



Liikenneviraston älyväyläpäivä

*Älypoiju – lisäarvoa merenkulkujoille
ja väylänpitäjille*

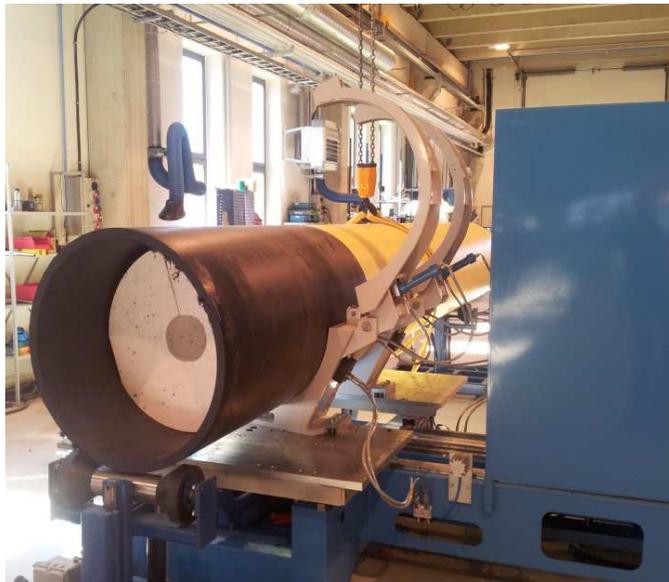
January 24th 2017

Seppo Virtanen



Facts about SeaHow buoy production:

- *Total of 60.000 units over the years*
- *Annual production 1.200 unit*
- *The only plastic ice buoy*
- *High Density HD 100 pipe*



Navigation buoy with:

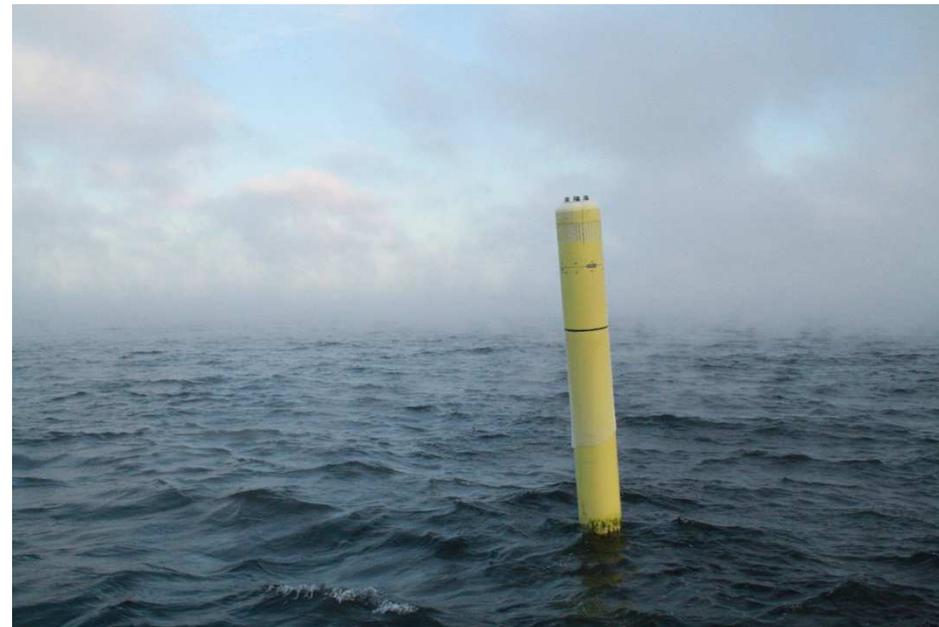
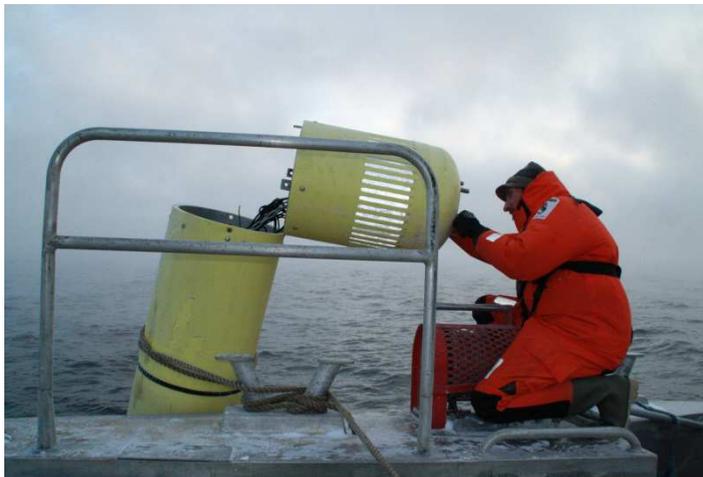
- ***Monitoring sensors***
- ***Datalogger***
- ***GSM connection***
- ***Battery for power supply***

