



Tempo! & Basta!

Modern user interface for EMPS

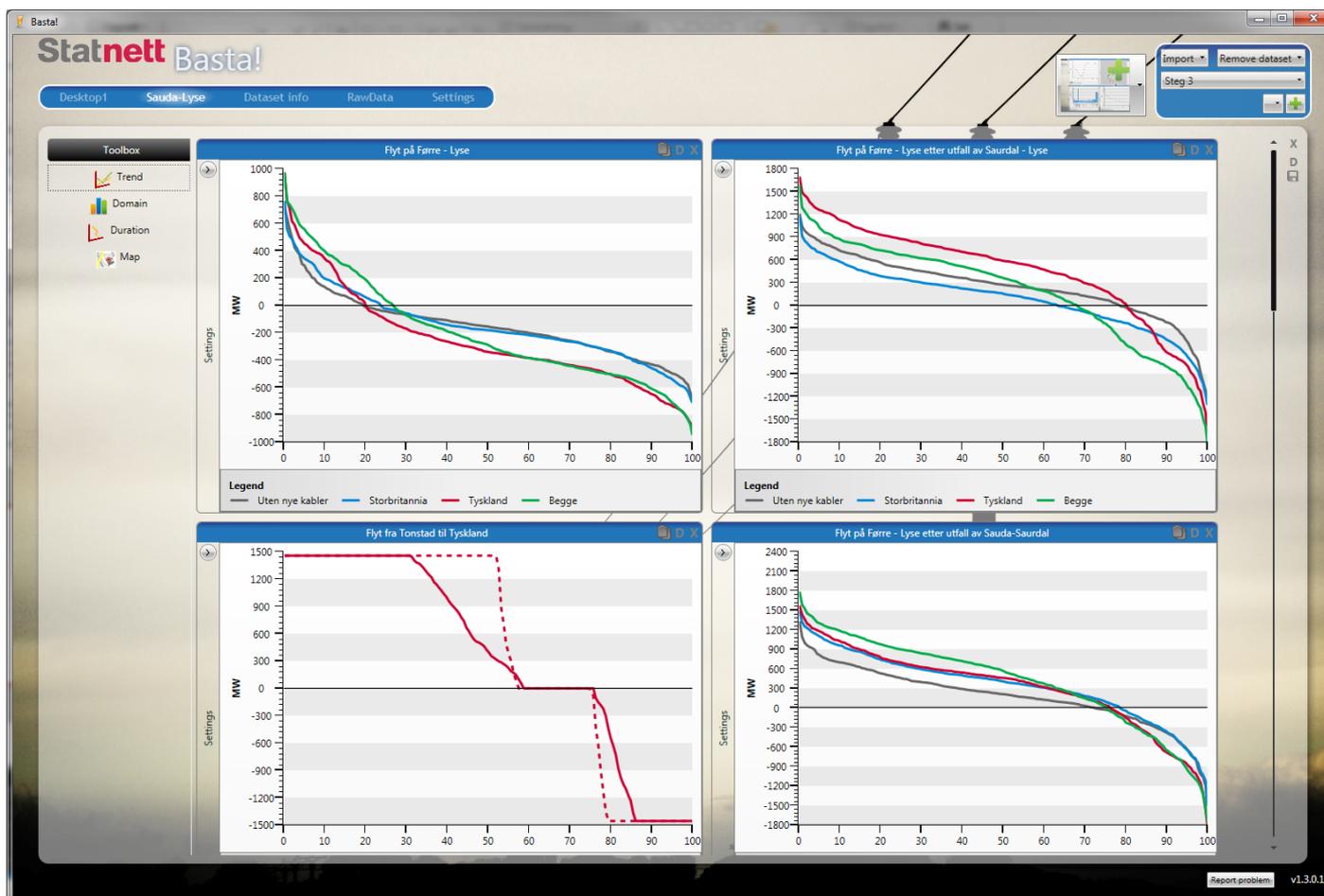
Users' Meeting in Power Scheduling, May 21st 2015

Statnett

Windows interface for results and input

- We first created **Basta!** from 2010-2011
- Now we are developing **Tempo!**
- Our motivation
 - Saving time and increasing quality
 - Keeping it simple
- Program developed in C# and WPF
 - by consultants from Webstep and Miles

Basta!



Tempo!

The screenshot displays the Tempo software interface, titled "Tempo (Test 1.0.5609.24151)". The main window shows a list of areas on the left and detailed data for selected categories on the right. The "2020 Basis (sbds_028)" tab is active.

2020 Basis (sbds_028)

0 ALL AREAS

- 1 FINNMARK
- 2 TROMS
- 3 SVARTISEN
- 4 HELGELAND
- 5 TRONDELAG
- 6 MORE
- 7 NORDVEST
- 8 INDRESOEN
- 9 BKK
- 10 SKL
- 11 VESTSYD
- 12 NORGESYD
- 13 HALLINGDAL
- 14 TELEMARK
- 15 NORGEOST
- 16 SVER-SNO1
- 17 SVER-SNO2
- 18 SVER-SNO3
- 19 SVER-SNO4

Hydropower plants in ALL AREAS (805)

Name	Annual inflow (GWh)	Power (MW)	Capacity (GWh)
2-KONGSFJORD	17.46	3.71	7.8
ADAMSELV	185.33	50.03	163
ALTA	1150.4	150.01	73.13
CÄRRUJAVRIT	13.78	1.7	48.81
GANDVIK	20.89	4.8	5.68

Reservoirs in ALL AREAS (460)

Name	Annual inflow (Mm³)	Reservoir Capacity (GWh)
HOLTSJØ	48.2	7.33
USTEDALSVATN	72.1	0
FINKOIHØGDA	43.3	51.84
K2-HØYANGER	0	0
SVORTUNGSVTN	28.2	6.75

Contracts with Gwh in ALL AREAS (239)

Name	Average price	Maximum annual
IND_SYDVARANGER	37.5	-400
IND_NUSSIR	37.5	0
PTR_SNOHVIT	37.5	-1850

Ready

Conclusions

- Basta! is a success
 - Easier to use – makes us better
 - More efficient, we save time
 - Low cost relative to saved time
- Tempo!
 - Large potential for savings
 - Important to see data in context

Success factors

- Developer integrated with analysis
- Agile development keeps it simple
 - Easy to adapt plans – simple decision process
 - Focus on creating value early
 - We started with the fundamentals but made room for expansions
- Adding desirable functions early
 - Must be easier to use than the alternative

Future development

- Both Basta! and Tempo! can be improved
- Tempo! development ends in July
- Further development depends in part on our own evaluation and external interest

Basta!



Tempo!

The screenshot displays the Tempo software interface for the 2020 Basis (sbds_028). The window title is "Tempo (Test 1.0.5609.24151)". The menu bar includes FILE, EDIT, HYDROPOWER, MARKET DATA, NETWORK, and SIMULATION. The left sidebar shows a tree view of areas, with "0 ALL AREAS" selected. The main content area displays three tables:

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The status bar at the bottom indicates "Ready".