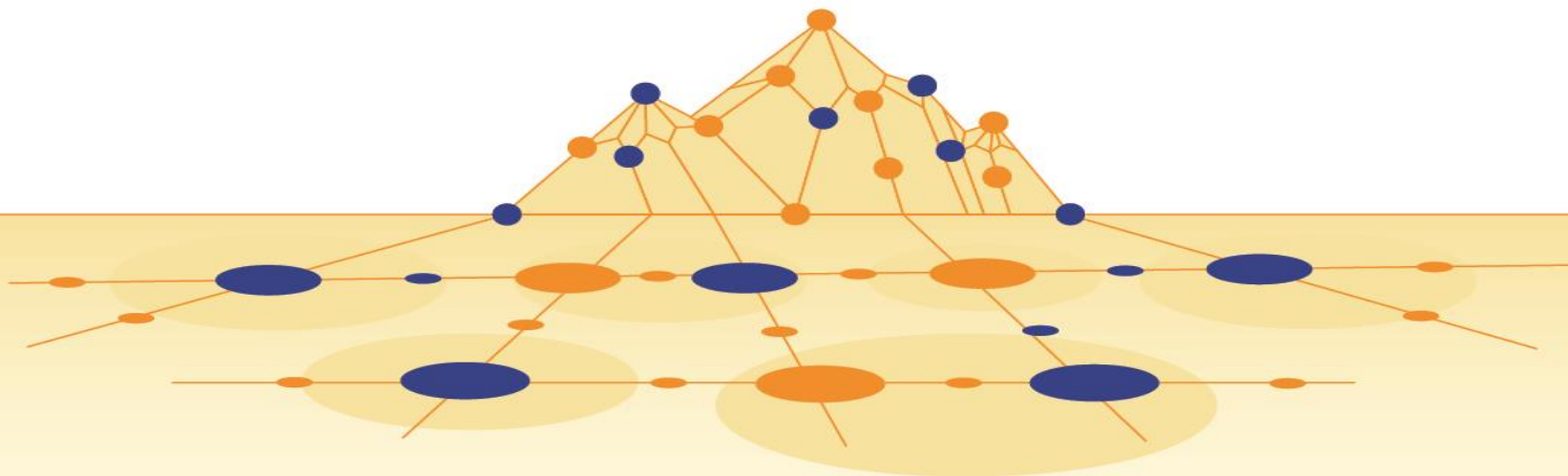


# S3-4AlpClusters

Smart Specialisation with Smart Clusters  
**StressTest**

**Training Tool**



# Smart Specialisation with Smart Clusters

In the implementation of S3 three challenges have been identified:

- Lack of real Transformative Activities to support innovation and structural transformation
- Lack of cross-regional collaborations to gain critical mass
- Need to better integrate and collaborate with clusters in S3

Smart Specialisation with Smart Clusters proposes a **systematic process** that follows **5 Action Lines** to address these challenges:

