



Nomvec

April 2019



Nomvec team



Kai Mjaanes

General Manager

- Project Management
- MAH Agreements
- EMVO and stakeholder relations



Sigbjørn Olsen

QA Manager

- QA system
- Change control
- Compliance



Eivind Lothe

Operations Manager

- Manage IT-supplier
- Follow-up system performance
- Investigate technical exceptions



Kjetil Evensen

Finance Manager

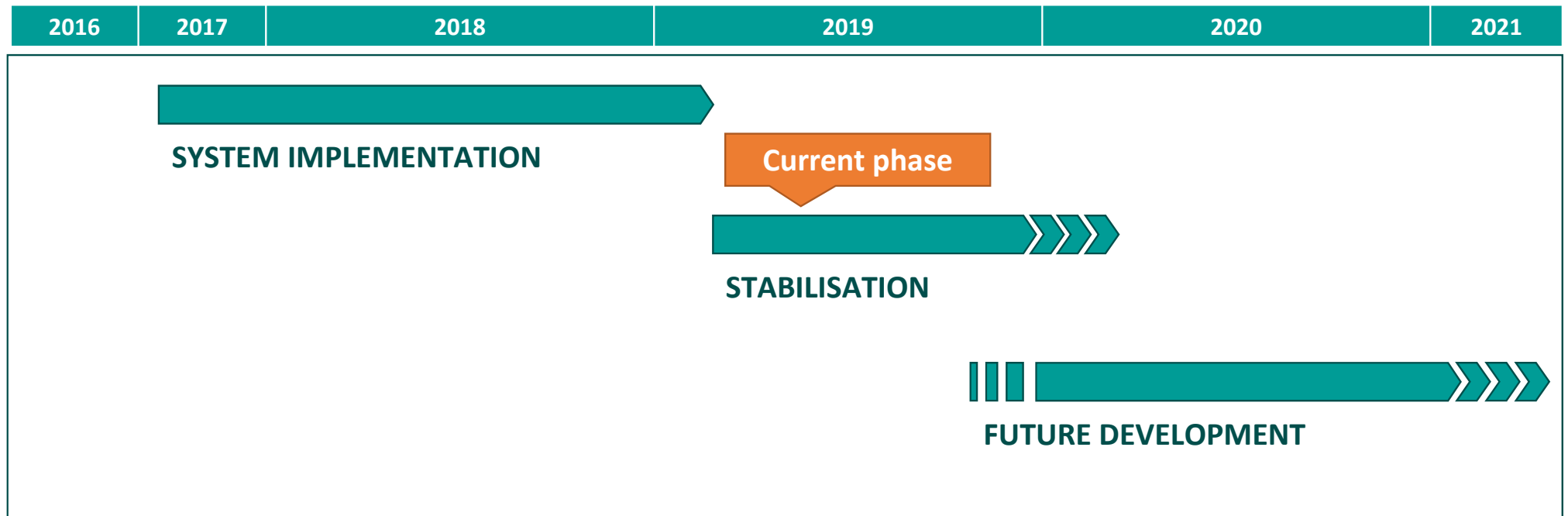
- Payments
- Accounting

Åse Mjelva

Admin support



Project timeline





Overall system status

- The Norwegian NMVS has been operational since February 9th
- NoMA has approved certain measures for a transition period, see here: <https://nomvec.no/news/launch-of-the-verification-system-in-norway/>
- All pharmacies, and all regular wholesalers are connected
- Hospitals will be connected in June



EMVS status

	JAN	FEB	MAR	APR	MAY	JUN
OBP	335	559	584	674		
MAHs	1 501	2 138	2 288	2 304		
MAHs loading to NOR						



