



## Dr. Øyvind Isaksen, President and CEO

- Joined Q-Free in 2006
- Previous experience as President of Nera Networks (2002-06), President of Roxar Flow Measurement, President in Fluenta AS and various management positions in ABB Research and Christian Michelsen Research
- Dr.scient in physics (University of Bergen 1994)

**Q-FREE**  
LEADING THE WAY

IN ROAD USER CHARGING AND TRAFFIC SURVEILLANCE

**” Vekst- og internasjonalsiseringsstrategi –  
Hovedutfordringer”**

Øyvind Isaksen, CEO

## Outline

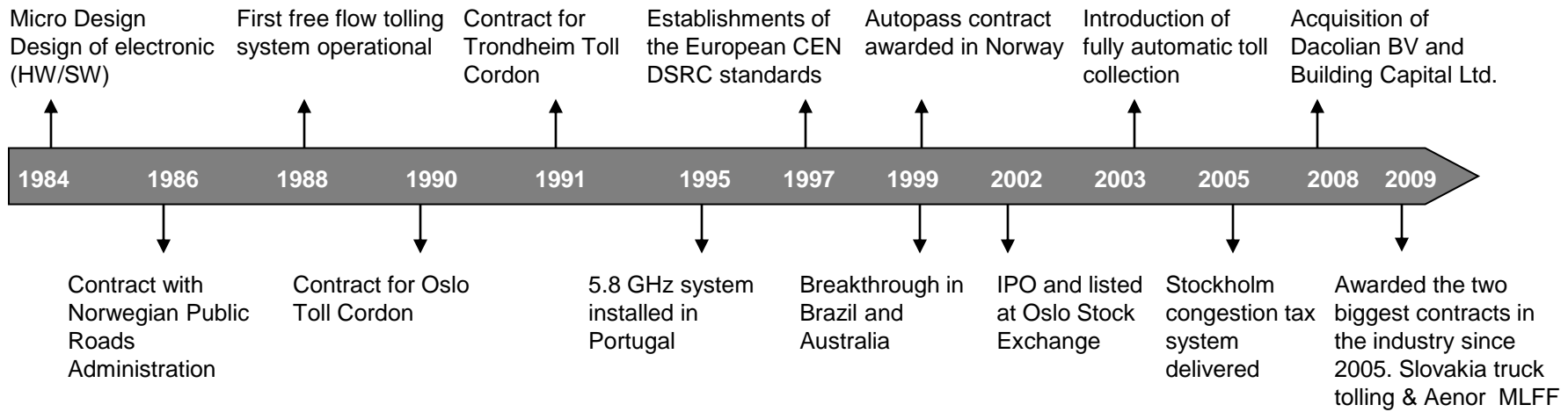
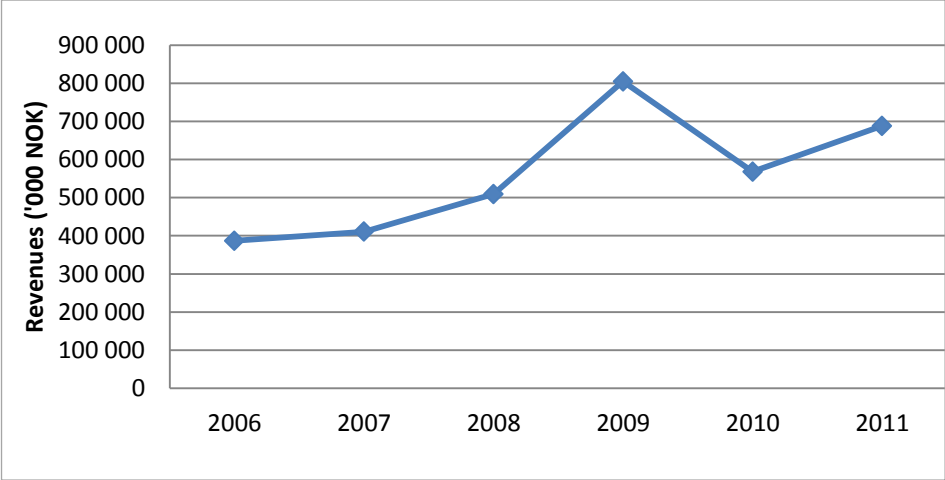
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- Q-Free in short
- Critical Success Criteria to become a successful international company
  - General observations and Examples
- Summing up
- Outlook for Q-Free
- Q&A



