways

Secured water depth is verified for all fairways (fairway areas)

Position and other navigational data of all navigational aids is checked

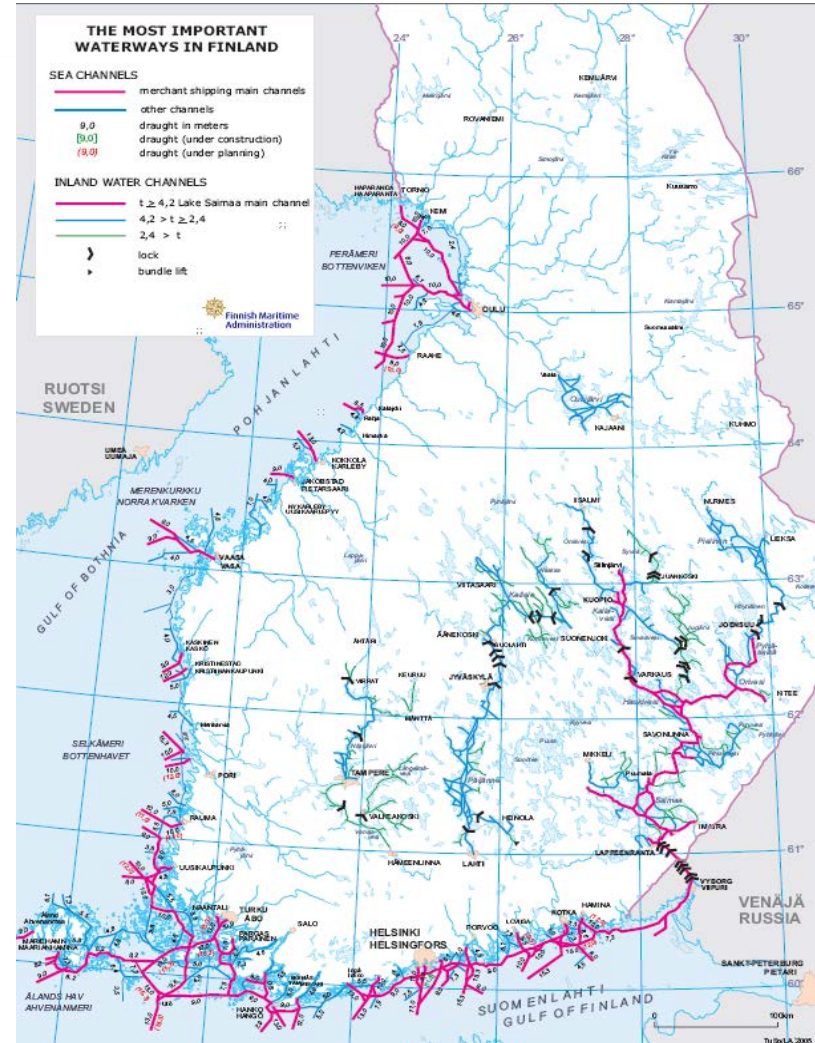
Depths (bottom topography) along fairways is checked
(100 % coverage)

Data maintenance is in condition

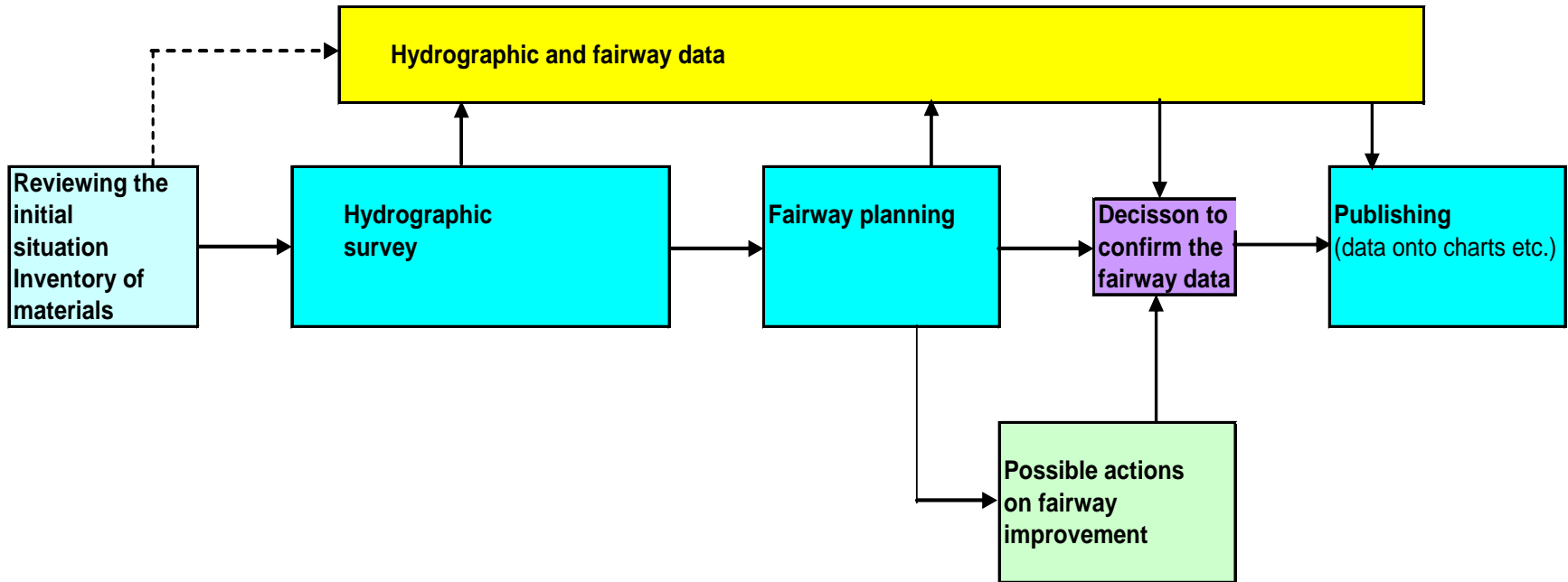
Fairway data corresponds to the actual and real time situation in the field.

