



Master Data Challenges

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Division Arable Systems: Plough Equipment

Manufacturing site located in:

Klepp, Norway: Production of Plough Equipment, Packers



Division Arable Systems: Soil Cultivation Equipment

Manufacturing site located in:

Les Landes Génusson, France: Production of Tine Cultivators, Disc Cultivators, Seedbed harrows, Subsoilers, Strip-Tillers



Division Arable Systems: Seeding Equipment

Manufacturing site located in:

Soest, Germany: Production of Precision Seeding, Seed drills, Seed drill combination, Power Harrows



Division Arable Systems: Crop Care Equipment

Manufacturing site located in:

Nieuw-Vennep, The Netherlands: Production of Sprayers and Spreaders



Division Harvesting Systems: Forage Equipment

Manufacturing site located in:

Kerteminde, Denmark: Production of Mowers, Tedders, Rakes, Wagons and Bale Choppers.

Gottmadingen, Germany: Competence Centre Rakes, Tedders and Loader Wagons



Division Harvesting Systems: Bale Equipment

Manufacturing site located in:

Ravenna, Italy: Production of Bale-Wrapper Combinations; Balers, Wrappers, Choppers and Rotary Tillers



Group Function: After Sales

Central Warehouse located in:
Metz, France

Satellite warehouses located in:
Torun, Poland
Kilkenny, Ireland
St. Helens, UK
Ravenna, Italy
Klepp, Norway



Group Function: Mechatronics BV

Manufacturing and Competence Center located in:

Nieuw-Vennep, The Netherlands

Kverneland Group has it's own advanced Competence Centre for electronic steering and control solutions for agriculture implements. Mechatronics is taking a leading position in the optimisation of agriculture (implement) processes using software, hardware and mechatronic solutions.

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1879
2019





iM FARMING

The Future of Farming is in Smart/Precision Farming Solutions:
Kverneland Group's offering within Smart/Precision Farming can be recognized
by our communication concept **iM FARMING**

1 Kverneland Group Klepp
2 Kverneland Group Norge
3 Satellite Warehouse Klepp

4 Kverneland Group Denmark
5 Kverneland Group Kerteminde

6 Kverneland Group Sverige

7 Kverneland Group UK
8 Satellite Warehouse UK

9 Kverneland Group Ireland

10 Kverneland Group Deutschland
11 Kverneland Group Soest
12 Kverneland Group International
13 Kverneland Group Gottmadingen

