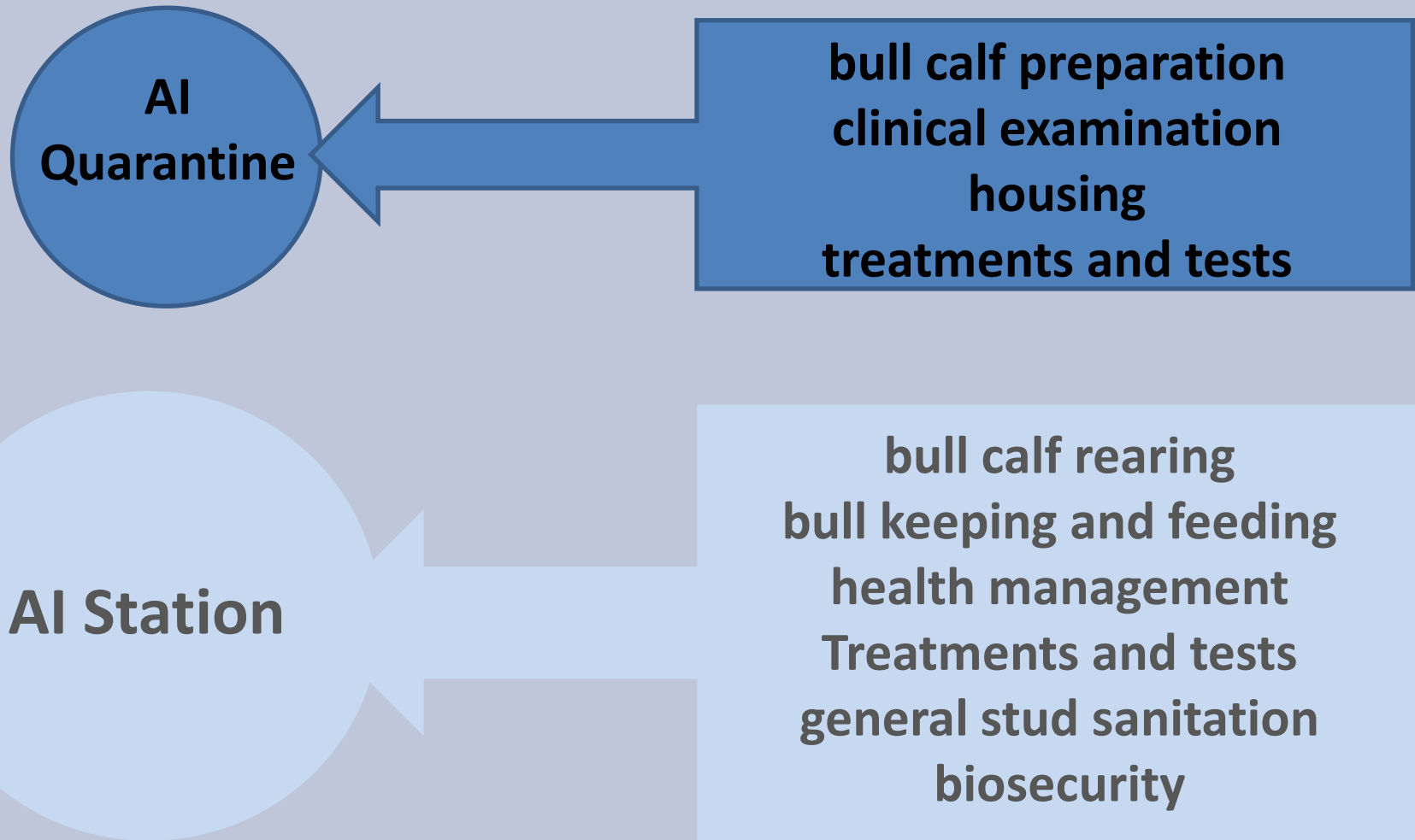


# AI Station and Quarantine

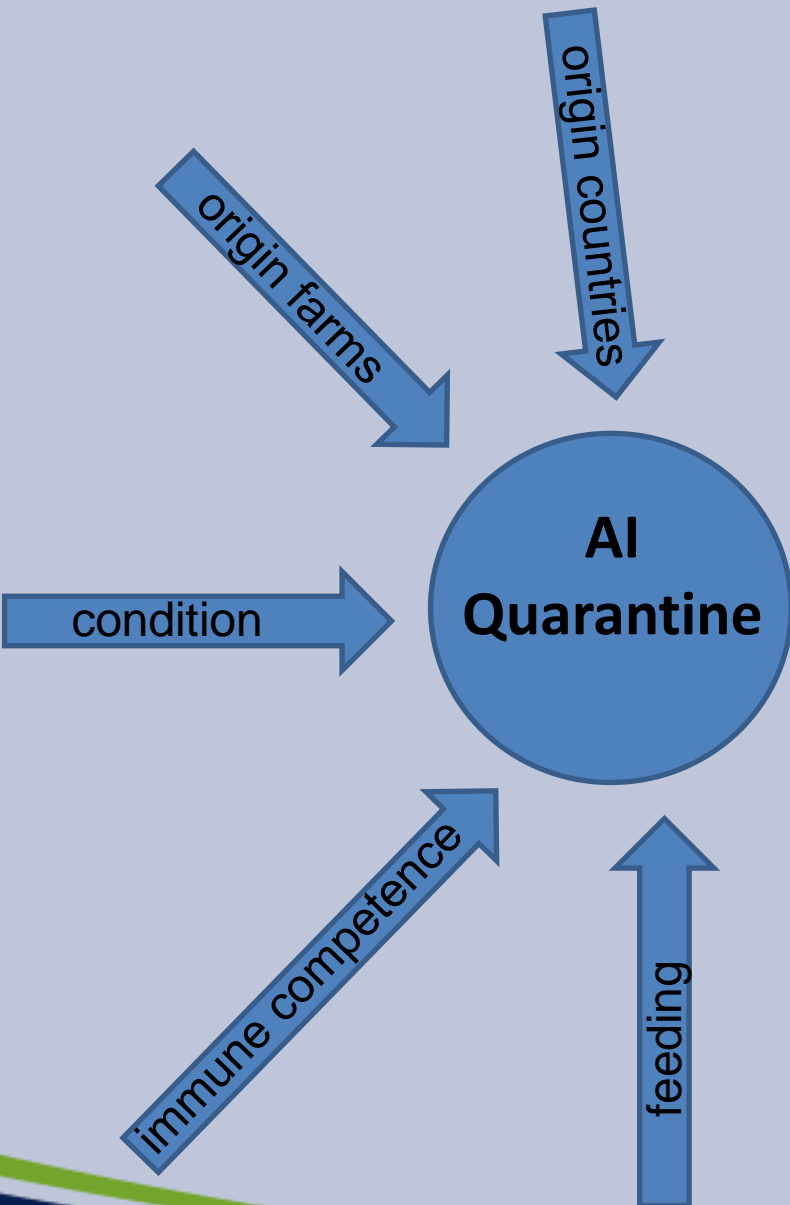


Anand, India, October 2014

# AI Station and Quarantine



# Pre-Quarantine: Bull calf preparation



## Documents and health checks before arrival:

- **General information** for the owner
- **Health certification of origin farm** by local authority (within Germany)
- **Traces certificate** (and required test results e.g. TB-test in UK) for import bulls
- **Declaration of owner**
- **Blood check results & Gene analysis** (only from one lab)

# Pre-Quarantine: Genetic Check

## Genetic Analysis (HF)

- 1) **Breeding value (gRZG)**
- 2) **parentage** (microsatellites of dam and sire)
- 3) **BLAD**
- 4) **CVM**
- 5) **Brachyspina**
- 6) **Red Carrier**
- 7) **Polled**

# Pre-Quarantine: Blood Check 1

**ELECTRONIC APPLICATION**  
- BLOOD SAMPLES & TEST  
RESULTS WITHIN 14 DAYS  
BEFORE BULL ARRIVAL

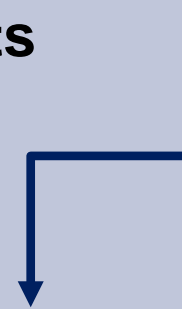
## According to EU-legislation (and additionally):

