

# Shared Competence Center

**Next level**  
Audi Hungaria 2.0

Dear colleagues,

**Extensive experience and know-how are some of the main success drivers in our business.**

More than 30 years of experience within our core businesses.

More than 22 years of experience within the business area of shared competence activities.

We established the Shared Competence Center (SCC) to focus on our offers strongly connected to the value chains of Group companies. SCC powered by Audi Hungaria offers unique and customer-centric competence-based services.

We focus on highly specialized competence areas like Technical Development, Finance, IT, Procurement, Logistics and Manufacturing.

To offer the best services, our highly motivated team is also equipped with distinct project management and language skills.

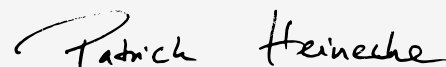
Our goal is to provide you with the best solutions possible in the most responsible and reliable manner.

Incorporating all our expertise and dedication is our passion, driving us to provide our highest competence in the excellent (skill – based) services we offer.

To achieve this goal we constantly progress our competence-portfolio, enhance specific competences and create new future-driven advantages based on a streamlined management.

We are able to push our portfolio to the next level while staying competitive to create added value for our customers. Being a part of Audi, advancement is in our DNA, so my team and I are excited to be shaping the transformation and exploring all new opportunities to support our customers within the Volkswagen Group.

#FromGyőrToTheWorld



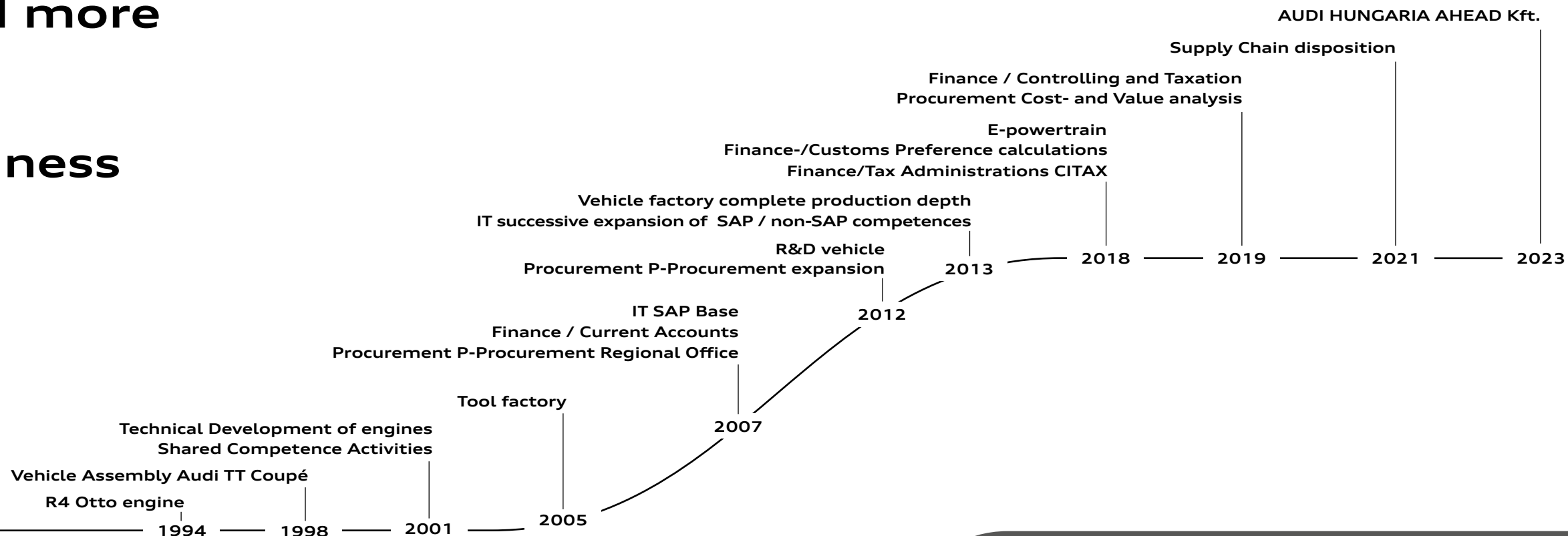
**Dr. Patrick Heinecke**

Member of the Board of Management  
Finance, IT, Procurement and Compliance



**More than 30  
years of experience  
within our core  
businesses and more  
than 22 years  
of experience  
within the business  
area of shared  
competences**

We have many years  
of experience within  
the VW Group.



