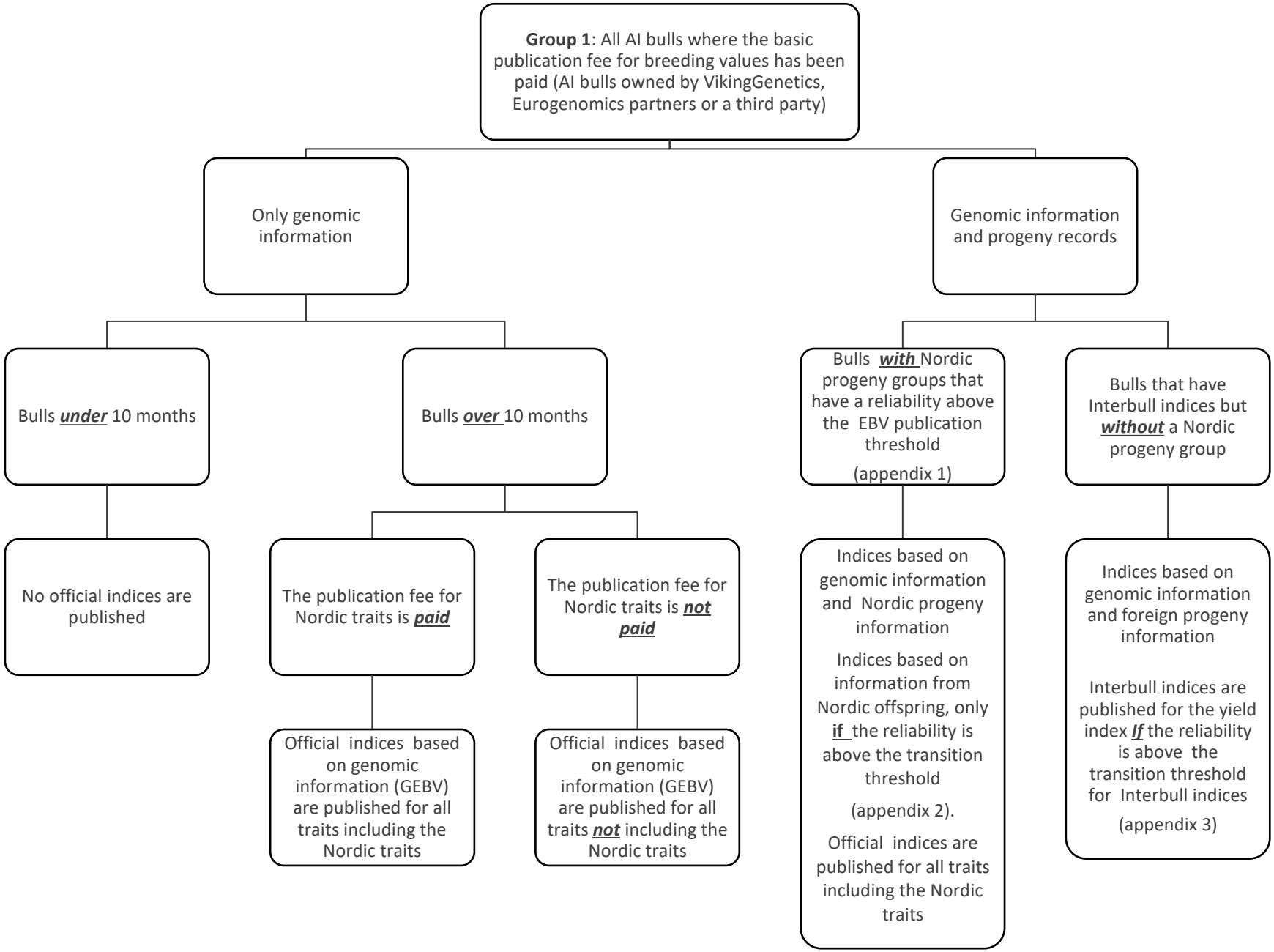
Publication of official NAV breeding values

