Evercore ISI Fieldtrip
December 6th, 2017
Anton Poll
Head of Financial Communication/Analysis, AUDI AG
Welcome to the Audi family - Lamborghini URUS
8:35
Alexander Seitz
Board Member for Finance, IT & Integrity

9:00
Dr. Roland Villinger
CSO/CDO

9:20
Mirko Reuter
Head of Automated Driving Functions
Silja Pieh
CFO & Product, AID

9:35
Talking Business & Q&A

9:50
Q&A & Brunch

9:50
Talking Tech

10:00
Shaping C/D Shift

11:00
Driving Experience Audi A8
Alexander Seitz
Board Member for Finance, IT and Integrity, AUDI AG
Despite challenges and redirection in China, Audi keeps deliveries on a high level...

Audi deliveries to customers in units and percent (YTD 1-10/2017 vs. 1-10/2016)

<table>
<thead>
<tr>
<th>Region</th>
<th>YTD 1-10/2017</th>
<th>YTD 1-10/2016</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worldwide</td>
<td>1,539,521</td>
<td>1,559,540</td>
<td>-1.3%</td>
</tr>
<tr>
<td>USA</td>
<td>180,339</td>
<td>169,900</td>
<td>+6.1%</td>
</tr>
<tr>
<td>Western Europe</td>
<td>685,888</td>
<td>681,112</td>
<td>+0.7%</td>
</tr>
<tr>
<td>China (incl. Hongkong)</td>
<td>472,498</td>
<td>487,264</td>
<td>-3.0%</td>
</tr>
</tbody>
</table>
...especially due to a strong sales performance in H2
Audi deliveries to customers in units and percent (YTD 7-10/2017 vs. 7-10/2016)

Worldwide
630,566 cars
(606,247)

+4.0%

USA
77,368 cars
(72,966)
+6.0%

Western Europe
253,023 cars
(253,741)
-0.3%

China (incl. Hongkong)
217,713 cars
(197,138)
+10.4%
After strategic realignment Audi continues its growth story in China

Audi deliveries to customers in China (incl. Hongkong) in units (1-10/2017 vs. 2016)

Since June Audi is gaining back its leading position in the Chinese premium market.
Audi slightly increases deliveries in Western Europe...
Audi deliveries to customers in units and percent (1-10/2017 vs. 1-10/2016)

Western Europe

685,888
(681,112)

+0.7%

Top 5 markets

<table>
<thead>
<tr>
<th>Country</th>
<th>1-10/2017</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>254,200</td>
<td>+0.1%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>152,413</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Italy</td>
<td>57,758</td>
<td>+11.5%</td>
</tr>
<tr>
<td>France</td>
<td>52,128</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Spain</td>
<td>46,815</td>
<td>+6.6%</td>
</tr>
</tbody>
</table>
...and continues its success story in the US with a significant volume growth

Audi deliveries to customers in units and percent (1-10/2017 vs. 1-10/2016)

180,339
(169,900)

USA

Q3
SUV family
+14.4%

Q5

Q7
A4 family
+4.0%

A5 family
more than double sales

180,339
(169,900)

+6.1%
new A5 family
86,500 units
(+47% YTD)

new Q2
almost
80,000 units
sold YTD
Audi Q7 remains a bestseller

more than 85,800 deliveries to customers YTD
Q1-Q3/2017: Strong Operating Profit proves high earnings quality...

<table>
<thead>
<tr>
<th>Audi deliveries</th>
<th>Revenue</th>
<th>Operating Profit/ Operating Return on Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in cars)</td>
<td>(in EUR million)</td>
<td>(in EUR million and percent)</td>
</tr>
<tr>
<td>1,408,828</td>
<td>44,017</td>
<td>3,033</td>
</tr>
<tr>
<td>1,380,778</td>
<td>44,235</td>
<td>3,941</td>
</tr>
</tbody>
</table>

Audi AG, incl. special items of EUR 885 million
...and strong Cash flow even withstands high outflows due to the diesel issue

EUR million

Net cash flow

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,086</td>
<td>2,489</td>
<td></td>
</tr>
</tbody>
</table>

includes cash outflow of approx. EUR 1 bn. in the context of the diesel issue

19,039

(18,160)

Net liquidity
September 30, 2017 vs. September 30, 2016
We put a stronger focus on investment discipline and R&D efficiency
EUR million
## Guidance 2017