**Shaping the  
Next level**



# Portfolio SCC

Competence based



**Shared Competences**  
#FromGyőrToTheWorld

Successful future business will be driven by highly specialized competences and maximized synergetic utilization within the corporate environment. This will lead the Group to a great competitive advantage.

At SCC powered by Audi Hungaria we are fully committed to this approach and created a Competence Center connecting the different business areas. With our highly educated and specialized teams we share

knowledge and skills with our Group partners around the globe. We are shaping a Next level mindset of collaboration within the Group offering a whole new dimension of customer-centric services.

# How we define Next level...



**Thorsten Pfeffer**  
Head of Drive System  
Development

The powertrain development team is fully dedicated to expanding future-driven competences in the area of electrified drivetrains. In addition we created a new organizational structure to meet our customers' needs through specialized competences, stronger project-orientation, more agility and flexibility. We are shaping the electrified future together with our partners within the Group's development network.



**Márta Kurunczi**  
Head of Controlling

From a controlling perspective, "Next level" means the development of our relevant competences on the Group-level along with the fused expansion of our team. While linking the Group's controlling processes, our experts put strong emphasis on cost-awareness and efficiency. It's in our nature.



**Tünde Havassy**  
Head of Taxes / Customs  
/ State Subsidies

I see our future in providing a professional response to a rapidly changing world and breaking with traditions. We are looking for new international costumers and areas to support, while we continue to enhance our language skills and develop our professional capabilities.



**Georg Taubenrauch**  
Head of Finance and Accounting

Connecting our highly specialized finance and accounting experts with group-wide digitalization and automation will bring synergies and success for both our customers and the whole Group. Today we are able to provide a wide range of current account services and will expand our portfolio to deliver a wider range of accounting and finance services in the future.



**Christian Stengel**  
Head of Whole Vehicle  
Development

We are driven to serve the current and future needs of our customers by delivering system solutions. That is why we are continuously expanding our virtual development competences & methods (e.g. Hardware - in - the - Loop / HiL). Striving for a culture of openness, agility and collaboration, we are able to react quickly to changed customers' requests.



**Matthias Müller**  
Head of IT

Providing innovative and high-quality IT solutions doesn't solely rely on the expertise of our highly educated IT specialists. It is equally attributable to the exceptional automotive and component manufacturing ecosystem at Audi Hungaria, which fosters an ideal environment for IT innovations. Our strong collaborations with customers across various Group brands and production sites position us as a first-class location for forward-looking IT solutions in the field of future-oriented production.

# How we define Next level...



**Andreas Kattendick**  
Head of Procurement

Our mindset is driven by entrepreneurship, customer focus and highly specialized competencies. Always striving for synergies, we cooperate with the highest flexibility and use strong interface connections with our clients. We will expand our portfolio and further increase technical competences in key areas such as alternative drivetrains. Taking responsibility for core processes (e.g. Forward Sourcing) and expanding our competence hub for tooling calculations are our main Next level steps.



**Franziska Wartmann**  
Head of Supply chain

For us, Next level means a continuous improvement towards operational excellence. It is our ability to react with the highest flexibility within changing conditions, and so is our extraordinary swiftness in cooperation within the global supply chain network, coupled with the exceptional learning competences of our organization and employees. Managing our highly complex network of suppliers, carriers and logistics service providers require a reliable information foundation. We will evolve this foundation through the amplified digitalization of our processes. In addition we will make further steps towards a sustainable supply chain.



**József Nagy**  
Head of Corporate Quality  
Vehicle Technology  
Functions/Geometry

For us, Next Level means to strengthen our strategic fields, to invest in our employees, so that we can shape our future together...



**Zsolt Falvi**  
Head of Finish/Rework

The vehicle assembly post-production ramp-up team (Anlaufteam) will provide high-profile support for market launches at the Group's sites in the future. The experience we gained in the last 20 years, the agility of our colleagues and their openness in any culture meet with high levels of customer satisfaction. We are constantly expanding and polishing our knowledge in the field of electric drives.



**László Janó**  
Head of Technical Services

In one sentence: maintenance is the future. Even if we are speaking about manufacturing equipment in the traditional sense or about robotics. Performing all the maintenance and component repair tasks in-house means an enormous economic advantage for the whole Group. We have created an outstanding expertise, our experts have more than 20 years of experience, which also means, that we can transfer our know-how to others at Group level in the future.