# Q-Free in short

- First mover in Electronic Toll Collection
- Established in 1984
- Present in 18 countries
- 300 employees
- Listed at Oslo Stock Exchange since 2002
- Market cap 1099 MNOK (at NOK 16 per share at Dec. 5th 2011)



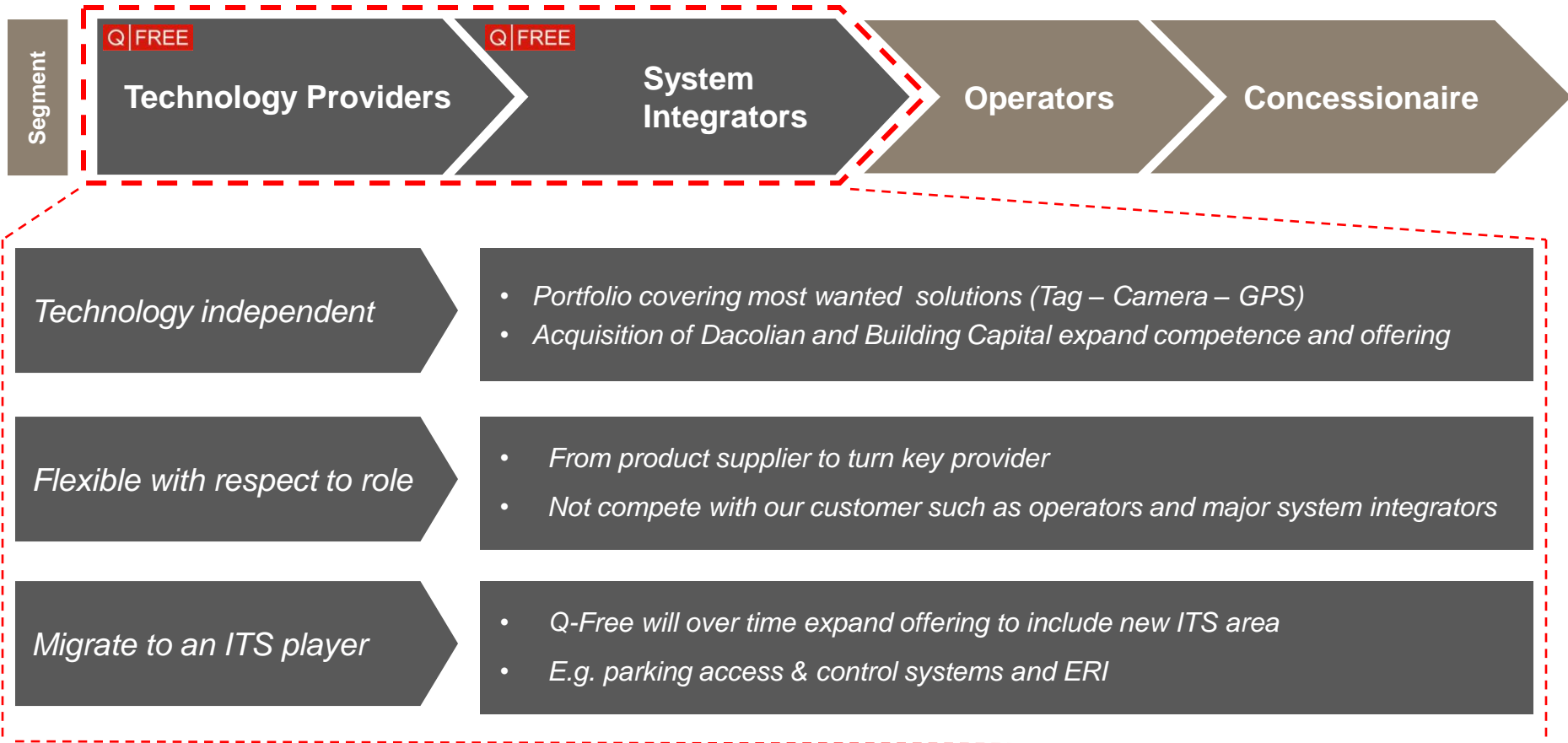
# Market Drivers – becoming more and more visible