<table>
<thead>
<tr>
<th>Metric</th>
<th>Target/Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliveries of cars of the Audi brand to customers</td>
<td>slight increase</td>
</tr>
<tr>
<td>Revenue</td>
<td>slight increase</td>
</tr>
<tr>
<td>Operating profit/Operating return on sales</td>
<td>within the strategic target corridor of 8 to 10%</td>
</tr>
<tr>
<td>Return on investment</td>
<td>within a range of 15 to 18%</td>
</tr>
<tr>
<td>Net cash flow</td>
<td>positive, but significantly below previous year level due to outflows in the context of diesel issue</td>
</tr>
<tr>
<td>Ratio of capex</td>
<td>moderately above the strategic target corridor due to model start ups in higher segments</td>
</tr>
<tr>
<td>Research and development ratio</td>
<td>slightly above the strategic target corridor of 6.0 to 6.5%</td>
</tr>
</tbody>
</table>

### Financial long term targets 2025

- **Revenue**
  - Target: 8 to 10%
- **Operating profit/Operating return on sales**
  - Target: 8 to 10%
- **Return on investment**
  - Target: 21%
- **Net cash flow**
  - Target: positive
- **Ratio of capex**
  - Target: 5.0 to 5.5%
- **Research and development ratio**
  - Target: 6.0 to 6.5%
Upcoming product launches will give further impetus for volume growth

- **launched in 2016/2017**
  - Q2
  - Q5
  - A5
  - A8

- **planned in 2018**
  - A1
  - Q3
  - A6
  - A7
  - e-tron
  - Urus
  - Q8

- **planned in 2019f**
  - Q4
  - e-tron Compact car
  - e-tron Sportback

...and more to come
Already at a high level, we aim at even increasing our SUV-ratio
Coming up in 2018: With the Audi e-tron we will change the electric game with a range of more than 500 km.
Focus areas of our strategy 2025 need to be financed...

- Future Powertrain
- Autonomous Driving
- Digitalization
...and the “Angriffsplan” will help us to stabilize our margins

- Model offensive
- Market penetration
- Material-, investment & indirect procurement costs
- Factory costs
- Transforming technical development
- Organization
- China

~30% from revenue growth

potential of EUR 10 bn.

~70% from cost savings
Vorsprung remains our promise!
The Audi Angriffsplan is the foundation for successfully implementing our Strategy 2025.

Audi SPEED UP!

The Audi Angriffsplan is the foundation for successfully implementing our Strategy 2025
Audi’s Strategy Pillar #1:
Digitalization – effortless use, commercial success

Value creation through digitalization

- Enhancement of our core vehicle business
  - Clean & simple UI/UX (new A8!) → effortless use
  - Focused extension of services & features: myAudi app, in-car webshop, e-tron trip planner, personalization, etc.
  - Introduction of function-on-demand with the Audi e-tron in 2018

- Services with clear commercial potential
  - A few select new business models targeting large, established value pools along the automotive value chain
  - Leveraging defensible assets (in-vehicle sensor data, etc.)
  - Euro 1 billion incremental profit achievable for Audi by 2025

- Rigorously leveraging VW Group synergies
  - One platform approach: Group backbone, brand faces
  - Combining mass-market and premium brands/ vehicles/ use cases
  - 2 mio. → 10 mio. → 100 mio. customers p.a.
  - Most attractive developer ecosystem in the OEM world

- Combining data, digitalizing internal processes
  - Creating unified data lakes as overlayers to systems infrastructure (legacy & new/ developing)
  - End-to-end process digitalization
  - Increasingly wide-spread application of agile/ scrum software development approaches within Audi
Online Used-car platform – live since October 2017
Audi’s strategy pillar #2:
Sustainability – making money with electrification

- Tailored yet cost-effective platform approach
  - Split-platform approach: best vehicle per technology (ICEs, NEVs) – leadership in customer value
  - Move towards 100% use of Group EV platforms: PPE with PAG (-30%), MEB with VW
  - Smart, low-cost derivatization

- Leveraging VW Group synergies for EV batteries
  - VW Group collaboration and synergy capture across the entire battery value chain
  - Coordination of procurement consistently leveraging VW Group scale, starting from raw material sourcing
  - Clear allocation of competences/know-how development

- Leadership in rapid development of long-distance charging networks
  - Europe: 400 fast-charging locations with Ionity alliance by end of 2020
  - USA: 290 locations with Electrify America by end of 2019, technology in line with European approach
  - China: also moving forward aggressively ...