NORWAY

Alerts: alerts@nomvec.no

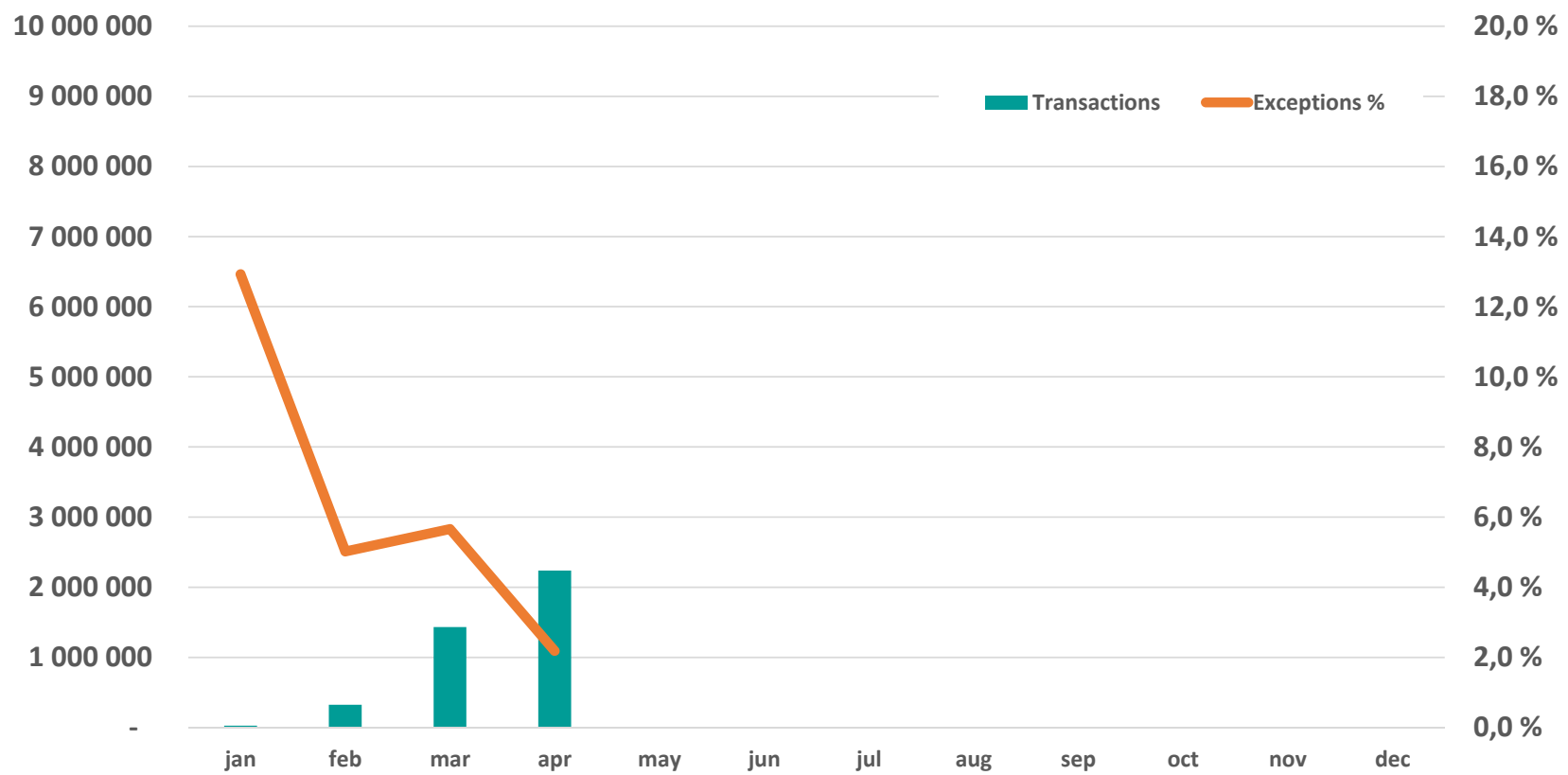
System support: avvik@nomvec.no

MAH support: mahsupport@nomvec.no

General: post@nomvec.no



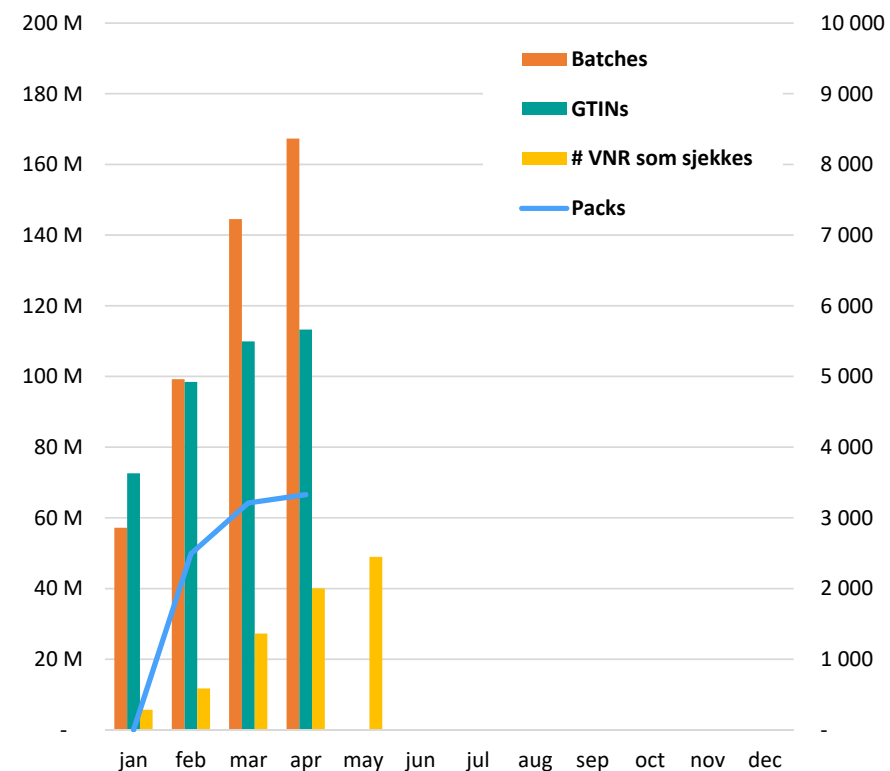
Transactions and exceptions





