



Triplesign VMS in the future

Speaker Name

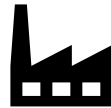
Hans-Ivar Olsson CEO

TRIPLE SIGN SYSTEM AB



Our Business

Developing and producing Prismatic Variable Messaging Signs (PVMS)



Production

In-house production in Vrigstad, Småland, Sweden



Markets

Europe - main areas: Great Britain, Poland, Germany, Netherlands, Norway and Alpine region



Sustainability

A sustainable VMS improves the environment & saves costs

Applications

Road bridges



THE FUTURE OF VMS

VMS demand will increase due to:



Increased and more complex Traffic flow



Explosive increase of Traffic information



Increased demand for on-site information of
Traffic Risks or Warnings




Smart Cities Sustainability Requirements

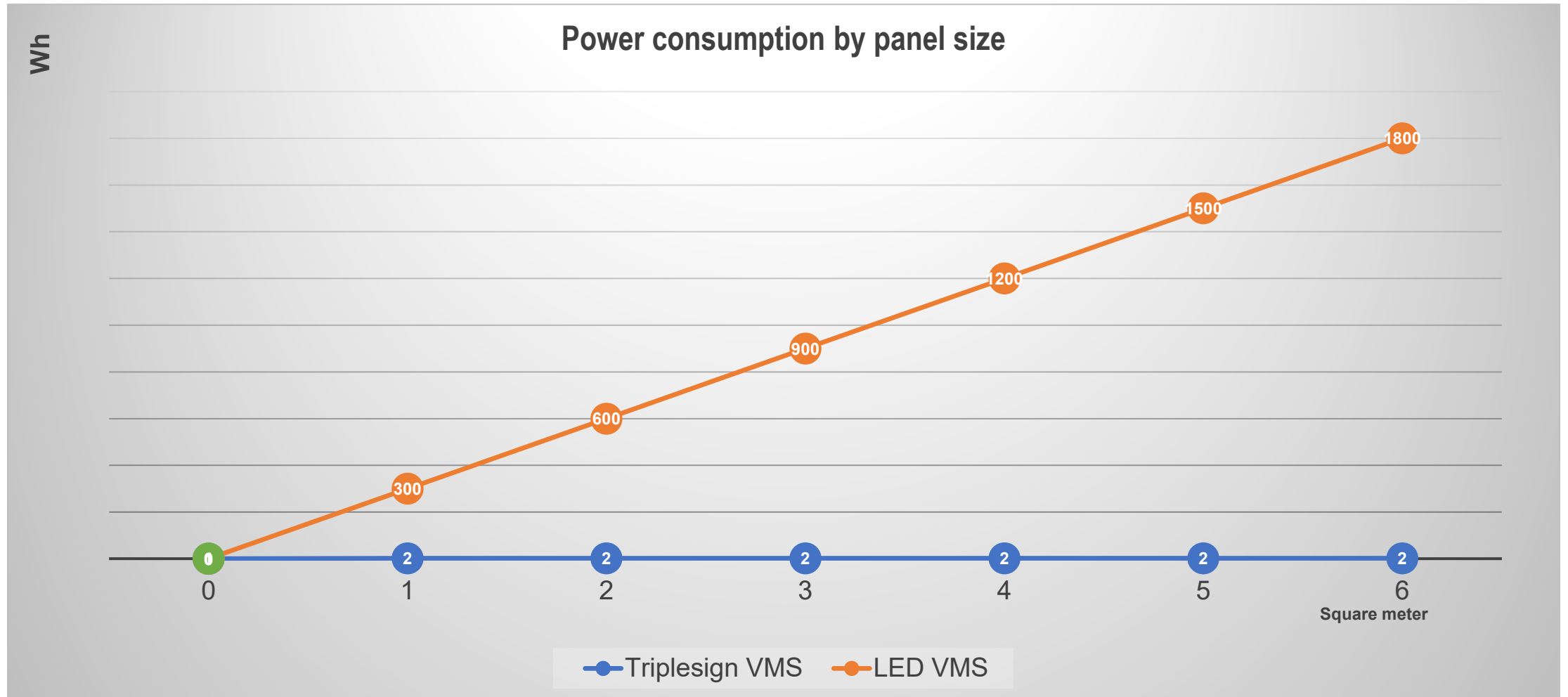
SUSTAINABLE VMS

- SAVE LIVES & ENVIRONMENT-



- Efficient traffic flow reduces the carbon footprint
 - No power needed to display a message