- Technology solutions for mix optimization over time
  - Unique strength in CNG as potential diesel ‘bridging’
  - Small series production of fuel cell vehicles in early 2020s
  - E-fuels solutions depending on cost, scalability and regulatory developments
  - Audi development lead within VW Group

Value creation with electric/new energy vehicles
Growth of Audi`s electrified vehicle portfolio through a synergistic platform strategy

- ≥ 20 electrified vehicles
- ≥ 10 full electric vehicles

Fully electric vehicles

- e-tron Derivatives

Hybrid vehicles

- A3, Q7, A6L
- A8, Q5
- ...

2016 2020 2025

* At least mild hybrid
Audi together with other OEMs is driving the rapid development of long-distance charging networks

**EUROPE**

- 400 locations until end 2020
  - Several thousand **charging points**
  - Up to **350kW** per charging point (**200-920 V**)
  - Several location partners like Shell, Tank&Rast, OMV got into IONITY as well

**USA**

- 290 locations until end 2020
  - Technology approach analog Europe
  - **Further extension planned**
AUDI AG, Evercore ISI Fieldtrip

Audi’s strategy pillar #3: Autonomous driving & new/urban mobility solutions

- Evolutionary ADAS development within Audi AG – use case after use case
- Revolutionary/speed boat approach by Audi subsidiary AID GmbH – focused on complex urban autonomy solutions

- Audi development lead for all of VW Group (10 mio units!)
- Synergies through expertise and development toolkit sharing between Audi R&D and AID
- Ultimate merging of solutions – best-of-both-worlds

- Attractiveness: one partner (Audi), yet entire VW Group multi-brand scale and commercial potential
- Flexibility: Different partnership options/approaches along the technology stack for AID and Audi R&D

- Embedded in VW Group/MOIA new mobility system, scale and cooperations (e.g., with cities like Hamburg)
- Developing tailored solutions for Audi’s premium positioning (B2C/B2B customers, inter-/urban use cases)
- Shared & owned mobility solutions

Value from transition to AVs and new mobility solutions

Dual approach towards development of Level 4/5

Synergistic expertise, cost and solution sharing

Most attractive OEM/Group for partnerships

Tailored new/urban mobility solutions
Until 2030 conventional mobility concepts will be largely substituted by robotaxis and shuttles

- Car Sharing, Taxis and Ride Hailing will be substituted by robotaxis
- Company cars will increasingly be replaced by mobility concepts for employees
- Car rental has still significance in the interurban area
### Strategic Mobility Partnership with Hamburg

- Urban mobility concepts
- Intermodality
- Traffic management
- Autonomous driving and parking
- Innovative vehicle concepts
- Air monitoring initiative

### Establishing a mobility provider based on ride hailing/ pooling

- Go live in 2018 with full electric vehicles
- Establishing a mobility provider and customer base as basis for further robotaxis
- Rides are booked via Smartphone App and shared with other passengers
- Algorithm optimizes driving routes to increase efficiency and reduce detours
- Costs for the customer will be lower than taxi
Developing Audi’s vehicle portfolio – reconfirming “Vorsprung durch Technik“

- **Leadership with ADAS and AD vehicles**
  - A8: first mass produced level 3 capable vehicle
  - Group: shared level 4 autonomy by VW Group
  - Elaine: owned level 4 autonomy by Audi
  - Aicon: level 5 long-distance lounge

- **Leadership in vehicle electrification**
  - A8: first vehicle line all equipped with 48V system
  - e-tron: 1st premium OEM eSUV (within core competition), CO2-neutral production
  - … rapidly followed by a smart derivative (e-tron SB)
  - … and then a host of e-models based on Group platforms

- **Focus on the Chinese market**
  - Growing premium segment
  - Young premium customers
  - Establishing 2nd leg/ partnership in the Chinese market
  - Model line-ups for both future local partners

- **Capturing young customers**
  - Leveraging unique sleek Audi UI/UX and digital features (such as FOD) to attract young customers
  - Introducing emotional models that are achievable for younger buyers also

- **Advancing C/D segments for Audi**
  - New A8 with with industry leading technology position, followed by A7, A6
  - Additional Q models
  - M. Lichte design impact, more differentiated vehicle lines

**Profitable volume growth & brand development**
Audi’s product roadmap is well aligned with our corporate & brand strategy.