- 1) Infectious Bovine Rhinotracheitis (gB-Ab)
- 2) Brucellosis (Ab)
- 3) Leucosis (Ab)
- 4) Bovine Virus Diarrhoe (Ab)
- 5) Bovine Virus Diarrhoe (Ag)
- 6) (Johne´s Disease Ab)
- 7) (Bluetongue Ab)
- 8) (Bluetongue Ag)

# Pre-Quarantine: Declaration of owner

## Standard document to display:

- 1) about contact to females
- 2) general condition
- 3) treatments
- 4) feeding



*„freedom of symptoms of diseases including umbilical hernia“*

*„andrological intact, including two testicals of normal size“*

# Pre-Quarantine: Examination and TB-Test

## Before Quarantine starts:

- 1) **TB-Test** (intradermal, bovine and avian tuberculin simultaneously)
- 2) **Examination** (protocol!) → Feedback for Sire Analysts/Owner

**STANDARD PROTOCOL**

## Physical examination:

- 1) **General health**
- 2) **Eyes**
- 3) **Teeth**
- 4) **Umbilicus**
- 5) **Testicles**

# Quarantine: Feeding and Housing

## Diet:

- 1) hay
  - 2) water
  - 3) little concentrate
- become acquainted

## Housing:

straw bedding

depending on the age  
groups of 2-5 bulls



# Quarantine: Treatments and Tests

## Treatment 1:

- 1) 1<sup>st</sup> Ringworm vaccination
- 2) Endo-/Exoparasites (pour on)

## Preputial samples:

- 1) Trichomonas fetus (parasite)
- 2) Campylobacter fetus fetus

## Treatment 2 & Blood Check 2:

- 1) 2<sup>nd</sup> Ringworm vaccination
- 2) Repellent (pour on)

# Quarantine: Blood Check 2

**BLOOD SAMPLES AT THE  
EARLIEST 21 DAYS AFTER  
BEGINNING OF  
QUARANTINE**

According to EU-legislation  
(and additionally):

- 1) Infectious Bovine Rhinotracheitis (gB-Ab)
- 2) Brucellosis (Ab)
- 3) Leucosis (Ab)
- 4) Bovine Virus Diarrhoe (Ab)
- 5) Bovine Virus Diarrhoe (Ag)
- 6) (Q-Fever Ab)
- 7) (Schmallenberg Ab)
- 8) (Leptospirosis Ab)