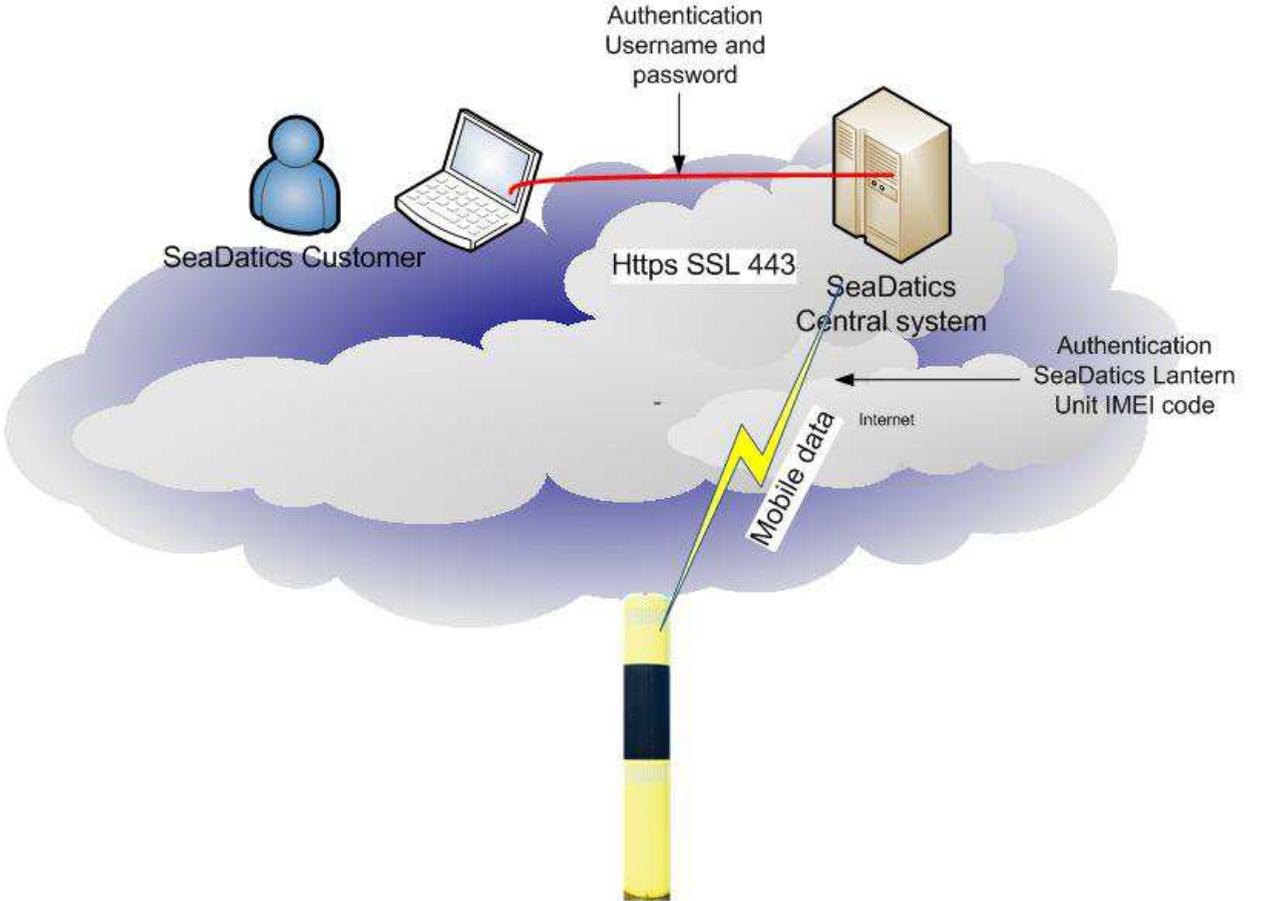


*Smart Buoy concept
Basic principles of smart buoy network*



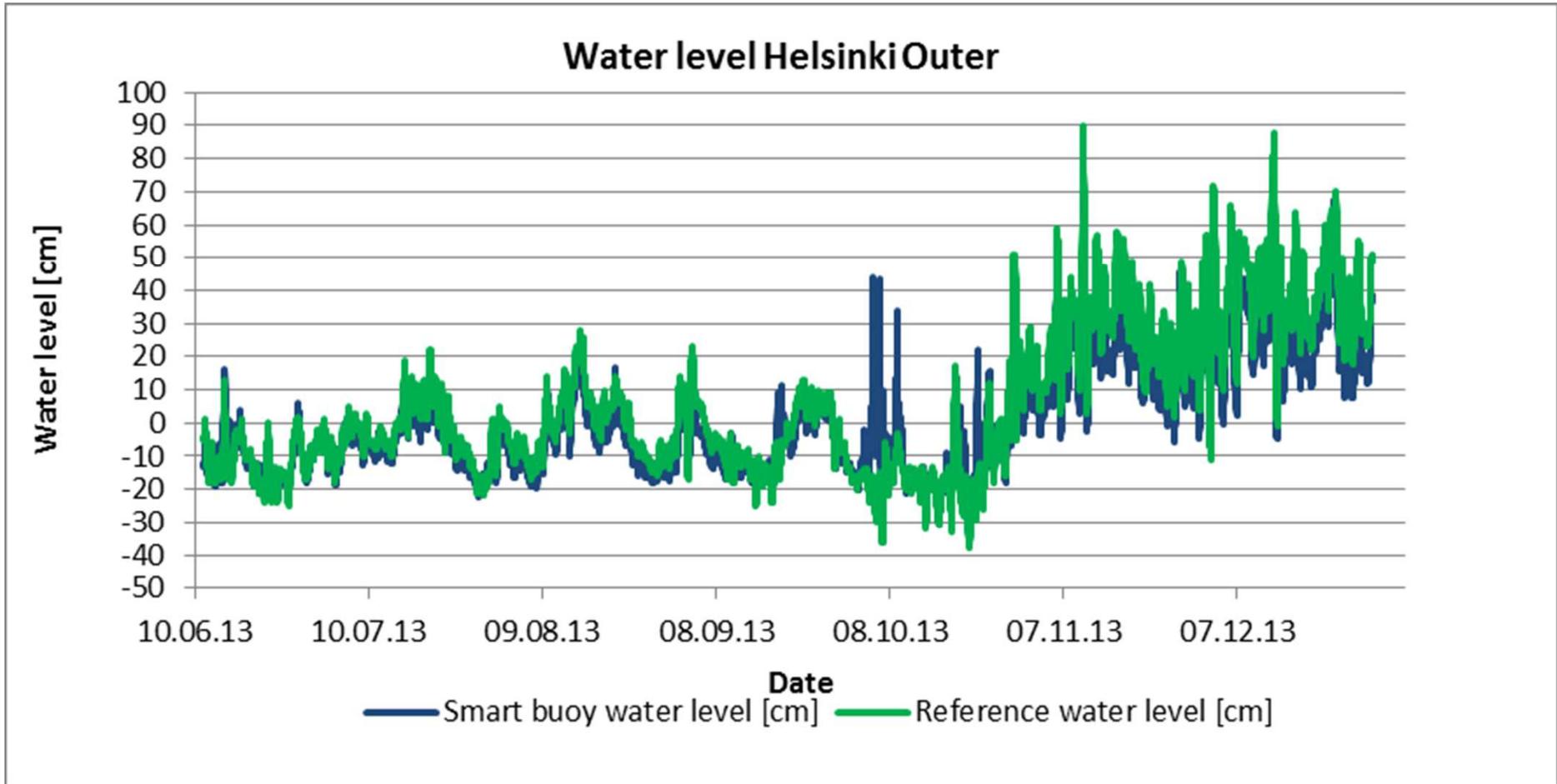
*Part of existing buoy infrastructure
No separate maintenance required
Sensors selected according to needs
Data delivered to several end users*





SeaHow Ltd
SeaDatics AtoN Unit
Buoy Remote Control
Physical Sensor

SeaHow
Created
09.10.2014 Tero Tuominen





Leading Finnish experts

- *Finnish Transport Agency*
- *Finnish Meteorological Institute*
- *Finnish Environmental Institute*
- *Border Guard*
- *Ministry of Transport*

Real-time oceanographic data is needed !