1. Electronic Toll Collection (ETC)
  - Financing of the infrastructure
  - Truck Tolling
2. Conversion from manual to ETC
  - Increase efficiency
3. Congestion Charging (CC)
  - Time efficiency
  - Environmental impact
4. Longer term
  - Park & Access
  - Electronic Marking, e.g. licence plate
  - Road safety

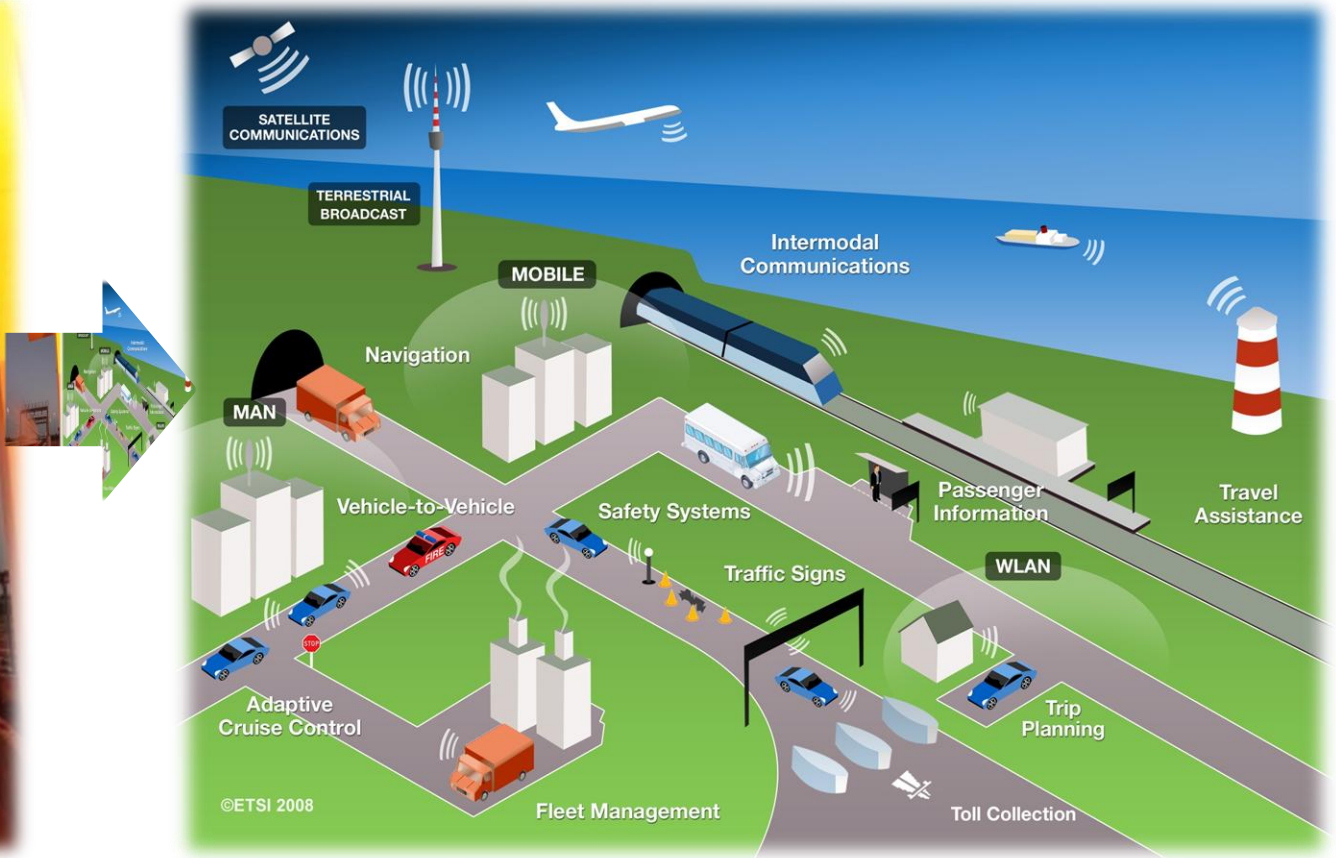


# Vision and Strategic positioning

*The Leading Supplier of Intelligent Transport Systems for Road User Charging & Traffic Surveillance*



# Moving from deploying standalone tolling systems to managing traffic

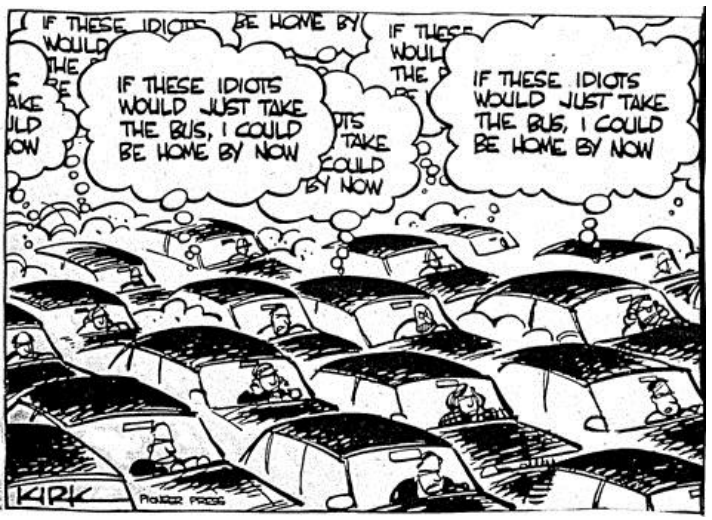


# Moving from deploying standalone tolling systems to managing traffic



Lot of talking

Jakarta will have a still stand situation in 2014



## Critical Success Criteria's to become a successful international company

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- Establishing Market/Customer Understanding
- Decide on offering strategy (portfolio)
- World class Technology and Product Development
- Efficient Sales and Marketing organisation
- World class Manufacturing, Delivery & Support

**Continuous improvement processes in all parts of the value chain**

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# Establishing Market/Customer Understanding

## - Market Drivers for Q-Free's Business Areas

The image is a composite illustrating market drivers for Q-Free's business areas. On the left, a conceptual diagram titled "Intermodal Communications" shows various modes of transport and their connectivity. On the right, a collage of real-world infrastructure images is overlaid with the text "electronic tolling systems".

**Intermodal Communications Diagram Labels:**

- SATELLITE COMMUNICATIONS
- TERRESTRIAL BROADCAST
- MOBILE
- Navigation
- MAN
- Vehicle-to-Vehicle
- Safety Systems
- Traffic Signs
- Adaptive Cruise Control
- Fleet Management
- Passenger Information
- WLAN
- Trip Planning
- Toll Collection
- Travel Assistance

**Real-world Infrastructure Images:**

- Electronic tolling systems on a highway.
- A highway interchange with traffic.
- A city street intersection with traffic lights and buildings.
- A map showing a city area with various districts like Östermalm, Södermalm, and Gröndal.
- A clock face and a navigation screen showing travel times.