**Ferenc Juhász**  
Head of Corporate  
Quality Powertrain

For 30 years, we have been responsible for the added value of Audi Hungaria Powertrains. Our synchronized and standardized processes with AUDI AG and VW Group give us a stable basis of competences for the Next Level. All required competences, across business areas, are available at the site, and we are able to support all our partners within VW Group at a high-quality level.



# We develop the key components of our premium products!

Technical development | Drive System Development



**Thorsten Pfeffer**  
Head of Drive System Development

The Technical Development of Audi Hungaria is the third largest Research & Development Center within the Audi Group with its more than 530 colleagues, 33 test benches and over 20 years of experience.

Since its establishment in 2001, the Powertrain Development functions as an integral part of the Technical Development of AUDI AG. Various conventional and electric drive modules are being developed here, and a significant part of projects managed under our own responsibility.

Over the years strong and specialized competences have been developed in the fields of project management, construction of parts and systems, virtual development/numerical simulation, powertrain thermodynamics and the testing of drive modules.

#### Engineering ZP4-Scope of development for ICE / E-powertrain

- › Project management
- › Design
- › Mechanics/-Tests
- › Thermodynamics/Mechanical application
- › Numerical simulation

#### Test facilities

- › Endurance test ICE/E-Drive
- › Function ICE
- › Acoustic ICE/ E-Drive
- › Climate ICE

| Complete approval responsibility  
| Testfield



# We shape the perceptible properties of vehicles!

Whole vehicle development



**Christian Stengel**  
Head of Whole Vehicle  
Development

The Whole Vehicle Development at Audi Hungaria started in 2012 and has evolved into the strategic partner of the Technical Development of AUDI AG. We support our customers with specialized engineering know-how regarding vehicle properties, system integration of electrics/electronics, product data management and homologation.

We have developed a strong strategic partnership with the Széchenyi István University in recent years.

Essential research projects are performed at the Department of Powertrain Development and the Department of Whole Vehicle Engineering on the one hand, and the next generation of engineers can prepare for filling in the open positions of Audi Hungaria through practice-oriented trainings on the other hand.



- | Virtual development
- | Testing
- | Release recommendation

## Engineering

- > Whole vehicle properties
- > System integration electrics/electronics
- > Product data management
- > Supporting homologation
- > Competence Center "Virtual development"

## Test facilities

- > Chassis dynamometer
- > Acoustic room
- > Centrifugal test benches for e-rotors
- > Durability test rigs (e.g. shaker)
- > Hardware - in - the - Loop/ HiL test benches

## Development of whole vehicle properties

- > Acoustics (NVH drive train & whole vehicle)
- > Thermal and energy management
- > Strength and durability (drive train and HV-accumulator)
- > Ground clearance
- > Water management



# Performance management for your business to thrive!

## Controlling



**Márta Kurunczi**  
Head of Controlling

Our Controlling Department has evolved organically together with Audi Hungaria. Our main goal has always been to be a reliable business partner in all areas and an excellent advisor in topics of financial performance.

The key to our success is based on our four principles:

- > purposeful, straightforward and responsible regarding performance and cost targets
- > high transparency and cost governance
- > excellent planning quality
- > competent business advising and valuable decision-making proposals

Over the years we have gained valuable expertise in many controlling areas. It is in our nature to encourage not only our partners to improve their performance continuously, but also to consistently enhance our own operations and processes.

Since 2019 we are offering our services to other Group companies and we are pleased to expand our partnership through Audi Hungaria SCC.

We hope to be a part of your performance management soon!

- | **More than a billion € material costs volume** for Audi Car Systems
- | **Expertise in Group controlling** processes and systems
- | **Deep dive into new controlling areas** (R&D, sales)

### Material costs of Products/Car- Systems

- > Complete responsibility for product calculations /setting financial targets / evaluation of financial impacts
- > Powertrain, Body and Battery systems

### R&D Costs

- > Responsibility for planning, analysis and reporting
- > Governance for investments of technical development

### Material costs

- > Responsibility for material cost reports
- > Material costs (Series): analysis/ reporting (technical, procurement price changes)

# Creating value along tax and customs, and make them transparent & comprehensible!

Taxes / Customs / State Subsidies



**Tünde Havassy**  
Head of Taxes / Customs / State Subsidies

Our department comprises three associated financial areas:

- > Taxes
- > Customs
- > State Subsidies

Our Tax-team manages national and international tax affairs and liabilities. We are professional business partners in all tax related issues within the company and for external suppliers/Group partners.