# Quarantine and AI Station

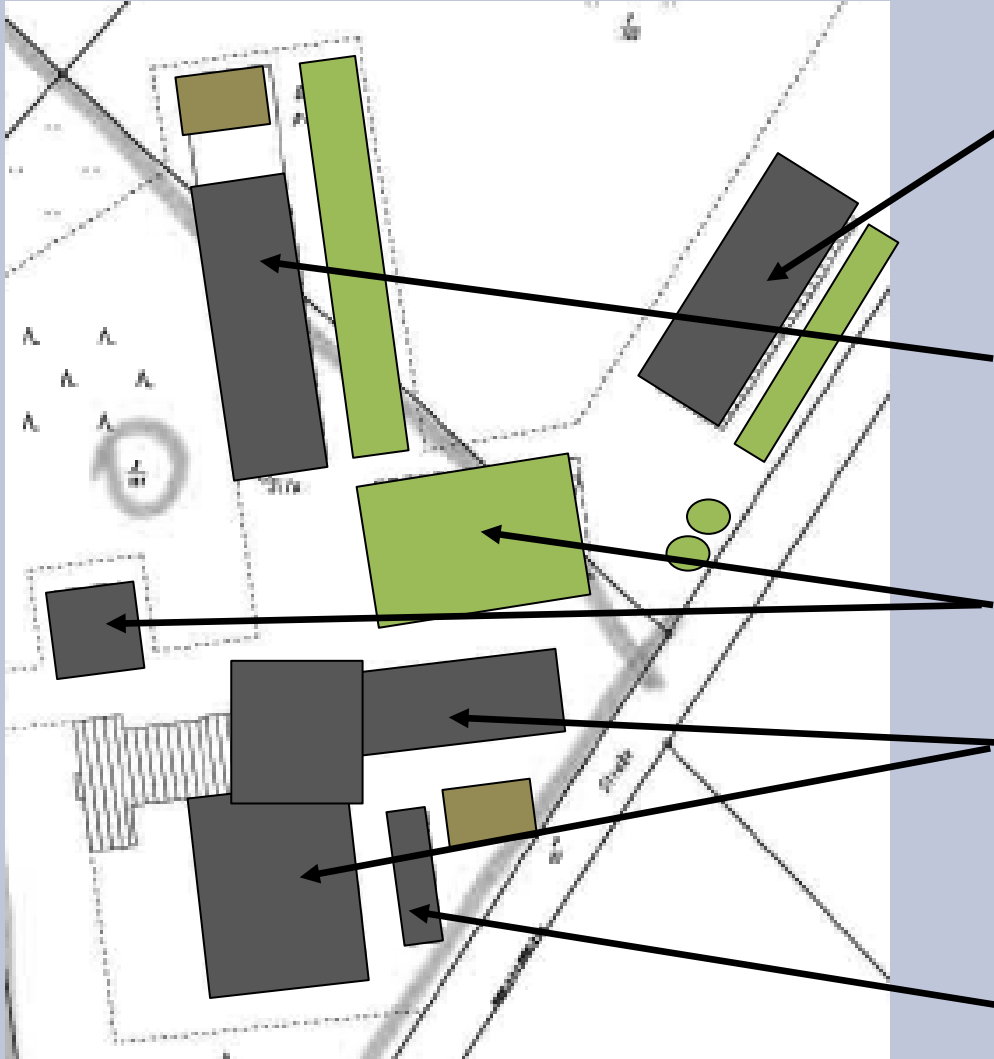
AI  
Quarantine

bull calf preparation  
examination  
keeping  
treatments and tests

AI Station

bull calf rearing  
bull keeping and feeding  
health management  
Treatments and tests  
general stud sanitation  
biosecurity

# AI Station: Site plan



## rearing barn

80 places in groups (4-7 bulls)

## waiting barn

70 places in groups (2-3 bulls)

## straw, hay, machinery

## production barns

22 single boxes (15-20m<sup>2</sup>)

40 single boxes

## internal isolation

3 single boxes

# Rearing barn

## Before production starts:

- 1) Blood check
- 2) Preputial sample
- 3) Andrological examination
- 4) Magnet
- 5) Claw trimming