**Text in the collage:** "electronic tolling systems"

**Copyright:** © ETSI 2008

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## Decide on offering strategy (portfolio)

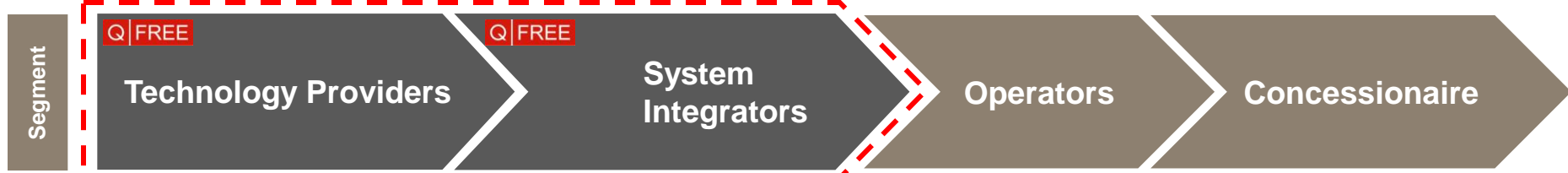
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- Avoid doing too many things at the same time to many places - focus
- Recurring/underlying business
- Scalability in business demand smart portfolio thinking - standardisation

# Vision and Strategic positioning

*The Leading Supplier of Intelligent Transport Systems for Road User Charging & Traffic Surveillance*

FOR Q-FREE VAR DET VIKTIG Å BYGGE BREDDE I PORTEFØLJE



*Technology independent*

- *Portfolio covering most wanted solutions (Tag – Camera – GPS)*
- *Acquisition of Dacolian and Building Capital expand competence and offering*

*Flexible with respect to role*

- *From product supplier to turn key provider*
- *Not compete with our customer such as operators and major system integrators*

*Migrate to an ITS player*

- *Q-Free will over time expand offering to include new ITS area*
- *E.g. parking access & control systems and ERI*

# Q-Free's solution and product offering – Recurring business vs. projects

## RUC Systems

- Single - and Multilane tolling systems
  - DSCR based
  - ALPR based
  - Combination DSRC/ALPR
- GNSS Enforcement for Truck Tolling
  - DSRC and ALPR based
  - Mobile and fixed
- Central systems
- Services, Maintenance & Integration

## Traffic Surveillances

- ALPR based offering – world best Optimal Character Recognition (OCR) software
- Law enforcement:
  - Red light- and speed enforcement
  - Section control
- Parking, Access control and Security
- Traffic Statistics

## Products

### On Board Units (OBU)

- Long term market leader
- Over 11 million units supplied worldwide
- Recently released new OBU;
- Smallest on the market
- Longest battery lifetime
- Non intrusive appearance
- Fully secure transactions



### Road side

- Recently released new single & multilane reader.
- Exceptional accuracy and performance
- State-of-the-art technology
- Guaranteed high quality data and unmatched availability



### Central System

- Commercial Back Office
- Operational Back Office



### Video and still image processing software

- High yield, low error rate Intrada ALPR back office software
- Embedded version for handheld devices
- ALPR performance evaluation service