Our main responsibilities also include communication with legislators and public entities as well as analyses of new laws and other legal regulations.

Our Customs team focuses on the customs clearance of goods from non-EU countries, at the same time optimising customs' costs. Another key objective of our work is to monitor changes in customs-related and legal regulations, and putting these into practice.

The State Subsidies team is responsible for finding and evaluating the potential direct and indirect state grants or tax exemptions.

We manage the complete procedure of drawing down state subsidies.

- | **Providing customs benefits** through preference calculations
- | **Deliver transparent and compliant solutions** regarding business gifts and invitations through the CITAX system

## Customs

- > Preference processing, intra-trade statistic, activities in the area of export/import
- > **Complete responsibility**
  - > preference calculations and the SDs\* issued
  - > reports and representation of Audi AG in audits by the Statistical Office
  - > follow-up of export customs declarations, examination of import customs declarations

\*SD: supplier's declaration

## Taxes

- > Tax processing VAT registration in HU for AUDI AG, benefits/contributions AUDI AG with the CITAX software
- > Complete responsibility
  - > for the representation of Audi AG for CITAX administration



# We drive success with lean and flawless finance processes!

## Current accounts



**Georg Taubenrauch**  
Head of Finance and Accounting

Our multifaceted activities include the processing and accounting of AUDI AG's incoming invoices that are not recorded in the automatic workflow.

This includes, among others, the checking, and validation of incoming vendor invoices and their tax content.

Our scope of services also includes the checking of performance and delivery confirmations supported by electronic workflows.

The high qualification level of our Hungarian employees is outstanding (> 80 percent of the employees have a university degree), as their knowledge is highly required in the processing of invoices, since compliance e.g. with the rules of taxation imposes special requirements.

We look forward to the future with confidence, our goal will be to optimize the entire process - from placing the orders to payment (so-called purchase2pay process).

Furthermore we just extended our activities with the process of issuing invoices or credit memos.

This also includes the management of receivables, consequently our activities will also support the liquidity management of the Audi Group.

The AUDI AG and Audi Brussels mark the beginning. We have a clear vision on offering our skills to a much wider range of other companies within the Audi Group. Additional skills related to finance and accounting may also follow.