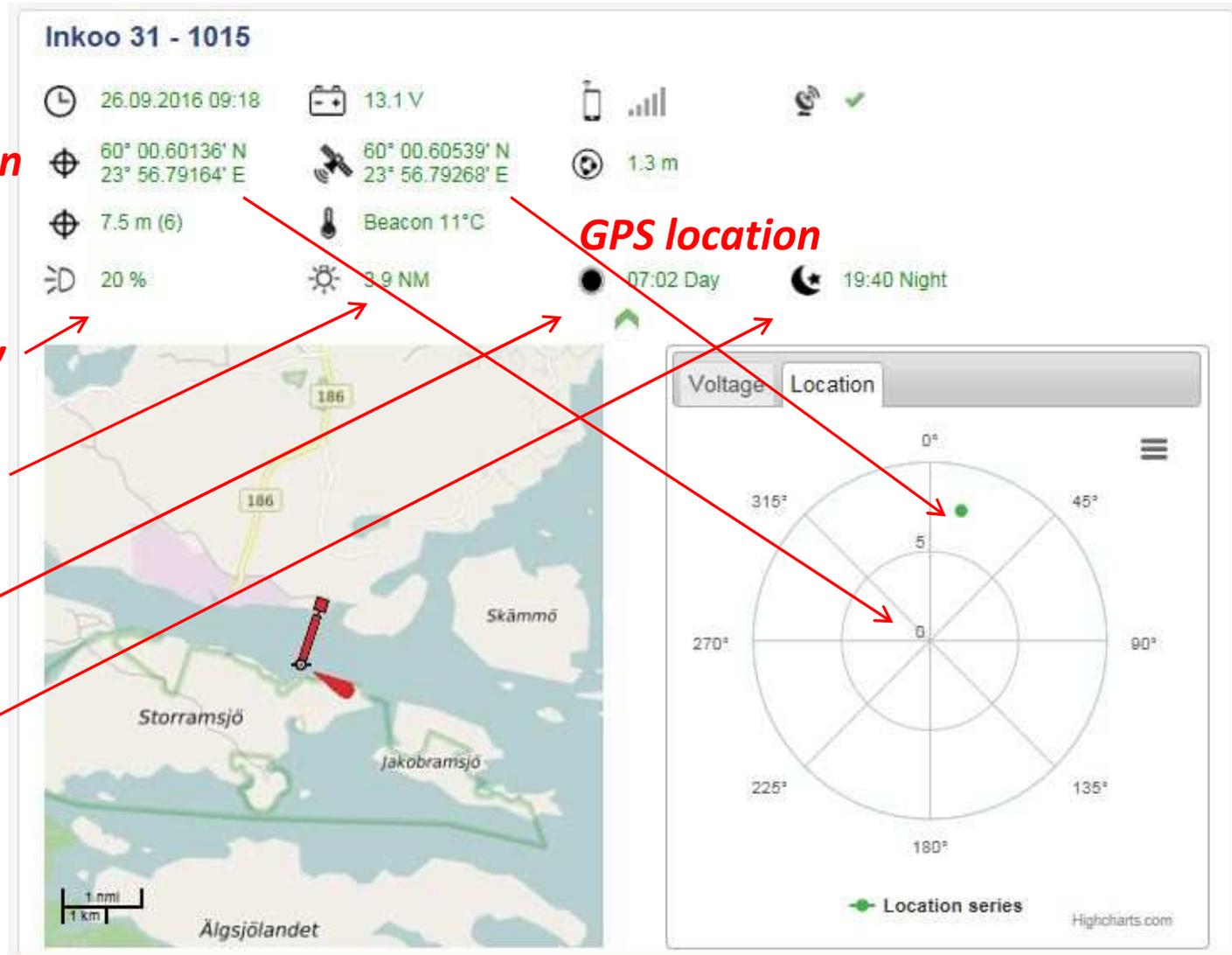


Number of Answers:

<i>Ship Masters</i>	56
<i>Pilots</i>	31
<i>VTS-operators</i>	14
<i>Ports</i>	8
<i>Ship Owners</i>	8
<i>Total</i>	121

The screenshot displays the SeaHow SeaDatics web interface. At the top, the logo 'SeaHow SeaDatics' is on the left, and 'English' and 'Hello seppo.virtanen@meritaito.fi | Log off' are on the right. Below the header is a navigation bar with icons for 'N units', 'Alarms', 'Reports', 'Settings', and 'User profile'. The main content area is titled 'Map' and shows a detailed map of the Helsinki region. The map is densely populated with various AtoN symbols, including buoys and lights, many of which are highlighted with colored circles. A control panel on the right side of the map includes a 'Base Layer' section with a dropdown menu, a 'Base map' section with a zoom slider, and an 'OpenStreetMap' section. Under 'Overlays', there are four checked items: 'Seamarks', 'Alarms', 'Buoys', and 'Buoys - Original location'. A vertical navigation bar on the left side of the map contains directional arrows and zoom controls.