 - **1,5W** power consumption
 - Solar power for stand alone installation
- 
- Solar power for minimum carbon footprint
 - No heavy diesel machinery needed for cable excavation minimize the carbon footprint
 - Minimum installation time minimize traffic jams

Power consumption VMS vs. LED



SUSTAINABLE VMS

- COST BENEFITS -

- €0 for Cable Excavation
- €0 connection fee to Main Grid
- Low Installation cost - a few hours rather than weeks
- Minimum impact on traffic flow due to easy and short installation period
- Very little need for expensive solutions used to re-direct the traffic during installation
- No impact by power outage. No extra UPS or static sign needed during outage
- **Cost Saving up to 90% compared to LED VMS installation**

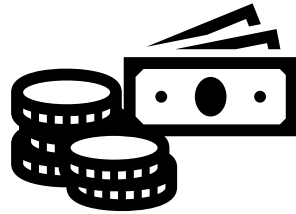
CONCLUSION



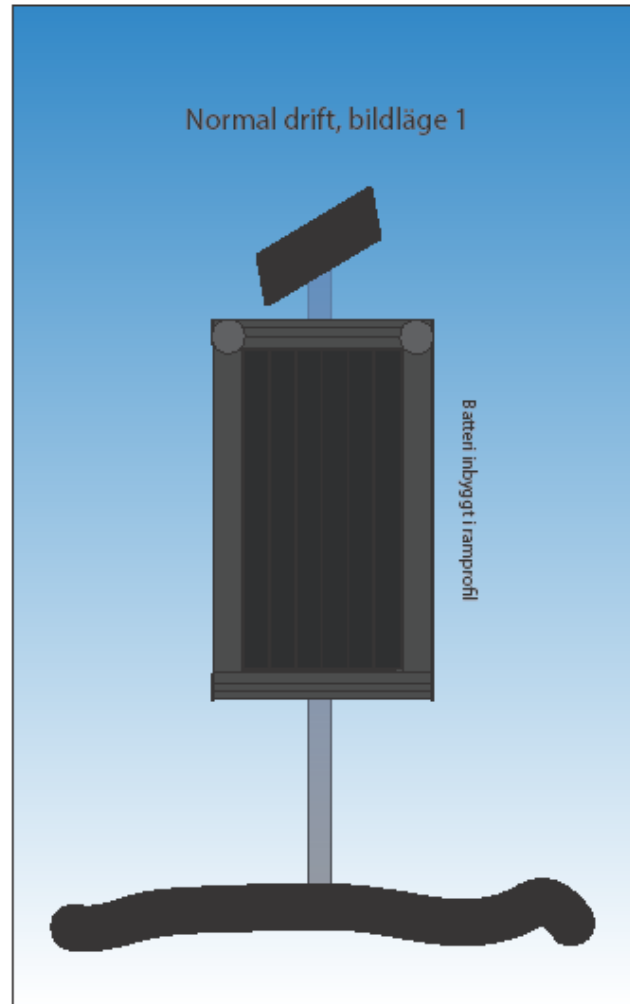
LED VMS is **not** a sustainable technology



