Digitalisation enables great change. As society faces some of its greatest challenges ever, we’ve also never had greater awareness and better opportunities to manage them. We advance data-driven innovation in both industry and the public sector. We combine expertise in AI, cybersecurity, IoT and advanced sensors with service development and user understanding.

Energy system transformation and a bio-based economy are key for a sustainable transition of both society and industry. We bring together expertise in tomorrow’s energy systems, bioeconomy, industrial energy systems, systems analysis, resource efficiency and service design. In collaboration with our customers, we develop smart power grids, renewable energy sources and biofuels along with new business models for tomorrow’s energy supply and industry.

The cities of tomorrow must be smart, integrated, circular and equipped for a changed climate. We bring together expertise and testbeds in systems innovation, IoT, construction technologies, new energy systems and sustainable infrastructure along with water and sewerage systems and mobility. In collaboration with our customers and partners, we develop solutions that contribute to robust, smart and sustainable cities and communities.

Society’s costs for healthcare and mental illness are rising sharply. At the same time, Sweden aims to retain its leading position in drug development and medical technology. We bring together expertise and testbeds in everything from social impact bonds and welfare technologies to pharmaceutical production and infection control. The goal is healthier people and a competitive Swedish life science sector.

Of all the world’s materials, today only 8.6 per cent are circular. At the same time, CO2 emissions must be reduced significantly. As a result, Sweden needs to take a leading position in the development of value-added and circular materials. We bring together expertise and testbeds in circular business models, lifecycle analysis, materials development, materials ecosystems and the materials production of tomorrow.

Climate change and urbanisation pose new requirements for sustainable and safe transport of both passengers and freight. As vehicles become connected, electrified, self-driving and shared, business models and user behaviours will change right along with them. We bring together expertise and testbeds in everything from mobility systems and ICT to electrification and manufacturing. We also pursue policy and system issues for sustainable mobility.
The five divisions

Bioeconomy and Health
The Bioeconomy and Health division has cutting edge expertise in process engineering, drug development and material and surface design. Our work involves biorefinery value chains and products and processes for agriculture, food, pulp, paper and packaging.

Digital Systems
The Digital Systems division operates in electronics, information and communications technology, software development, mobility, system analysis and interaction design. We provide solutions for all sectors, especially in areas involving digitalisation.

Materials and Production
The Materials and Production division, specialises in corrosion, chemistry, biology, medical technology and mechanics. We operate in product, production and material development for textile, polymer, composite and metal.

Built Environment
Within the division and together with our customers, we build the sustainable society through conversion to resource efficiency, climate neutrality and a robust infrastructure. We have expertise in energy, infrastructure, certification, construction and real estate as well as innovation management and system conversion. We work with materials such as wood, glass, cement and concrete.

Safety and Transport
The Safety and Transport division, specialises in reliability, risk and safety in relation to vehicles, the maritime industry, the electrification of transport system and fires. The division has expertise in measurement technology, calibration, inspection and verification.

Magnus Hallberg
Charlotte Karlsson
Pernilla Walkenström
Marco Lucisano
Paul-Halle Zahl Pedersen
Materials and Production

**departments and units**

- **Polymeric Materials and Composites**
  - Process Simulation and Manufacturing Technology
  - Composite Materials and Product Development
  - Polymeric Products and Service Life Technology
  - Polymeric Materials and Sustainability
  - Materials, Processes and Recycling
  - Structural Analysis and Modelling

- **Chemistry, Biomaterials and Textiles**
  - Biological Function
  - Chemical and Biological Safety
  - Material and Product Safety
  - Chemical Solutions
  - Textile Materials and Products
  - Fibre Development

- **Manufacturing Processes**
  - Additive Manufacturing
  - Cast Components
  - Component Manufacturing
  - Multi-Materials
  - Heat Treatment and Surface Technology

- **Product Realisation Methodology**
  - The Environment and Sustainable Chemistry
  - Production and Health & Safety
  - Product Development and SME Support

- **Corrosion**
  - Product Durability
  - Vehicles and Surface Protection
  - Infrastructure and Energy

- **Applied Mechanics**
  - Machine Safety
  - Construction and Infrastructure
  - Mechanical Reliability

- **IC Brest (France)**
- **IC Saint Etienne (France)**

**Dep. Units**

- **Chemistry, Biomaterials and Textiles**
  - Methodology
  - Corrosion
  - Applied Mechanics

- **Manufacturing Processes**
  - Component Manufacturing
  - Multi-Materials

- **Product Realisation Methodology**
  - The Environment and Sustainable Chemistry
  - Production and Health & Safety
  - Product Development and SME Support
# Safety and Transport

## Departments and units

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**Units**

- Verification South
- Verification North
- Inspection South
- Inspection West
- Inspection East
- Inspection North