Data in the Norwegian verification system

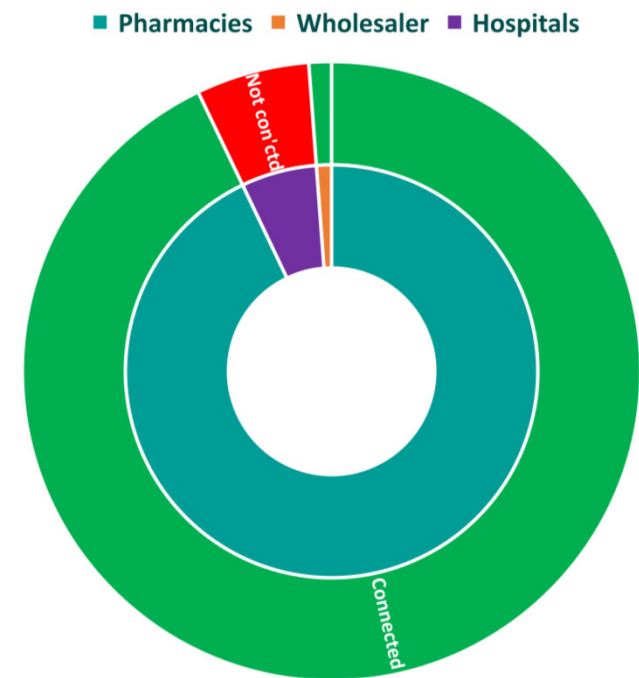
	JAN	FEB	MAR	APR	MAY	JUN
Packs		49,8M	64,2M	66,5M		
Batches	2 861	4 962	7 228	8 368		
GTINs	3 631	4 923	5 498	5 665		
VNR check	284	587	1 363	2 001	2 449	





