SOURCE OF TEXTILE INNOVATION FOR OUR FUTURE

Protection / Defense
Security
The cluster dedicated to the French textile industry.

Nearly 300 members

Public actors
Ministries

First tiers suppliers

Laboratories
Technical centers

Major prime contractors

Industries Manufacturers

Schools
Universities

Strategic priorities

• INDUSTRY OF THE FUTURE
• CIRCULAR ECONOMY
• ADVANCED MATERIALS

Services

- Innovation
  - Emergence of ideas
  - Projects support
  - Projects labelling
  - Hosting innovation projects

- Economic development
  - Business opportunities
  - International development
  - Enhancing visibility

- Territorial development
  - Support for reindustrialisation
  - Local value chains development
  - Inter-industry development
  - Territorial circular economy strategy

Key figures

Over 270 projects financed since 2005
Over 650 M€ for an amount of

Over 300 members
Project support & industry stimulation

MONITORING & CONTROL
FUNCTIONALIZED TEXTILES
HEALTH MONITORING & DIAGNOSTICS
THERMO INTELLIGENCE
INNOVATIVE INTERFACES
ENERGY
PROTECTION
MOBILITY ASSISTANCE

Textiles for protection against

Focus
Defense

PME Tour DGA: the cluster organised, in partnership with the DGA (French Directorate General of Armaments) an event on the theme of extreme conditions with the participation of industrial prime contractors, the French ministry of armaments and industry and manufacturers in the sector.

Optitex incubator: a workshop dedicated to the emergence and incubation of concepts for defense and civil security sectors has been set up. It is the fruit of collaboration between TECHTERA and MINALOGIC (digital sector) clusters to encourage the emergence of cross-disciplinary and cross-technology projects.

Security

Centurion program: Techtera supports the French Directorate General of Armaments in setting up a multi-year project dedicated to innovations in flexible protection for combatants. Proof of concepts currently under study.

A+A trade show: Techtera supports its members at the textile industry’s leading trade show dedicated to protection, safety and health in the workplace. The event offers a comprehensive overview of processes and new materials for PPE and defense.

Cybersecurity diagnosis: As part of the EDIH Minasmart project, a turnkey solution for assessing, analyzing andremedying IT vulnerabilities of SMEs has been developed.
Some projects involving Techtera

### Defense

- **ARMETISS**: Develop a set of smart clothes and equipment integrating complementary functions based on EU end-users' needs and textile-based advanced technologies.
- **SOBLAST**: Design a modular anti-blast and bulletproof protection solution.
- **PROPTITEX**: Develop textile fibers to create fabrics capable of changing color locally in a controlled manner.
- **ISL Porcher**: Characterize and model the multiscale mechanical behavior of a fabric subjected to ballistic impact.
- **EU-ALLIANCE**: Support the internationalisation of European SMEs in technical textiles, connectivity, advanced technologies and advanced materials.
- **FOMOF**: Functionalize military and civilian absorbent membranes by integrating MOFs (Metal Organic Frameworks).

### Security / Protection

- **BIO-SUSHY**: Replace perfluorinated products (PFAS).
- **CODETEX**: Design a mobile primary decontamination facility for fire suits and equipment.
- **ETINCELS**: Provide textile solutions embedding sensors that will allow to answer to thermal-related stress situations encountered by security professionals.
- **MIROIR**: Design semi-industrial solutions for the metallisation of innovative, resistant, flexible materials; for luxury and personal protection.

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Some key partners

- **French Directorate General of Armaments**
- **Innovation Defense Agency**
- **European Defense Agency**
- **French Cluster serving SMEs in defense, security, and safety**
Markets & applications

- **FIREMEN**
  - Thermal protections

- **ARMY**
  - Camouflage clothing
  - Smart clothing
  - Ballistic protections
  - Airbags
  - Racing suits

- **POLICEMEN**
  - CBRN protections
  - HAZMAT suits

- **PILOTS IN EXTREME CONDITIONS**
  - DECONTAMINATORS
  - RESCUE MOUNTAINEERS
  - Masks
  - Gloves
  - Sensors
  - Straps - Ropes