14 Kverneland Group België

15 Kverneland Group Nieuw-Venep
16 Kverneland Group Benelux
17 Kverneland Group Mechatronics

18 Kverneland Group Italia
19 Kverneland Group Ravenna
20 Warehouse Ravenna

21 Kverneland Group Ibérica
22 Satellite Warehouse Ibérica

23 Kverneland Group France
24 Kverneland Group Les Landes Génusson
25 Warehouse Metz

26 Kverneland Group Polska

27 Kverneland Group Czech
Joint Venture, partly owned

28 Kverneland Group Slovakia
Joint Venture, partly owned

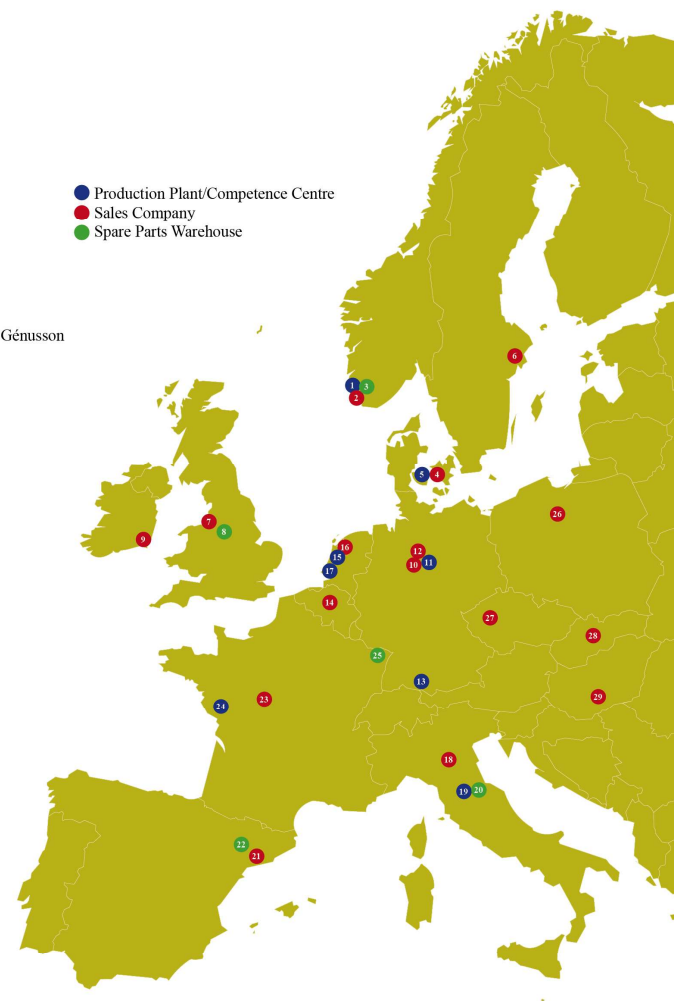
29 Kverneland Group Hungária

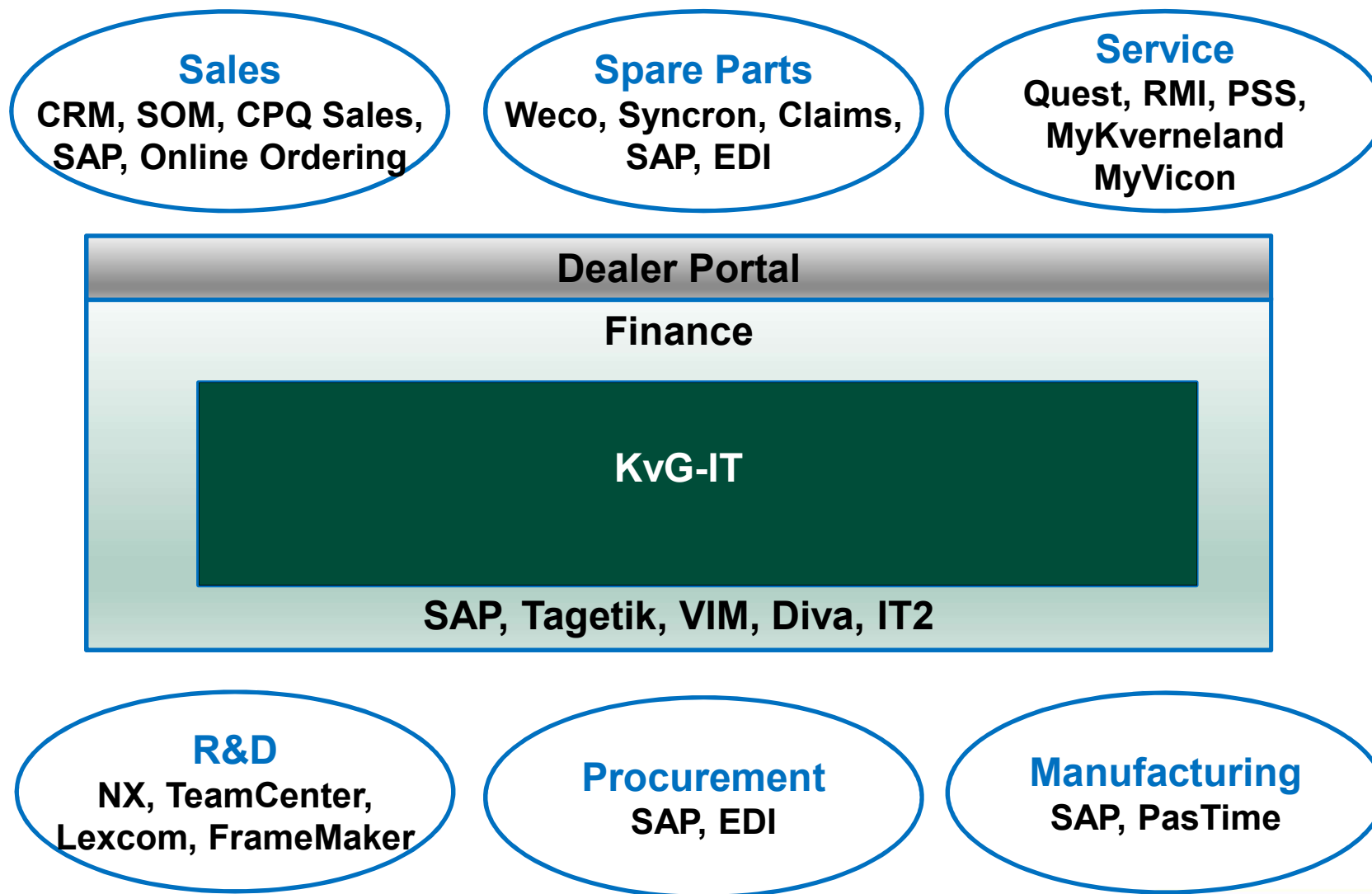
● Production Plant/Competence Centre
● Sales Company
● Spare Parts Warehouse