End-User connected

	JAN	FEB	MAR	APR	MAY	JUN
Pharmacies	870	890	941	941		
Wholesalers	5	12	12	12		
Hospitals	0	0	0	0		





Transaction performed

	JAN	FEB	MAR	APR	MAY	JUN
Total	25,2K	323,4K	1 432,5K	2237,9K		
Verify	8,8K	143,2K	698,1K	1178,8K		
%	34,9%	44,3%	48,7%	52,7 %		
Dispense	5,8K	118,8K	666,0K	1046,3K		
%	23,1%	36,7%	46,5%	46,8 %		
Other	0,1K	2,0K	6,3K	12,8K		
%	0,5%	0,6%	0,4%	0,6 %		

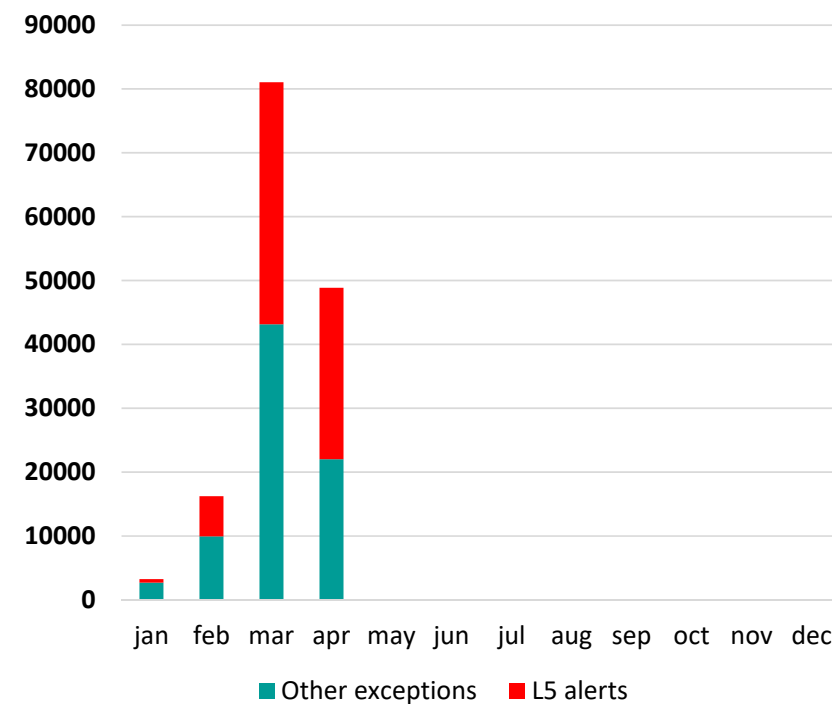


■ Verify ■ Dispense ■ Other



Transaction errors and system availability

	JAN	FEB	MAR	APR	MAY	JUN
Total	25,2K	323,4K	1,43M	2,24M		
Successful	21,9K	307,1K	1,35M	2,19M		
%	87,1%	95,0%	94,3%	97,8%		
Level 5 alerts	567	6,3K	38,0K	26,8K		
%	2,2%	1,9%	2,6%	1,2%		
Other exceptions	2,7K	10,0K	43,2K	22,0K		
%	10,7%	3,1%	3,0%	1,0%		
Response time (avg)	862 ms	256 ms	32 ms	26 ms		
System up-time	99,90%	99,90%	99,90%	99,90%		