- **Leadership with ADAS and AD vehicles**
  - Level 3: Audi A8

- **Leadership in vehicle electrification**
  - Level 3: e-tron, e-tron Sportback
  - Level 4: shared VW Group

- **Focus on the Chinese market**

- **Capture young customers**

- **Advancing C/D segments for Audi**
  - A6, A7, A8
  - Q8

2017 - 2025 f.
Audi’s new strategy is translated in tangible value for our customers and we’re already delivering against it — ‘Vorsprung durch Technik’
Audi’s new strategy is translated in tangible value for our customers and we’re already delivering against it — ‘Vorsprung durch Technik’

<table>
<thead>
<tr>
<th>Audi Origins</th>
<th>Changes</th>
<th>Audi tomorrow</th>
</tr>
</thead>
<tbody>
<tr>
<td>myAudi</td>
<td>Online-Used car platform live since October 2017</td>
<td>100 Audi VR Experience equipped dealers until end of 2017</td>
</tr>
<tr>
<td>e-tron</td>
<td>Audi g-tron powered with e-gas (2014)</td>
<td>≥ 20 fully/ partly electrified vehicles until 2025</td>
</tr>
<tr>
<td>Audi AI</td>
<td>Piloted driving at level 3 in our new Audi A8 (2017)</td>
<td>AID GmbH for enabling Level 5 (founded 2017)</td>
</tr>
</tbody>
</table>
achieved milestones

2009
Audi TT
Salt lake
Bonneville

2010
Audi TT
Pikes Peak

CES 2013
Park pilot &
traffic jam pilot
Permission to
test piloted
driving in Nevada

Aug. 2014
Permission to
test piloted
driving in Florida

Sept. 2014
The best
performing
piloted driving
prototype in the
world at the
Hockenheimring

Oct. 2014
Drive from
San Francisco
to Las Vegas
with Jack (Highway Pilot)

Mai. 2016
Highway Pilot
Testing in
Germany Test
area A9

Jun. 2015
Traffic Jam Pilot in
Shanghai
automated driving as an influence on megatrends

1. Enhanced safety
2. Eco-friendly driving
3. More comfort for the customer
4. Efficient use of the transportation infrastructure
broad range of driver assistance functions already in production today

**Standard features**
- Hold assist
- Audi pre sense basic
- Audi pre sense city
- Park assist rear
- Adjustable speed limiter
- Cruise control system
- Break recommendation function

**Tour assistance package**
- Turn assist left
- Adaptive cruise control
- Audi active lane assist
- Audi pre sense front
- Obstacle avoidance assist
- Camera-based traffic sign recognition
- Predictive efficiency assistant
- Traffic jam assist

**City assistance package**
- Audi side assist
- Exit warning
- Audi pre sense rear
- Park assist plus
- Rear cross-traffic assist
- Reversing camera

**Parking assistance package**
- Surroundings camera
- Park assist

**Additional options**
- Trailer assist
- Main beam assist
- MMI navigation plus with MMI touch
- Night vision assistant
evolutionary advanced development driver assistance & automated functions

Current range of driver assistance functions

- Traffic jam pilot
- Park pilot

Future driver assistance functions

- Intersection assistant
- Top View 3D
- ACA
- Maneuver assist
- Turn assist

Motorway pilot
- Parking garage pilot

City pilot
Audi Intelligence

Car intelligence

- Vehicle drives fully autonomously upon request
- Vehicle itself takes over active driving without driver
- User gains autonomy of time

Interaction intelligence

- User is surrounded by an intelligent and empathic system
- Vehicle knows and understands the habits of the user and anticipates his needs within the specific context
- Manner of communication between user and vehicle develops individually over time

Intelligent Technologies - FAS

- Introduction of first automated functions/systems
- Personalization and operating concept give a glimpse into the future development of Audi AI towards an empathic and intelligent system

Level of Automation

Yesterday to the Future
levels of driving automation (SAE international)
each evolutionary stage will relieve the driver more
the new A8 has been developed for conditional automated driving (level 3)

central driver assistance control unit (zFAS)
the new A8 has been developed for conditional automated driving (level 3)

In 2018 we will gradually start to put the automated functions into series production.

Legal framework
(road traffic laws)

Technical regulations
(type approval / homologation)
the new A8 has been developed for conditional automated driving (level 3)

In 2018 we will gradually start to put the automated functions into series production.

Legal framework
(road traffic laws)

› National road traffic laws regulate the behaviour of the driver on public roads.

› Conditional automation: The driver needs to have the ability to control his vehicle even if he is not performing the driving task. National traffic legislation in different countries is currently amended to allow the use of Level 3 systems.
the new A8 has been developed for conditional automated driving (level 3)

In 2018 we will gradually start to put the automated functions into series production.