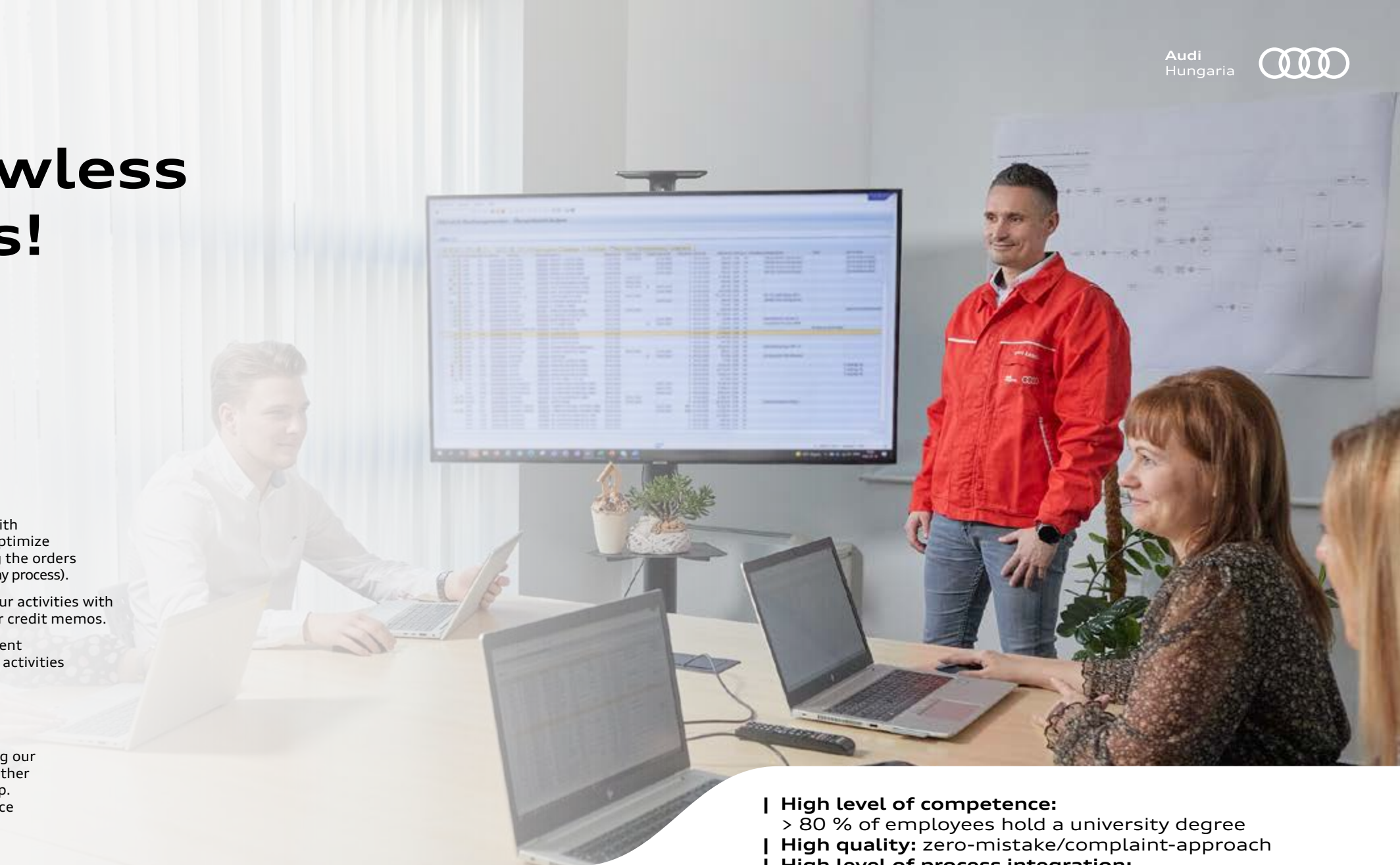
### Current accounts

- > Accounts payable
- > Independent invoice processing and posting in the SAP system of AUDI AG
- > Accounts receivables
- > OCR services

### Customers

- > AUDI AG
- > Audi Brussels S.A./N.V.

- | **High level of competence:**  
> 80 % of employees hold a university degree
- | **High quality:** zero-mistake/complaint-approach
- | **High level of process integration:**  
p2p – from purchase to pay
- | **Experience:** on average 9 years/employee workexperience in current accounts





# We facilitate key corporation processes!

## IT services



**Matthias Müller**  
Head of IT

Our IT Shared Competence team is currently responsible for almost 40 services. They support our international customers across the Volkswagen Group with a range of high-quality IT services including 24/7 support.

A strong customer-centric and value-driven approach, an international perspective and a commitment to continuously develop our future-oriented skills - this is what characterizes the attitude of our IT Shared Competence team.

By managing and improving the systems we operate and develop, we create substantial value for our customers. This value is particularly evident in domains such as SAP, DevOps, and Cloud Computing.

We convince our customers through a combination of well-established structured optimizations and innovative, customer-focused developments.

**| 40 services**  
**| 6 of them 7x24 hours (Risk class 1-2)**  
**| 200 supported locations worldwide**

### Application management

- › ITIL Processes
- › Incident Management
- › Change Management
- › Problem Management
- › Service Level Management

### Application Development & DevOps

- › DevOps
- › Low Code solutions
- › Agile Software Development

### SAP Competence Center

- › SAP Basis – VW Group Service Management
- › SAP Logistics and Production Solutions
- › SAP Reporting and Business Intelligence Solutions

### Supported systems (examples)

- › SAP OneLog
- › Flexera Support
- › Nessus by Tenable
  - vulnerability management
- › COPS, PIOS
  - SAP Vorserien Systeme

### Services (examples)

- › WASI – SSO (Single Sign On) / web – authentication services
- › IT4IT – Monitoring services
- › Client Design – Workplace services
- › Software development – MMS development services
- › SAP Basis / Business Object Based Services
- › Application Services for SAP Production/Logistic Systems
- › Application Services for SAP Business Warehouse Systems

# Procurement is much more, than just a purchase order!

## Procurement



**Andreas Kattendick**  
Head of Procurement

Our unique Procurement Department plays a central role within the Group, as we are responsible for the specific material groups of serial parts ordered centrally in Győr and handle these for all vehicle types on a Group level.