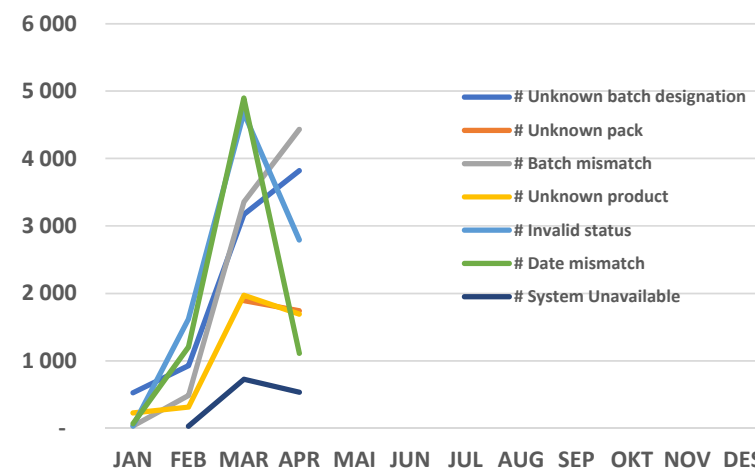
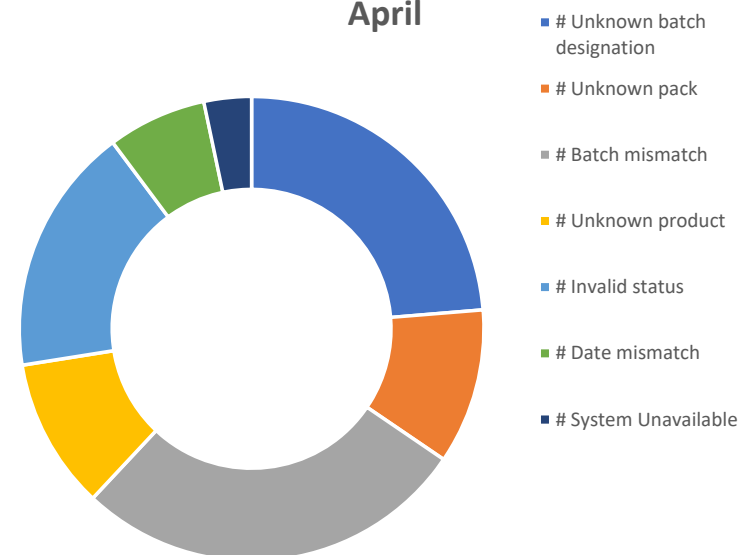




Exception classification

	JAN	FEB	MAR	APR	MAY	JUN
Invalid status	33	1 621	4 677	2 791		
Date mismatch	67	1 206	4 898	1 111		
Unknown batch designation	526	927	3 173	3 821		
Batch mismatch	33	486	3 355	4 432		
Unknown pack	820		1 893	1 742		
Unknown product	226	312	1 972	1 693		
System unavailable		30	726	533		

April





Current improvement focus

Overview of current bug fix projects and work on improvements



Critical error investigation I

Extra transactions generated creating error PCK_23/_22

- There is an issue being investigated within the pharmacy systems that appears to generate extra attempts to decommission packs
- This generates errors #A7 and #A24
- The root causes are identified and actions are being taken and will be come effective in May / June



Critical error investigation II

User generated double scans

- There is an issue with some pharmacies where it appears that pharmacy staff registers the same pack several times
- This is likely a procedure issue and affected pharmacies are contacted
- This is a known issue and corrective measures are taken



Critical error investigation III

Sent message from NMVS not corresponding with message in end-user system

- There is an issue where we see examples of sent exception message from the NMVS does not correspond with the message shown at the end-user
- This requires further investigation and analysis before to understand how to correct
- Root cause investigation still ongoing



Critical error investigation IV

Small caps sent from end-user system

- There is an issue with scanned information sent from the end-user does not match the data-matrix information
- This appears to affect only one pharmacy chain, and affected pharmacies are contacted by their head-office
- This is a known issue, and corrective measures are taken



Critical error investigation VI

System unavailable

- There is an issue with IMT receiving a system unavailable message
- This seems to be caused by disconnected information in the HUB and in the NMVS
- Investigation and analysis is being performed
- Root cause investigation still ongoing



Critical error investigation VII

End-users not reporting data

- There is an issue with a few pharmacy end-users not appearing to report transactions to the system
- Investigation is being performed to check if this is because of connection errors or user error
- The effected pharmacies were contacted and are now using the system