› Type approval leads to the technical certification of the vehicle. The automaker must fulfil various technical regulations in order to gain the necessary approvals.

Focus: Technical regulation for the steering equipment (UN-R 79):
› At present **UN-R 79** is currently under amendment to allow **continuous steering by the system**.
› The amendment is necessary to address various aspects of automated driving.
› **Currently** the regulation permits continuous steering without holding the steering wheel only at speeds not exceeding 10 km/h (6.2 mph).
Audi AG has been a key player in the development of self-driving technology and acts as lead developer in the Volkswagen Group.

Launched in 03/2017 as a 100% subsidiary of AUDI AG, AID is the center of competence for autonomous driving in the urban area of the Volkswagen Group.

The technology is to be used in models of the various brands of the Group.

“We see potential for highly automated driving also in the city, where traffic is highly complex; this is the ultimate test for us”

Prof. Rupert Stadler, Chairman of the Board of Management of AUDI AG
Speech at the Annual Press Conference, March 15, 2017
SELF-IMAGE OF AUTONOMOUS INTELLIGENT DRIVING GMBH

MISSION STATEMENT
By 2021, enable mobility services to drive fully autonomously in urban environments. In the future, enable everyone – shared and owned cars – to drive fully autonomously.

WHAT WE DO
We develop the full software and data service stack together with a hardware specification to enable autonomous driving.

OUR COMPANY VALUES
Act fast
Be safe – take risk
Show passion
Succeed as a team
WHAT HAPPENED SO FAR (UNTIL OCTOBER 2017)

IN THE FIRST YEAR RESOURCES WERE POOLED ACROSS AUDI / VW GROUP AND THE NEW COMPANY WAS STARTED

Decision to found an independent company to enable VW Group to compete with new competitors

05/16

Bundling of Audi (& VW Group) resources in project team SDS

07/16

Foundation of AID as a technology supplier

03/17

New management team starts work

04/17

Agreement with first test customer

06/17
AID IS CREATING A TRUE STARTUP ATMOSPHERE IN THE HEART OF MUNICH

THE TEAM IS GROWING DAILY

We bring together experts from all over the world to work in the spirit of a startup at our head office in Munich.

MANAGEMENT TEAM

Karlheinz Wurm
CEO & ENGINEERING

Silja Pieh
CFO & PRODUCT

Dr. Gunther Bös
CHRO

Alexandre Haag
CTO

Top-location in central Munich, modern innovative work space, state of the art building
AID IS LEAPFROGGING TO LEVEL 4+ DIRECTLY

A6 (model year 1999)
Q7 (MY 2015)
with adaptive cruise control
Audi active lane assist
A8 next gen.

Continual withdrawal of the driver from the task of driving

Continually growing automation of driving tasks

AID serves in first step as enabler of on-demand mobility services on a global scale for the VW Group

» Initially focused on urban environment and mobility services, our software is also designed to get integrated in ownership cars of the Volkswagen Group
ROLE OF AUTONOMOUS INTELLIGENT DRIVING GMBH IS TECHNOLOGY SUPPLIER

AID WILL ENABLE AUDI & VW GROUP FOR AUTONOMOUS MOBILITY AND COUNTER THE NEW COMPETITION
DEVELOPMENT OF AUTONOMOUS DRIVING TECHNOLOGY IN VW GROUP

1. Evolutionary development
   - To secure competitiveness in the current business model
   - Further development of pilot driving functions – primary focus: highway
     - Traffic Jam Pilot
     - Highway Pilot
     - City Pilot

   Transfer of knowledge into serial development to shorten the roadmap

2. Need for speed
   - Development of new business areas
   - Transfer of technology and know-how into serial development: additional offer for customers and assurance of urban mobility
     - City Pilot / Robotaxi in mobility services

Serial Development Departments of VW Group Brands

AID GmbH

Establishment of software expertise

Piloted driving

Sedric @ VW Group
KEY ACTIVITIES OF AID INCLUDE SOFTWARE ENGINEERING AND INFRASTRUCTURE

- Data Collection
- Storage
- Annotation

- DNN Training
- Simulation
- Validation

- Map Updates
- SW Updates
- DNN Updates

**Sensors**
(Camera, Lidar, Radar, GPS/IMU)

**Software**
- Perception
- Prediction
- Localization
- Trajectory Planning

**Compute HW**
Thank you!