30 Kverneland Group CIS
31 Kverneland Group Lipetsk
32 Satellite Warehouse Russia

33 Kverneland Group Representative Office Beijing
34 Kverneland Group Daqing



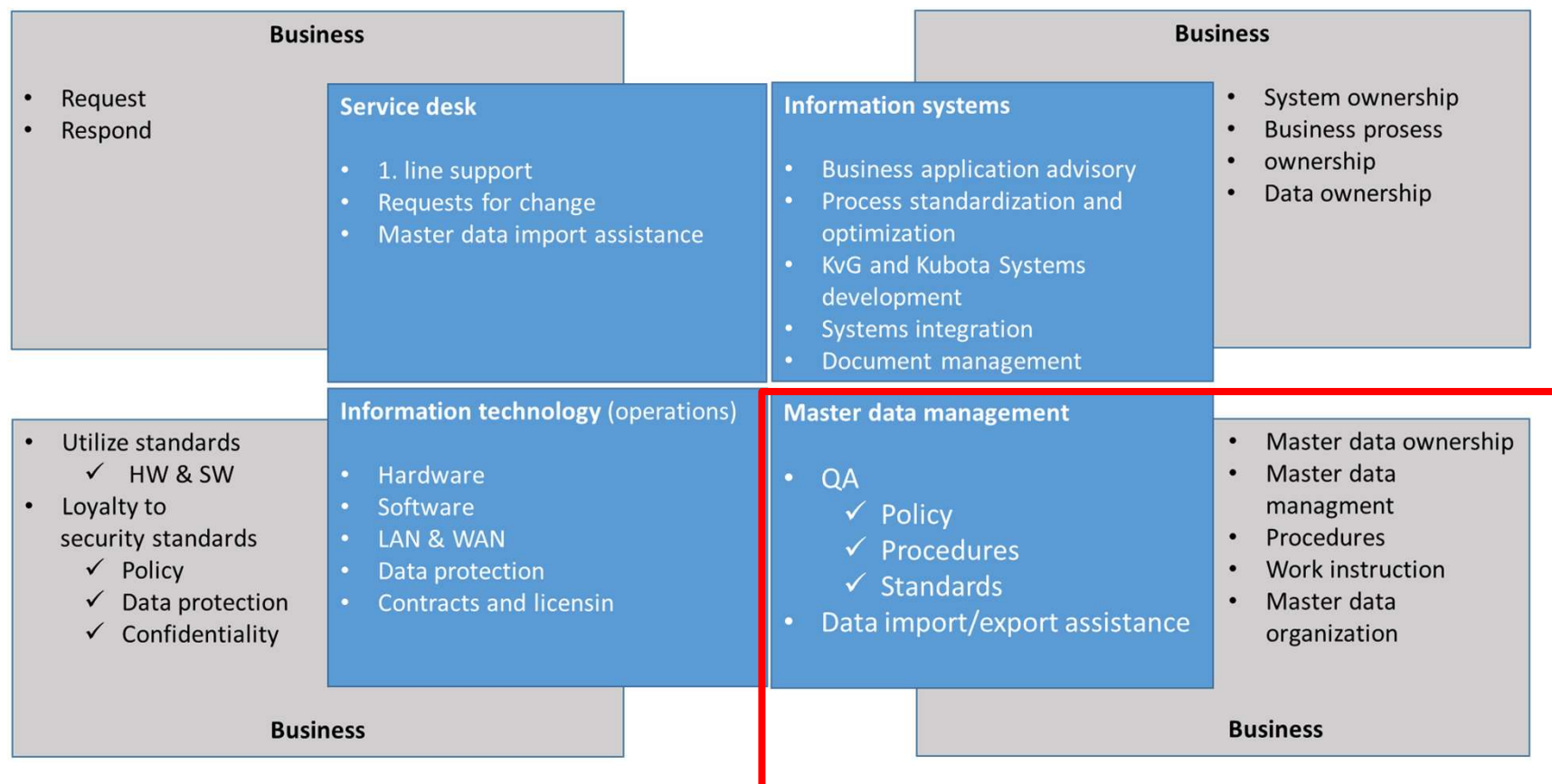


- **KvG Ireland**
 - Live 01.01.2018
- **KvG Hungary**
 - Live 01.09.2018
- **KvG Italy**
 - Live 01.01.2019
- **KvG Iberica - Spain**
 - Live 01.04.2019
- **KvG BNL**
 - Project start in April 2019. Planned go live 01.01.2020
- **KvG CIS**
 - Pre-study in 2019, Budget request for 2020
- **KvG Lipetsk and KvG Daqing**
 - Not planned