## Critical Success Criteria's to become a successful international company

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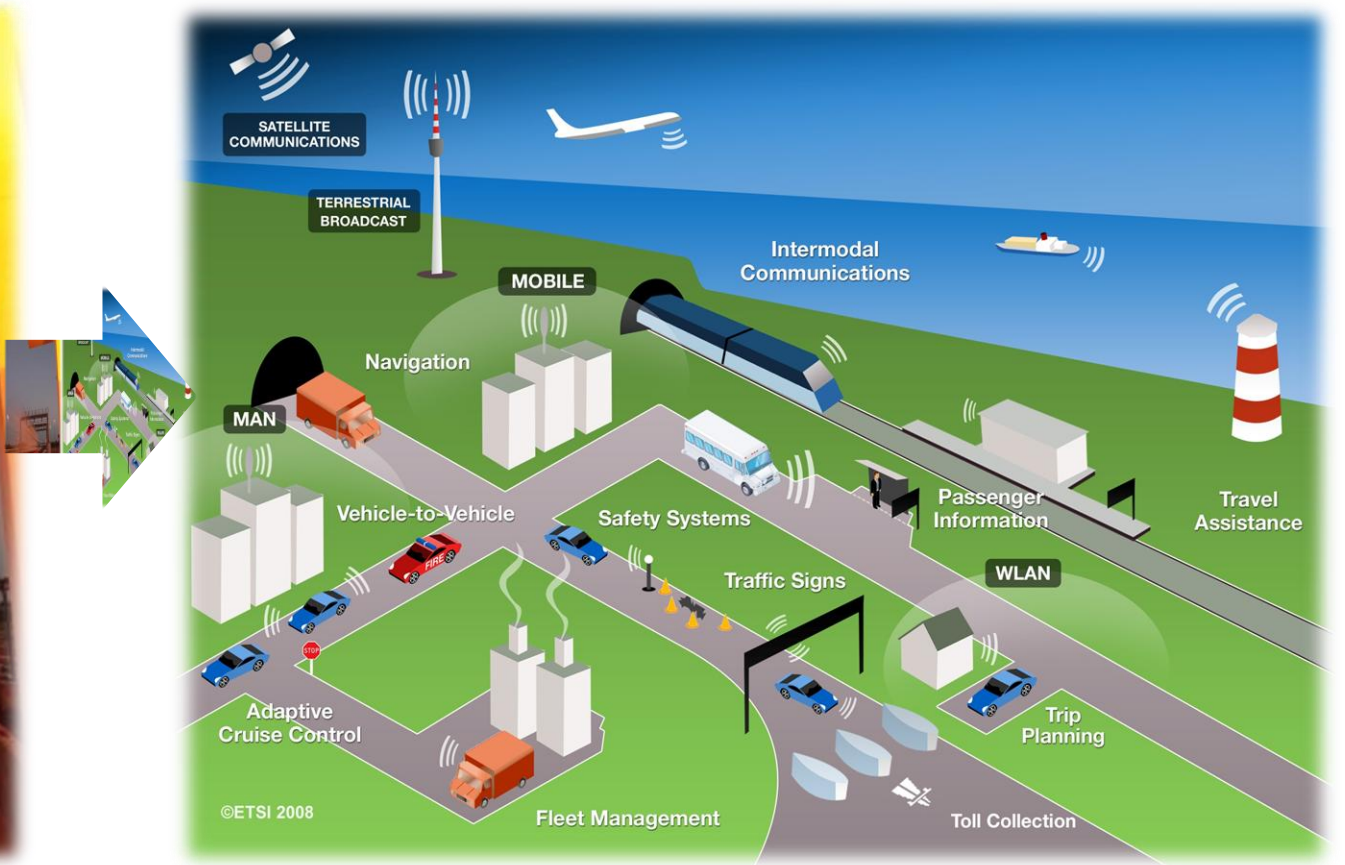
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## World Class Technology and Product Development

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- Lack of defined goals always add development time and cost
- High technology risk in a product development program adds time, cost and risk
- Technology/innovation programs basis for product development programs
- Processes for how to decide on new product development and/or change existing product portfolio need to be in place
  - Product council on group level instead of ad-hoc decision some where in the organisation
- Is the balance between resources used on new development vs. maintenance of existing products sound ?

# Balancing short and long term



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- Establishing Market/Customer Understanding
- Decide on offering strategy (portfolio)
- World class Technology and Product Development
- *Efficient Sales and Marketing organisation*
- World class Manufacturing, Delivery & Support

# Efficient Sales & Marketing

- To be close to clients early and often enough with the right skill sets



## Market outlook



Lot of talking

**Jakarta will have a still stand situation in 2014**



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## World-class Manufacturing, Delivery & Support

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- Coordination between sales & the delivery part of the organisation is crucial for customer satisfaction and profitability
- Local content
- Local support
- "Make/Buy"-strategy key to product cost and cost structure in the company

## Summing up

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- Clear and well thought through strategy and loyalty towards it
- Avoid ad hoc management
- Think globally and act locally
- Commitment and effort on all levels

## Outlook for Q-Free

- Strong pipeline building up
- Impressive portfolio and key references
- Industry still under definition
- Financial situation around the world will boost deployment of “cash machines”
- Longer term our technology will be used for many other applications
- Moving from an interesting growth niche market to a global intelligent transport market





Takk for oppmerksomheten !

**Q-FREE** Q&A  
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