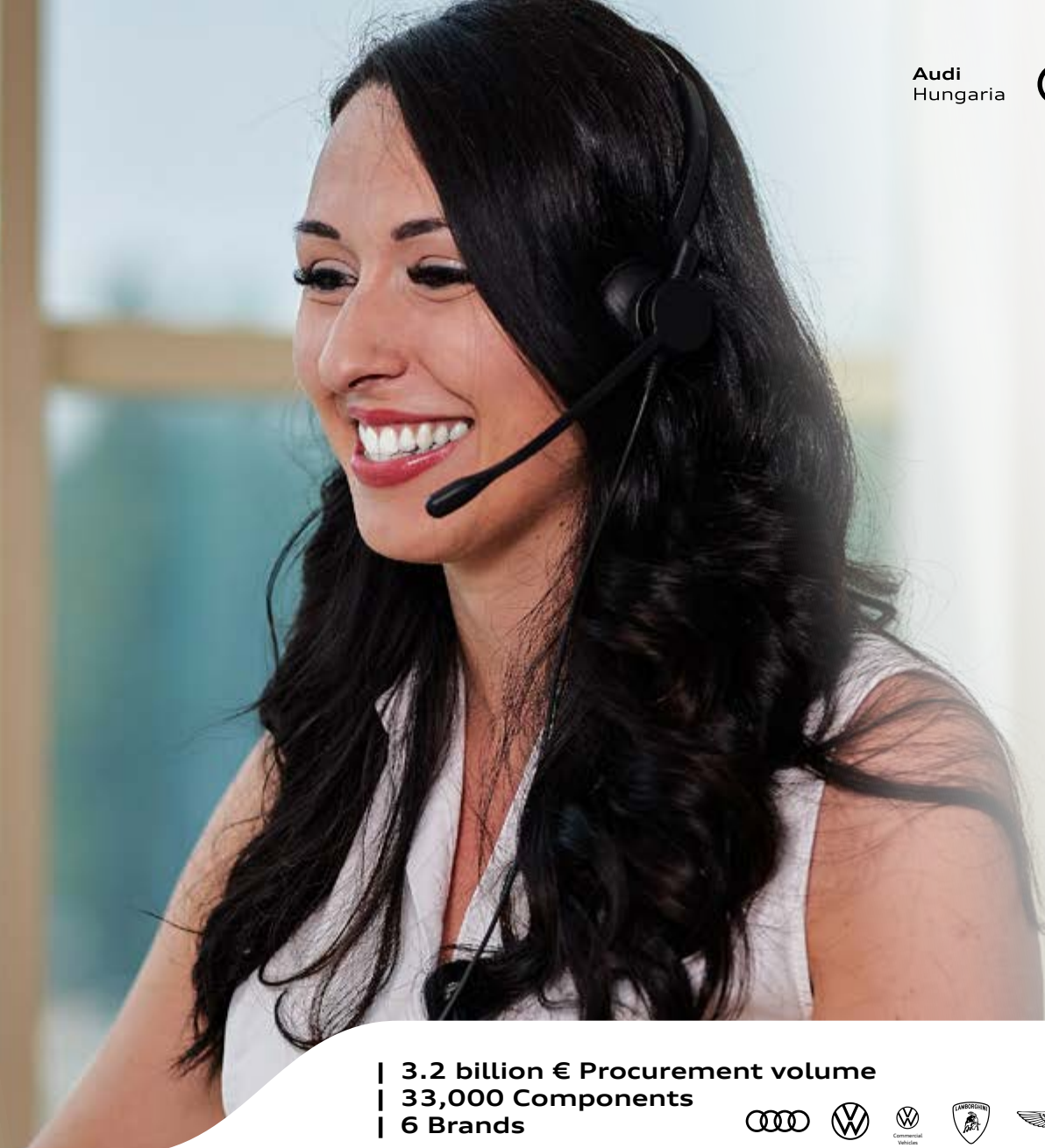
Choosing the best partner on the procurement markets worldwide from the aspect of technology, quality, sustainability, price, supplier engagement and flexibility - this task puts procurement at the center of the company each day and leads us to new challenges.

Procurement makes a significant contribution to the realization of corporate goals. Intensive pricing ensures customer-oriented value for money, allows access to innovations and the economic mediation of these to customers.

It ensures the availability of goods and thus the supplier's commitment to the customer. Through targeted supplier management, it meets the needs and expectations of the Group's 12 brands.