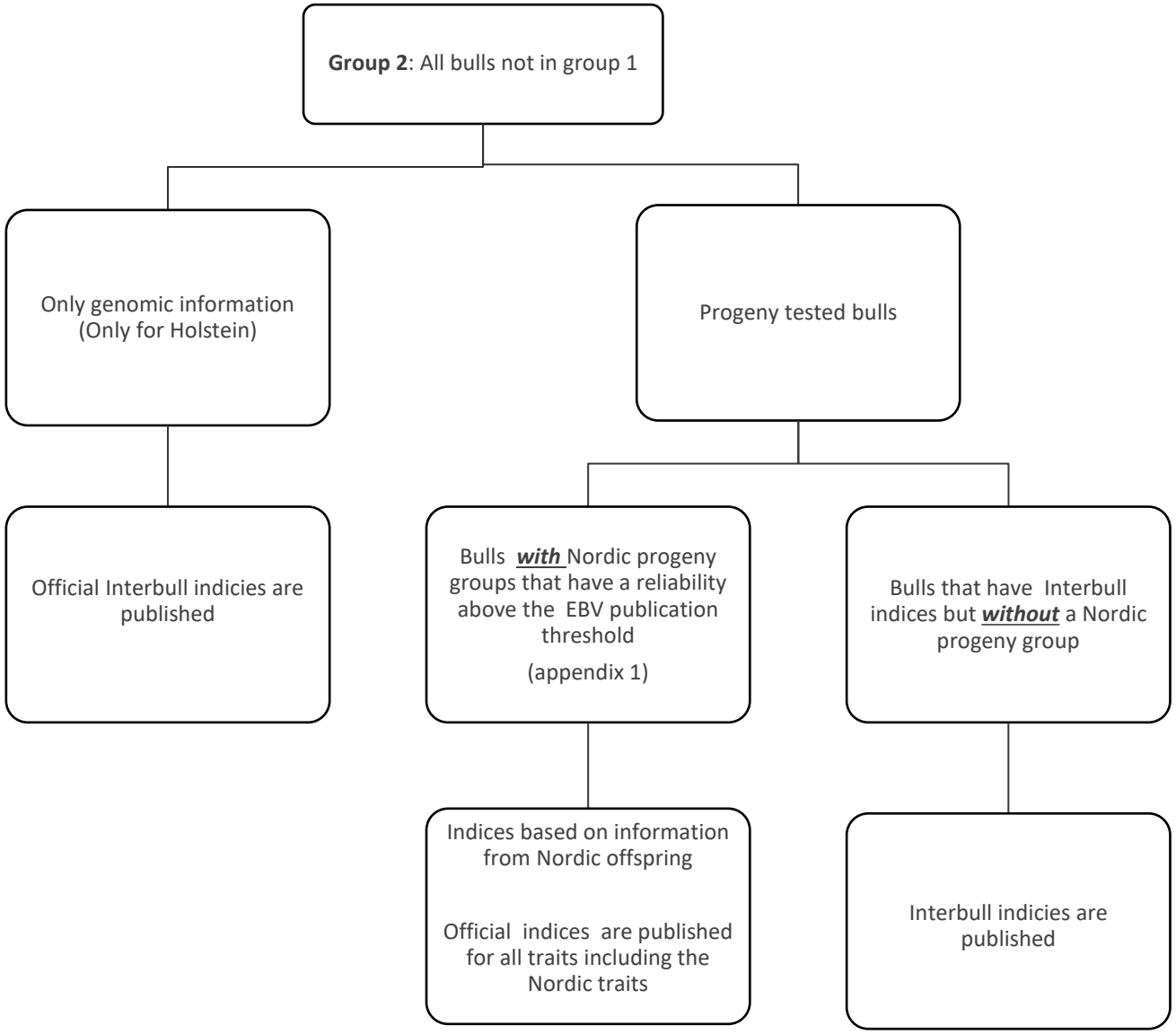
- The information behind and criteria for publication