*At the moment
600 AtoNs
are connected*





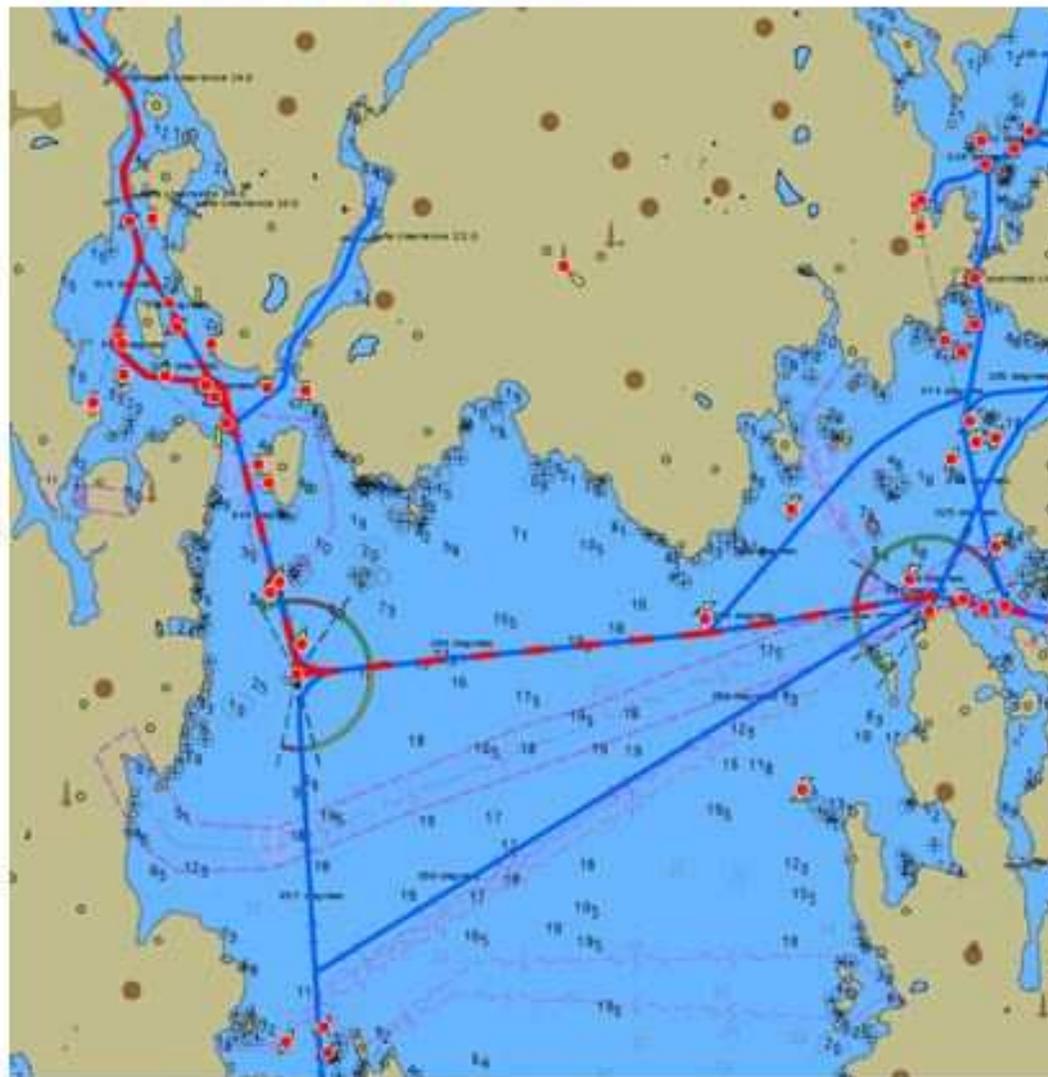
Case Färjsund

LÄHTÖTILANNE

- 5,2 m väylä (VL2), pääasiassa luotsattavaa liikennettä
- Melko vähäistä liikennettä, mutta lisääntymässä (1-2 alusta/viikko)
- Lähtötilanteessa kelluvaa merkintää ilman valoja, 2 sektoriloistoa

NYKYTILANTEESSA ÄLYVÄYLÄ

- 9 kpl valaistua älypoijua
- Oletuksena 5% valoteho
- Luotsi voi nostaa puhelimella 5 – 100 %
- Palautuu oletustilaan halutussa ajassa
- Palaute erittäin positiivista





"We want to be In"

Thank You

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www.seahow.fi