NAVI PROGRAMME FOR ACCURATE FAIRWAY DATA

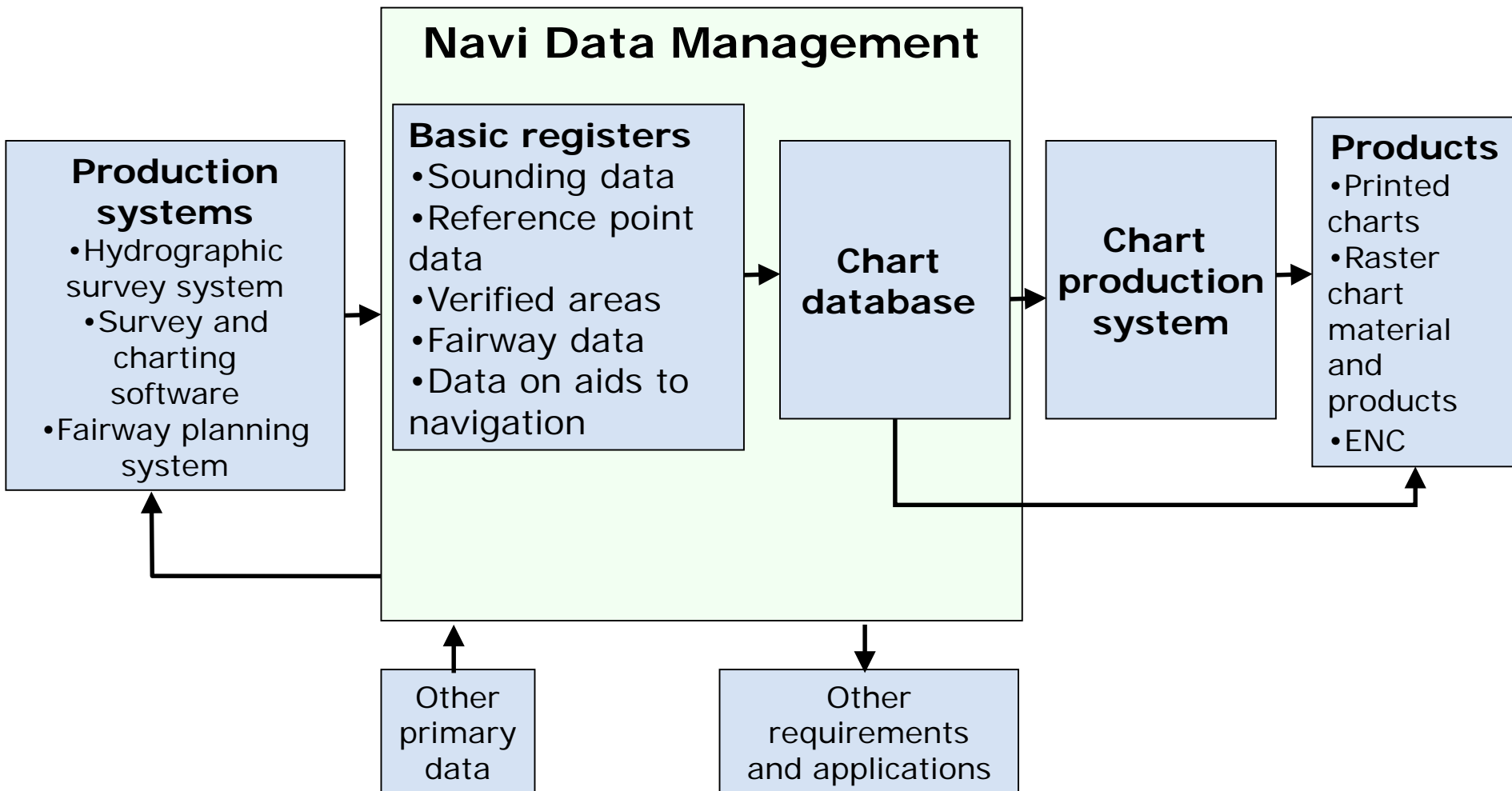
Task:
19 500 km of fairways
16 000 km maintained by FMA



The Fairway data Checking Process (for a Single Fairway)



Data systems and processes



Work is large, long lasting and costly but necessary

- **start up 1994**
- **2007:**
 - 85 % of fairways for merchant shipping is checked (goal for completing 2010)
 - 30 % of other fairways is checked (goal for completing 2015?)

We need to have extensive, updated fairway data in data bases (fairways, nav aids, depth data)

The data is used and needed in

- **chart production (printed charts, ENC)**
- **maintenance and developing of infrastructure**
- **vessel traffic service**
- **statistics**
- **strategic planning of fairway network**

Navi (extensive, accurate and up to date fairway data) gives us new possibilities to develop our activities and give better information and service to the navigators.