With a high level of technical and economic expertise, procurement staff should always find a balance between practical solutions and long term strategies.

Audi Hungaria's Procurement Department is divided into general and serial procurement since 2006, while the Regional Office is responsible for the Eastern European market and is complemented with Cost and Value Analysis.



| 3.2 billion € Procurement volume  
| 33,000 Components  
| 6 Brands



### Series Procurement

- > Series and project procurement
- > Forward Sourcing, After sales, Focus purchasing
- > 100% responsibility for material groups
- > In the name and on the behalf of Audi & Volkswagen
- > Cross brand responsibility
- > Cross brand league 3 committee
- > Group systems

### General Procurement

- > C-parts orders
- > Non-productive process materials
- > Complete responsibility for the material groups
- > In the name and on the behalf of Audi
- > Group systems

### Cost-/Value analysis

- > Calculation of components and invest (WINK; KLS & KGF; WLS&WGF)
- > Development of tool competences
- > Complete execution of calculations

### East European Regional Office

- > Supplier scouting and qualification / Supplier Management
- > Building up battery expertise
- > Complete RO-responsibility in East-Europe
- > Ramp up management



# In the right place at the right time!

## Supply Chain



**Franziska Wartmann**  
Head of Supply Chain

Our dedicated colleagues work every day to serve our clients at the right time, with the highest quality and the required quantity, also taking into account the aspect of cost-effectiveness.

The main tasks our expert colleagues perform each day are the planning, implementation and operation of the logistic processes and the provisioning of new projects, the innovative design and further development of new Supply Chain processes, structures and packaging, and the dispositioning of serial and auxiliary materials necessary for production.

Sustainability aspects have also become part of our daily lives, consequently our Supply Chain Department is striving to reach CO<sub>2</sub> neutral logistics and we are working every day on continuously optimizing the use of packaging materials for components.

Thanks to our vehicle logistic department, 170,874 cars left the factory and owing to our colleagues at the engine logistic department, 7,500-8,000 engines leave our site every day by rail or on road; after delivery, these will be built into cars of the VW Group brands such as Audi, VW, Skoda, Seat, Porsche, Bentley and Lamborghini.

### | Disposition | Supply Chain planning technology

#### Disposition

- › Disposition for Q8 E-tron and for eQ4 in Brussels: 2.800 part numbers
- › „Bottleneck”management Changemanagement
- › Ramp-up and Ramp-down control
- › Complete responsibility for the part numbers
- › In the name and on behalf of Group systems

#### Supply Chain Planning

- › Planning logistics equipment for Audi plants
  - › Special load carrier for assembly and body shop (190 versions)
  - › Sequence racks (70 versions)
- › Process planning
  - › Logistics cost assessment

- › Complete responsibility for planning based on supply chain standards
- › In the name and on behalf of
- › Group systems



# Technically on the top!

## Technical Services



**László Janó**  
Head of Technical Services

Our area has been operating as a central service area since 1993. With the continuous development of the company, it developed a wide portfolio meeting customer expectations.

Our task include, the monitoring of the efficiency of production equipment (OEE), and the professional support of BDE and EDE systems.

Our specialists perform the planned renovation of machinery, machine and component repairs, produce individual components or sharpen tools.

Our qualified colleagues ensure the delivery of finished engines to the logistics hall and supply the entire Audi Hungaria with spare parts and auxiliary materials. In addition, we also perform the cooling/lubricating fluid management of the company.

Expertise gained in our special area is the foundation for high quality for the entire Group in a cost efficient form.

### Repairment activities

- › Machinery repairment  
GROB/MAG/EMAG/JUNKER/HELLER/UNIOR/NILES-SIMMONS
- › Spindle-repairment  
GROB/EMAG/KESSLER/JUNKER/WEISS+GF+/Rexroth/usw.
- › Component repairment  
Chuks/Gears/Pumps/Turret head/Side channel blower/etc.

### Spare parts repair / Individual component production

- All possible spare parts
- › Turning
  - › Milling
  - › Grinding

### Compressed air Leakage

- › Measurement
- › Repair of the pneumatic system
  - › Measurement
  - › Repair
  - › Re-measurement

- | Individual component production
- | Spindle motor repairment
- | Component repairment
- | Machinery repairment
- | Compressed air leakage measurement





# We function as a “quality advocate” for our customers buying our cars

## Corporate Quality Vehicle Technology Functions / Geometry



**József Nagy**

Head of Corporate Quality Vehicle  
Technology Functions/Geometry

Our area, which has been operating since 1997, started first in the former Audi TT assembly shop and then in the new car plant.