# Claw trimming

**Production bulls need good claws for jumping!  
Safety and convenience is absolutely necessary!**

## **SAFETY WHILE WORKING**

# Production barn

**40 single  
boxes**

**possibility to  
fixate each  
bull**

**special lights/  
light  
treatment in  
wintertime**

**straw bedding**

**fresh water ad  
libitum**

**fixation two  
times per day  
for feeding  
and cleaning**

**production  
twice per  
week (two  
jumps each)**

**hay, alfalfa,  
concentrate  
(selenium),  
oak,  $\beta$ -carotin,  
yeast**

# „Waiting bulls“/ Pausing bulls

**70 places in  
groups of 2-3  
bulls**

**distinctive  
feature: single  
fixation, group  
run-out**

**easy handling  
(fasten,  
cleaning,  
sampling)**

**TMR: 50 % gras  
silage, 30 % straw;  
20 % corn silage,  
minerals**

**morning fresh,  
afternoon repeated  
supply**

**fresh straw daily,  
dunging every two  
weeks**



# Bull movements/ Hygiene levels

„waiting“

rearing

official permit  
& special trailer

AI  
Quarantine

production

**Movements into  
production barns  
only with a current  
BHV-1 result (at least)**

# Safety in bull handling

**double security when  
handling with bulls**

**nose ring (age!)**

**leading bar and rope  
(considering the age)**

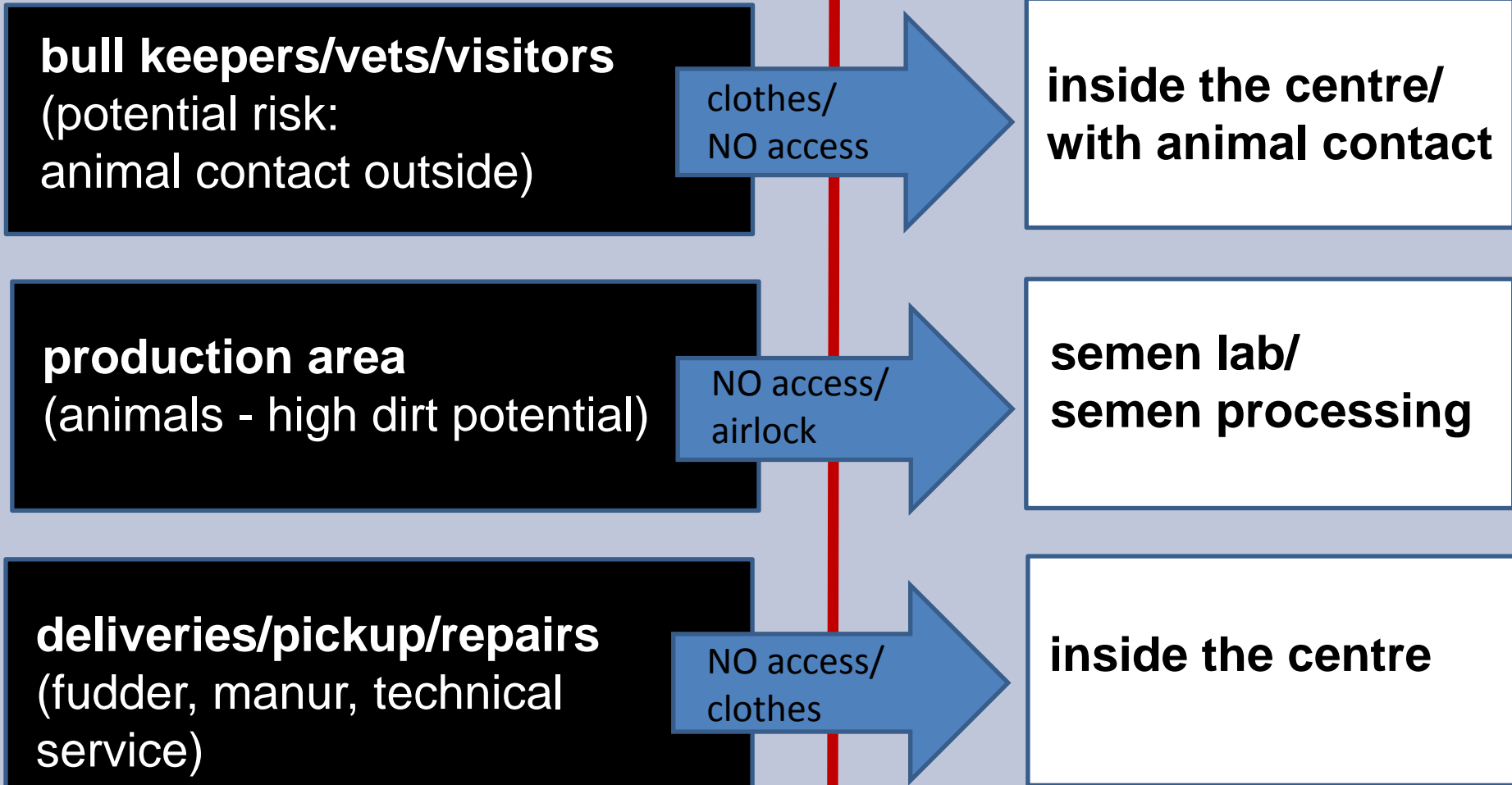
**escape ways**

**safety bars**

**experienced staff!**

# Minimise risks inside!

## Principle of black & white areas



# AI Station: Minimise risks!



## fodder

**straw** (own production)

**hay** (own production)

**silage** (own production)

**concentrate** (filling from outside)

## dunging

**storage areas for manur** (by hand /automatically, by tractor - own access from outside)

## carcass place

**storage area** (access from outside)