Triplesign Solar VMS is the sustainable option



Cost Saving up to 90% compared to LED VMS installation

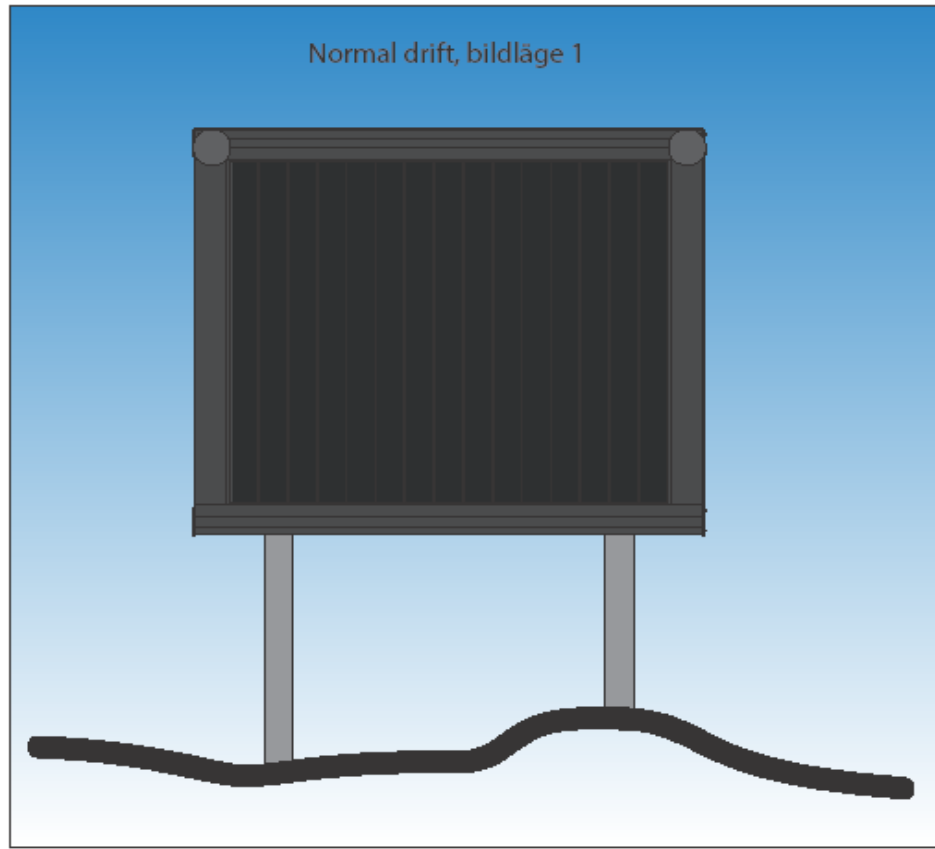


Bildläge 2

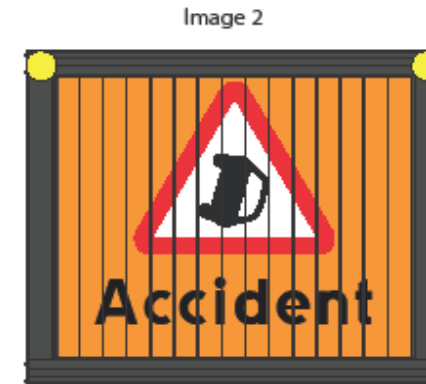
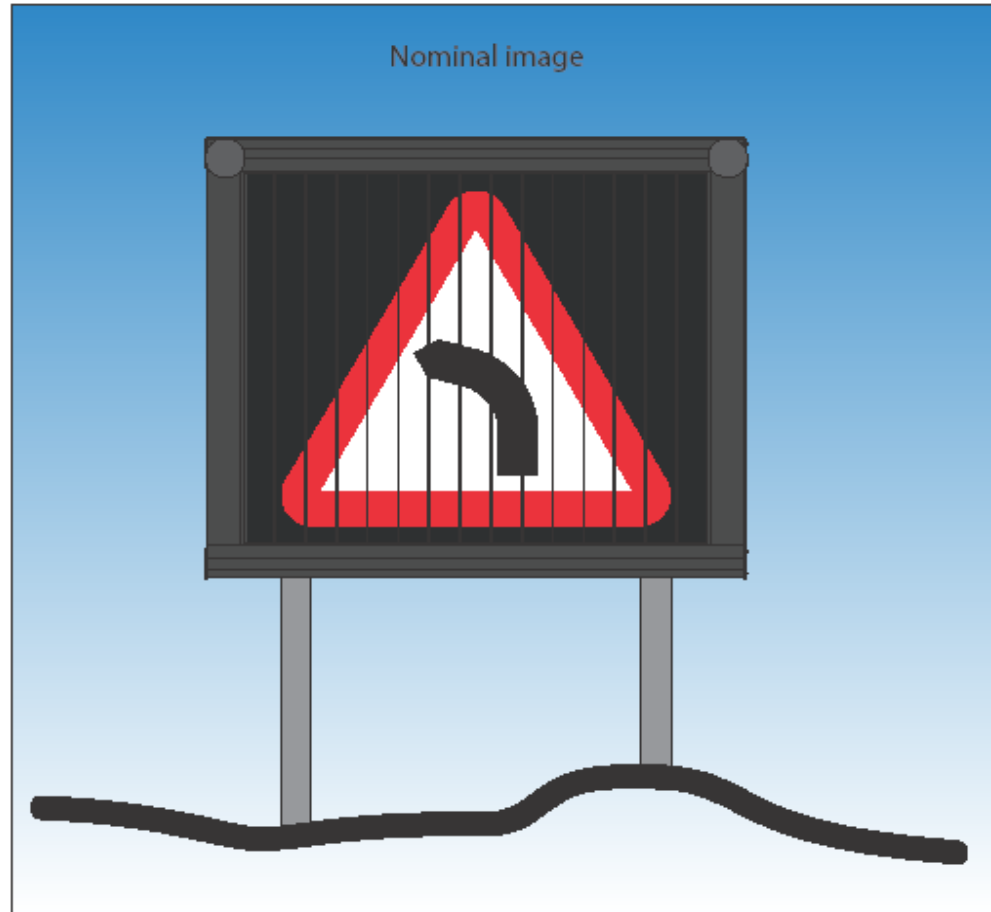