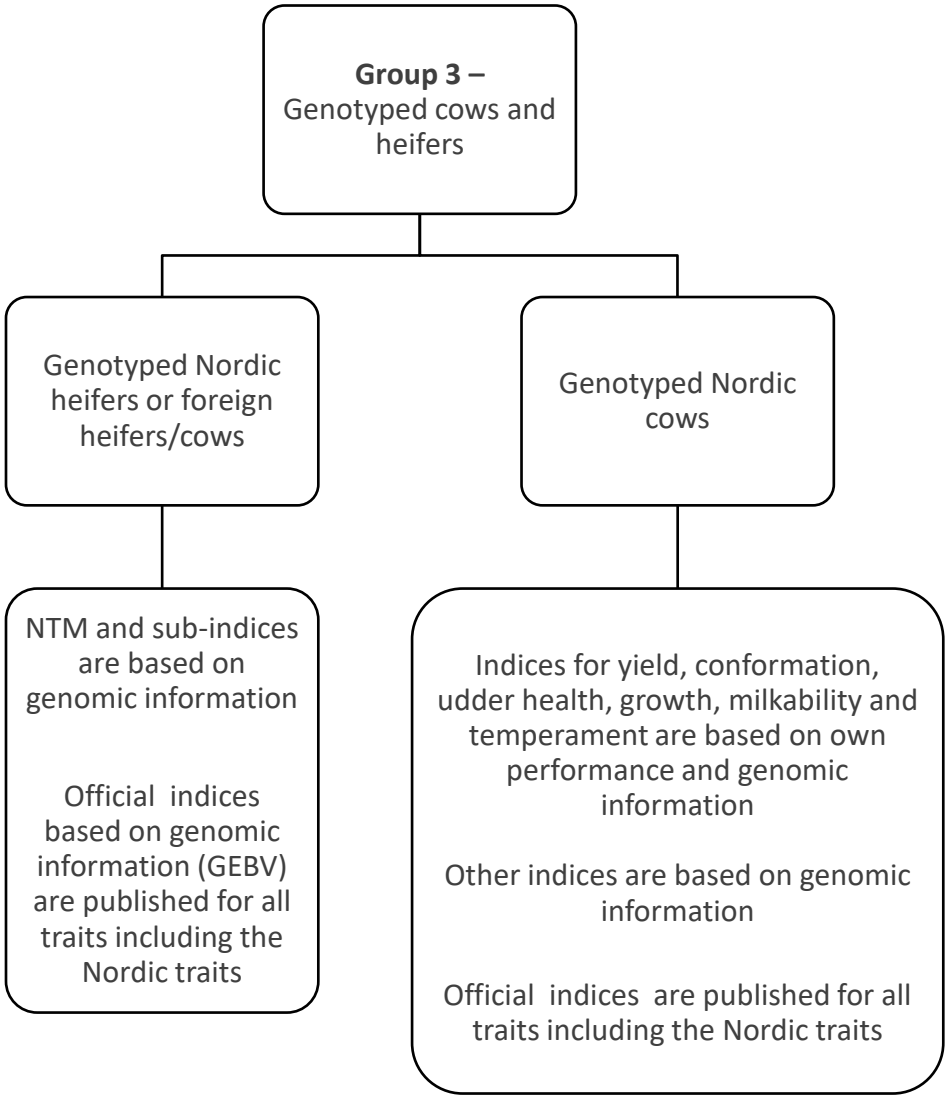
- This provides an overview of when different groups receive official breeding values from NAV

- There are 3 different groups:
  - **Group 1** - All AI bulls where the basic publication fee for breeding values has been paid (AI bulls owned by VikingGenetics, Eurogenomics partners or a third party)
  - **Group 2** - All bulls not in group 1
  - **Group 3** - Genotyped cows and heifers

- There are two types of fees for publication of breeding values:
  - The basic publication fee for breeding values
    - All indices except indices for growth, youngstock survival, general health, claw health and saved feed are published
  - The publication fee for Nordic traits
    - Indices for growth, youngstock survival, general health, claw health and saved feed are published