Group IT- Scope of Work

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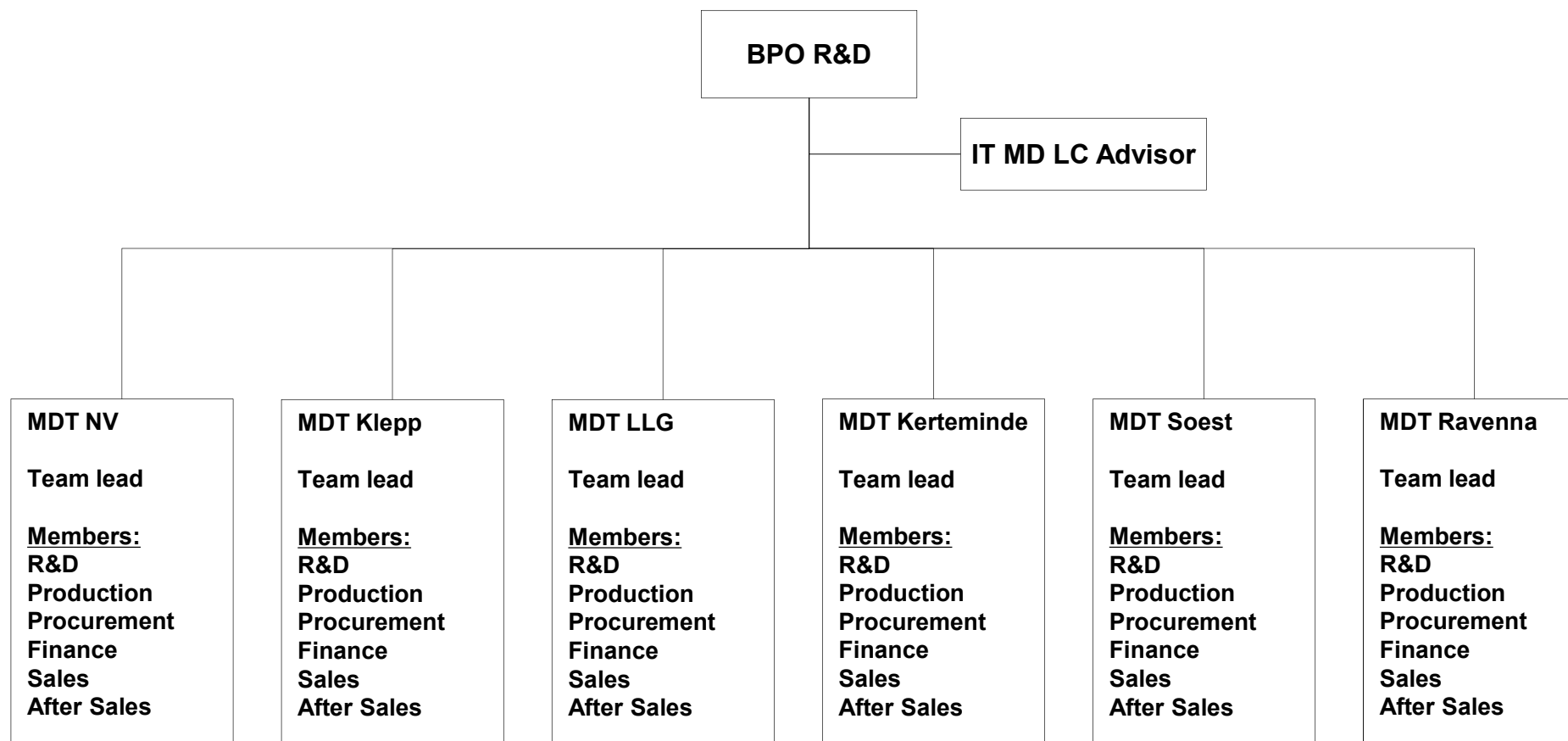
Service desk • 1. line support • Requests for change • Master data import assistance	Information systems • Business application advisory • Process standardization and optimization • KvG and Kubota Systems development • Systems integration • Document management
Information technology (operations) • Hardware • Software • LAN & WAN • Data protection • Contracts and licensin	Master data management • QA ✓ Policy ✓ Procedures ✓ Standards • Data import/export assistance



- None of the business system of the Kverneland Group offer master data *management* functionality capable of ensuring the required data quality.
- Currently master data management is basically dependent on individuals – the skills, knowledge and accuracy of a highly limited number of employees.
- Whether or not master data is correct or contains deviations depends on the degree of compliance with the group's standards; i.e. master data specifications.
- Local processes and master data needs still exists.
- The authorization system of SAP makes it virtually impossible to manage access rights on field level. As a consequence, data is sometimes corrupted inadvertently or due to lack of competence.
- We are currently trying to solve the master data challenges administratively, i.e. through the introduction of a global master data team. The organizational development achieved by the implementation of the global master data teams is a necessary prerequisite for a future digital master data management system.