Bildläge 3

VMS activated by rescue vehicle. Used for incident on road. W2X

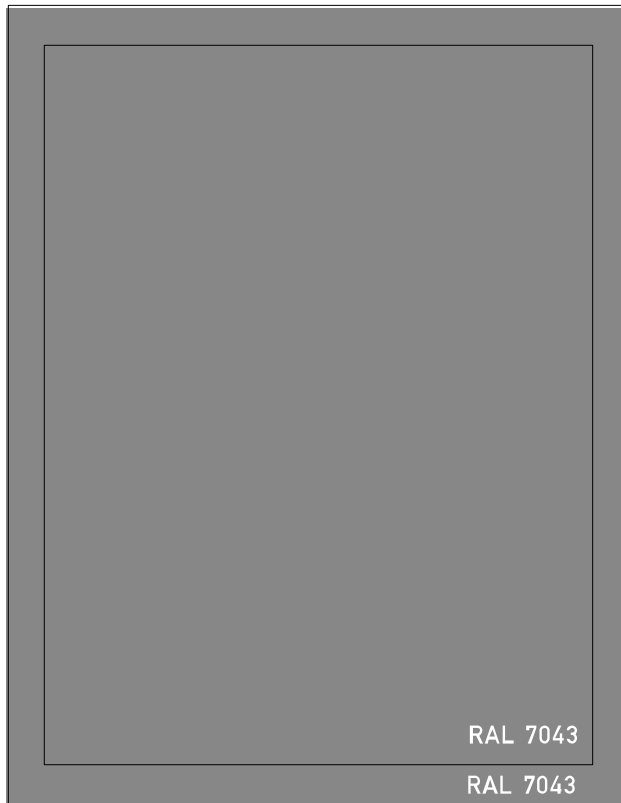


Warning sign information from traffic centre, I2X or W2X



Congestion Staugefahr

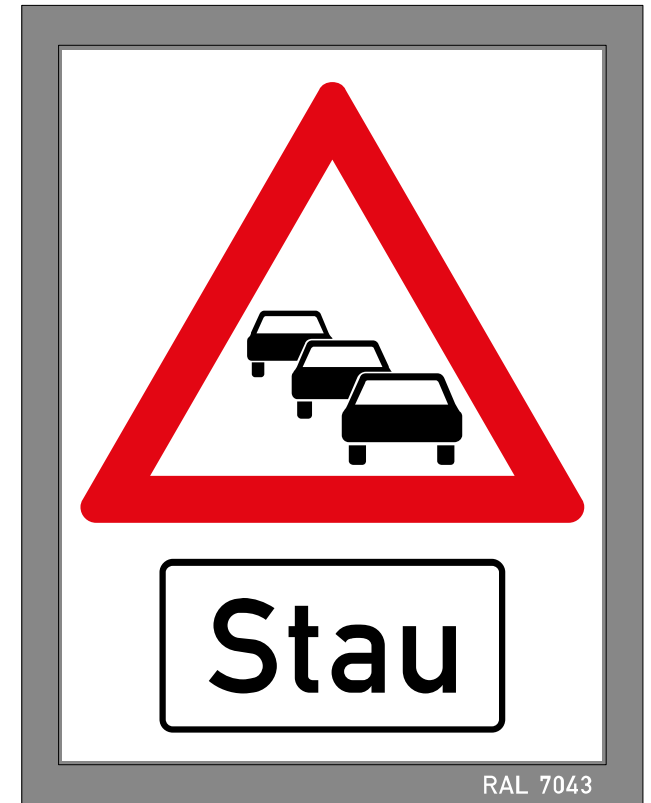
Seite 1



Seite 2



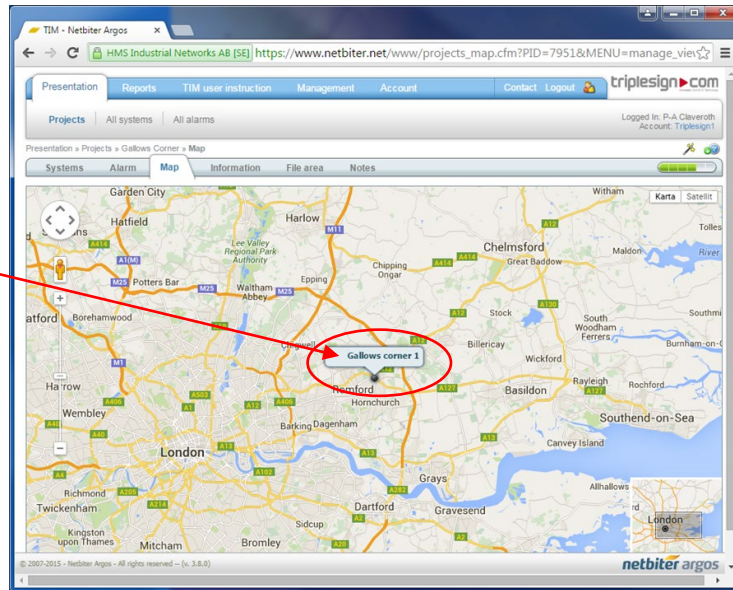
Seite 3



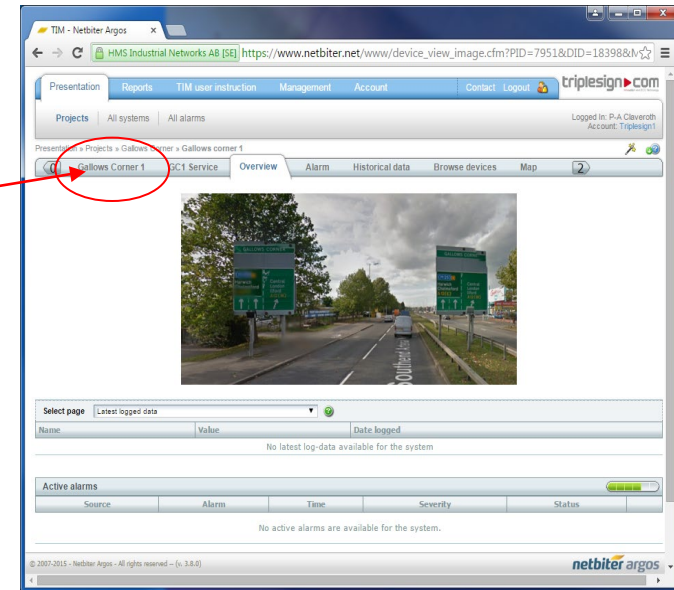
Communication

TIM, Triplesign Internet Management

Select sign by clicking on the sign name in mapview

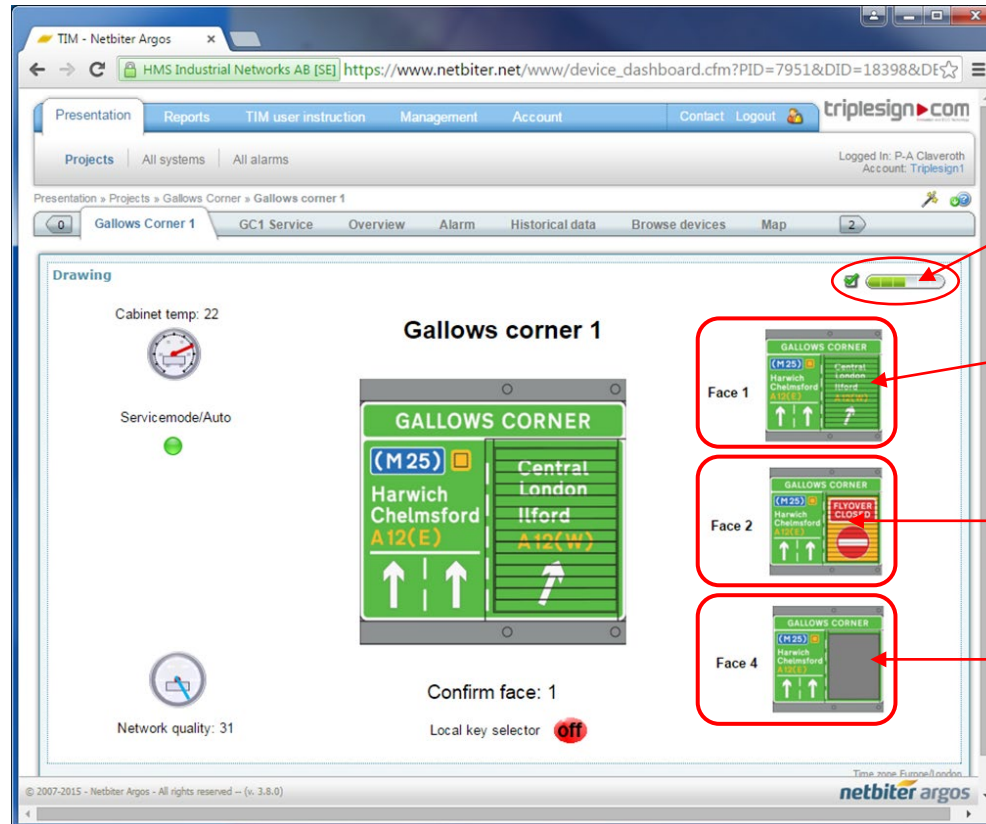


Click on sign name to enter managing dashboard.



Communication

TIM, Triplesign Internet Management



Information bar
showing countdown
to next page
refresh (*2)

Click on image
for face 1 to
select face 1

Click on image for
face 2 to select
face 2

Click on image for
face 4 to select
face 4

Airports and terminals



Temporary- & road work signs



Temporary city zones



TMA Vehicle VMS



More applications

- Warning blasting in progress
- Traffic re-directions
- Warning for trolley
- Warning school children, visually impaired and other handicaps
- Bei Nasse lower speed by rain, Standard in German highways
- Warning for heavy vehicles
- Re-direction of traffic in case of bridge open
- Extra lane at peak traffic. Lane closure sign. GB/Holland
- Re-direction of traffic based on traffic flow
- Road closed due to snow blocked, risk of avalanche,
- Sign warning for deer/elk etc. activated by animal near the road
- Warning the vehicle exceeds maximum height of the tunnel
- warning of high water flows
- There is a lot of on/off applications