Group 1: All AI bulls where the basic publication fee for breeding values has been paid (AI bulls owned by VikingGenetics, Eurogenomics partners or a third party)
Only genomic information
Genomic information and progeny records
Bulls ***under*** 10 months
Bulls ***over*** 10 months
Bulls ***with*** Nordic progeny groups that have a reliability above the EBV publication threshold
(appendix 1)
Bulls that have Interbull indices but ***without*** a Nordic progeny group
No official indices are published
The publication fee for Nordic traits is ***paid***
The publication fee for Nordic traits is ***not paid***
Indices based on genomic information and Nordic progeny information
Indices based on information from Nordic offspring, only **if** the reliability is above the transition threshold
(appendix 2).
Official indices are published for all traits including the Nordic traits
Indices based on genomic information and foreign progeny information
Interbull indices are published for the yield index ***If*** the reliability is above the transition threshold for Interbull indices
(appendix 3)
Official indices based on genomic information (GEBV) are published for all traits including the Nordic traits
Official indices based on genomic information (GEBV) are published for all traits ***not*** including the Nordic traits


Group 2: All bulls not in group 1
Only genomic information (Only for Holstein)
Progeny tested bulls
Official Interbull indicies are published
Bulls ***with*** Nordic progeny groups that have a reliability above the EBV publication threshold
(appendix 1)
Bulls that have Interbull indices but ***without*** a Nordic progeny group
Indices based on information from Nordic offspring
Official indices are published for all traits including the Nordic traits
Interbull indicies are published


Group 3 –
Genotyped cows and heifers
Genotyped Nordic heifers or foreign heifers/cows
Genotyped Nordic cows
NTM and sub-indices are based on genomic information
Official indices based on genomic information (GEBV) are published for all traits including the Nordic traits
Indices for yield, conformation, udder health, growth, milkability and temperament are based on own performance and genomic information
Other indices are based on genomic information
Official indices are published for all traits including the Nordic traits

Appendix 1 – Threshold of transition from GEBV to GEBV with information from Nordic offspring

Traits	Threshold of transition from GEBV (based ONLY on genomic information) to GEBV (based on BOTH genomic information and information from Nordic offspring)
Yield	60 % reliability and 10 daughters
Conformation	Single Step*
Milkability	Single Step*
Temperament	Published if conformation has 15 daughters
Fertility	35 % reliability
Udder health	40 % reliability
Calving	40 % reliability
Birth	50 % reliability
General health	Single Step*
Longevity	50 % reliability
Growth	Single Step*
Claw health	Single Step*
Youngstock survival	40 % reliability
Saved Feed	40 % reliability

*No treshold for Single Step methode, since calculation is done in one step.

Appendix 2 – Threshold for transition from GEBV to EBV

Traits	Threshold of transition from EBV based on BOTH genomic information and information from Nordic offspring to EBV based ONLY on Nordic offspring
Yield	90 % reliability
Conformation	Single Step*
Milkability	Single Step*
Temperament	Published if conformation has 50 daughters
Fertility	75 % reliability
Udder health	75 % reliability
Calving	75 % reliability (Jersey 40 %)
Birth	75 % reliability
General health	Single Step*
Longevity	75 % reliability
Growth	Single Step*
Claw health	Single Step*
Youngstock survival	75 % reliability
Saved Feed	75 % realiabily

*No treshold for Single Step methode, since calculation is done in one step.

Appendix 3 – Treshold for transition from GEBV to EBV for Interbull indicies

Traits	Threshold of transition from GEBV based on BOTH genomic information and INTERBULL information to EBV based ONLY on INTERBULL information
Yield	90 % reliability
Conformation	
Milkability	
Temperament	
Fertility	
Udder health	
Calving	
Birth	
General health	
Longevity	
Growth	
Claw health	
Youngstock survival	
Saved Feed	