Global Master Data Team - Roles

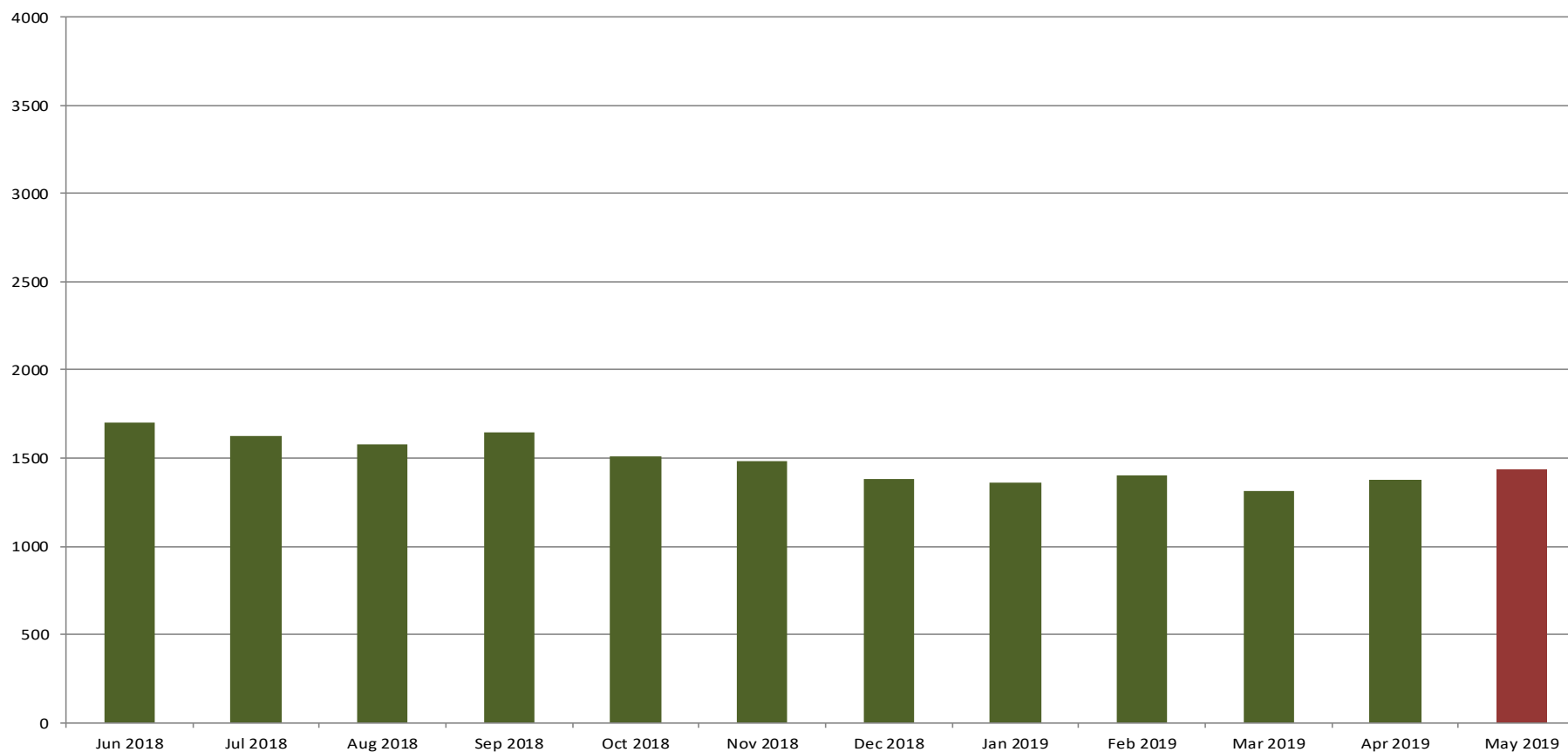
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- Managing the global master data on behalf of the Kverneland Group in total, providing complete, consistent and correct data in a timely and accurate manner.
- The mandate of the global master data team spans, but is not limited to:
 - Master data standardization
 - Creating master data
 - Master data maintenance
 - Control and master data quality assurance
 - Provide input to possible changes and improvements

- Standardized business processes → Standardized master data
- Data Warehouse / Business Intelligence
- Online presence → 100% correct master data
- Translation to 12 languages
- Kverneland Production System, KMAT's and modularization
- R&D Technical BOM, Sales BOM, Production BOM
- Global vs. Local data
- EU-Regulations
- Data validation should always take place in the source system ("master").
- Quality control before release
- Regular Quality checks