We are responsible for different quality analyses covering, for example, aero- and sound acoustics, noise localization, and function tests (climate chamber and hydropulser).

Another important field is that of electric/electronic analyses, e.g. e-lab testing of whole vehicles (systems) and parts using our self-built Hardware-in-the-Loop (HIL) environment simulation.

Our serial measure technology supports our press and body shop. Through whole vehicle geometrical analyses we provide help to our assembly shop and supplier quality. Our master jig does the qualification of the sheet and trim parts in the case of new vehicle projects.

### Analyses

- › Climate chamber for vehicles 35 m<sup>2</sup>
- › Wind test bench  $V_{max} = 160$  km/h
- › Vehicle hydropulser  $f=1...50$  Hz
- › Component testing in the climate chamber
- › Shock chamber with shaker
- › HIL construction
- › Semiconductor laboratory incl. CT analysis
- › Flash actions (Software)

### Master jig / Measurement programming Component qualification in master jig

- › Metal sheets
- › Trim parts
- › Geometric Vehicle Analysis Tactile / Optical
- › Virtual Reality evaluation

### Head airbag test

- › Tests with a high-speed camera
- › Evaluation

### Measurement programming for Zeiss KMGs

- › Creation of measurement programs
- › Evaluation

- | Analysis of over 1,000 vehicles from road test per year
- | Up to 1 Gbit of car measurement data per sec transferred from road test to user's PC
- | Non-stop support for production by our measurement service from May 2023
- | For 48 projects more than 1,000 measurement data files created





# Building on our expertise, we ensure competitive product and process quality and thus inspire our customers

## Corporate Quality Powertrain



**Ferenc Juhász**  
Head of Corporate  
Quality Powertrain

More than 300 direct and indirect employees work on our field to ensure that our engines are produced in the highest possible level of quality for the factories within the Group.

Our series quality assurance areas strive to respond to the quality assurance challenges arising in fields closely connected to production and development.

The pre-series teams ensure the high reliability of our engines through strict product and process qualification and subsequent audits and inspections at the suppliers.

Our analyses areas contribute to the quality of our engines by providing services for diverse activities.

The know-how and the results of all kinds of analyses are implemented in Group-wide “lessons-learned” processes.

### Technical responsibility for

- › Product and process qualification and release at suppliers
- › Measurements and laboratory tests

- › Building-up and coordinating project tracking
- › Establishment of business framework conditions for Q services with regard to Q services Group-wide

- | **Full responsibility** for powertrain quality
- | **Q-side engine qualification** for new engine types





# Our mission is to support successful market launches

## Post-production ramp-up team



**Zsolt Falvi**  
Head of Finish/Rework

The vehicle manufacturing post-production ramp-up team started its activities in 1998 at its own site, and after gaining sufficient experience, it helped the ramp-up at several other sites. We cover the entire area of vehicles (exterior, interior, tightness, repair of test drive defects, complete replacement of internal combustion and electric powertrains, flashing of controls).

Our goal in the future is to provide support to other brands of the Group, besides Audi models, at any plant of the VW Group.

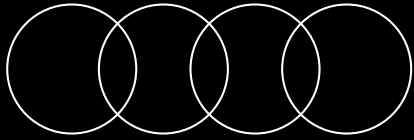


| Ramp-up support

### Post-production ramp-up team

- > 30 experts with international experience
- > 5 specialist disciplines in the ramp-up team (from high-voltage to software updates to interior)
- > 11 accompanied ramp-up (Audi, VW / ICE & BEV)
- > 4-5 sites supported internationally during ramp-ups (Ingolstadt, Győr, Brussels, Martorell, Zwickau)





# Shared Competence Center

## World's largest engine factory

The largest production  
company in Hungary

5.2 million m<sup>2</sup> | 11,957 employees

Central engine supplier within  
the whole Volkswagen Group

9,010 combustion engines / day production  
655 electric vehicle drives / capacity  
771 cars

Delivery of 10 model  
variants to 122 countries

Body parts for Audi Sport,  
AUDI AG, Lamborghini, Bentley

CO<sub>2</sub>-neutral operation since 2020

MISSION: SUBZERO

Shared  
Competence Center  
Audi Hungaria

scc@audi.hu