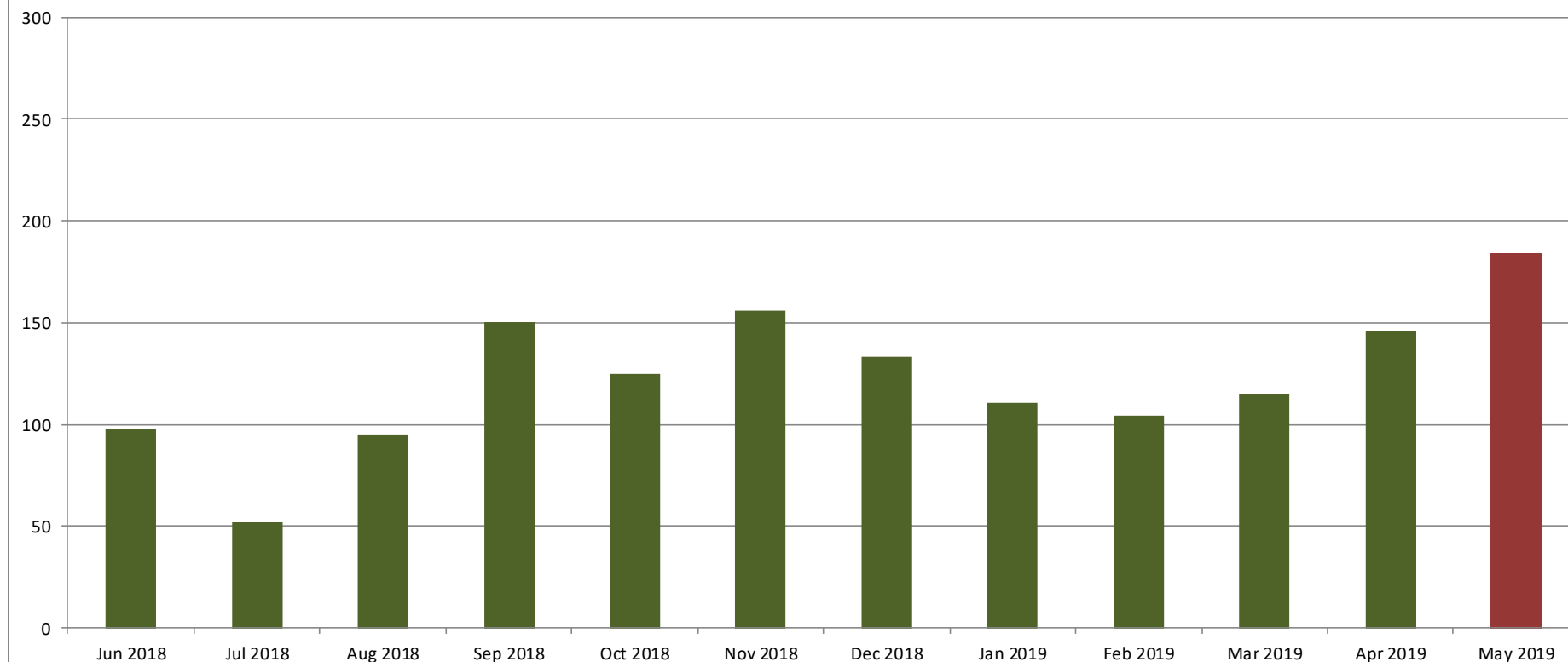
Total number of materials with missing or incorrect data



This report is showing the no. of master data errors per material absolute. The measurement keys and detailed materials with errors can be found in the detailed file [Link](#).

The aim is to show the development over time.

Total number of materials with wrong status combinations



This report is showing the no. of status combination errors per material absolute. The measurement keys are the combinations between X-plant status, X-distribution chain status, global replacement, determination reason of the replacement and stock (factory and BAAS WH). The aim is to show the development over time. A detailed list of material numbers can be found here [Link](#).



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