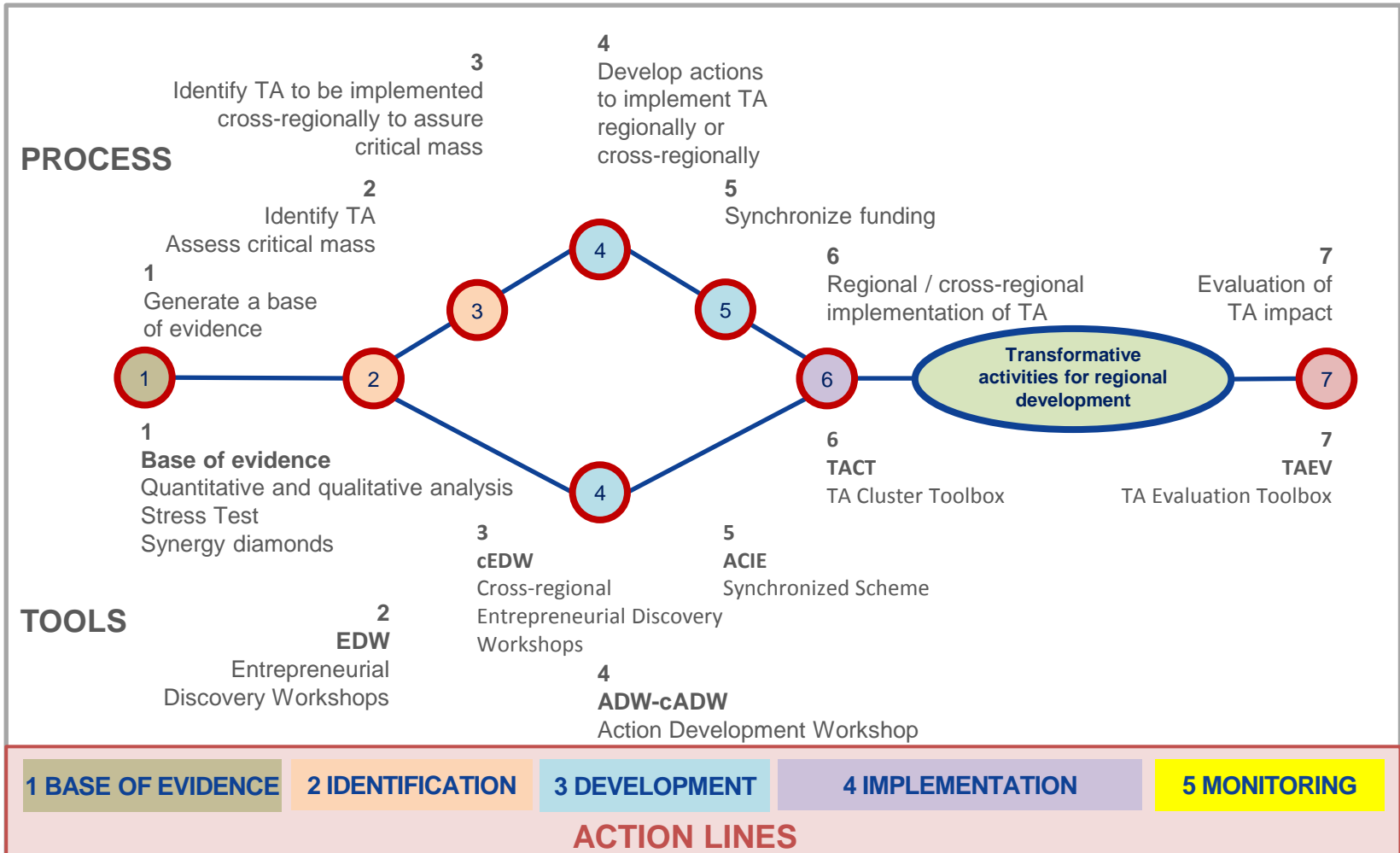
1. Provide a **Base of Evidence**
2. **Identification** of Transformative Activities
3. **Development** of actions
4. **Implementation** of Transformative Activities
5. **Monitoring**

To support the implementation of the individual process steps, **specific instruments and services** are developed. The **Training Tool Kit** provides guidance on how to implement the process and the instruments in a region.



# Smart specialisation with smart clusters

A new approach to generate Transformative Activities (TA)



# Training Tool Kit – Smart Specialisation with Smart Clusters



## 1. Base of Evidence

Qualitative & Quantitative  
Analysis

**Stress Test**

Synergy Diamond

## 2. Identification

Entrepreneurial Discovery Workshop  
regional / cross-regional

## 3. Development

Action Development  
Workshop

Synchronized Scheme

## 4. Implementation

TA Cluster Toolbox

## 5. Monitoring

TA Evaluation Toolbox



# Background

StressTest

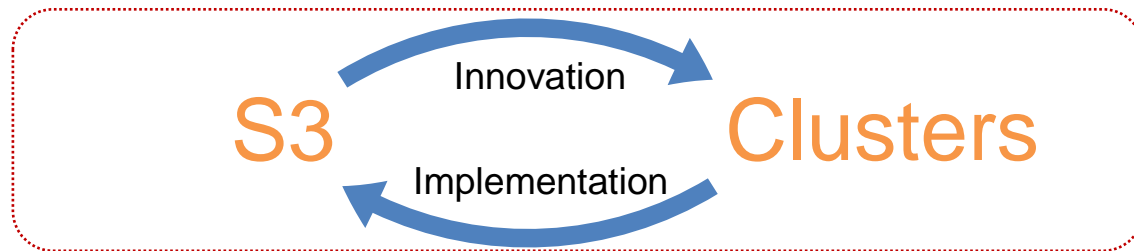


# Interplay between S3 & Clusters

The presence or the accumulation of a critical mass of entrepreneurial and innovation resources is crucial to unfold momentum and to contribute to regional development.

Therefore, local resource concentrations („**clusters**“) play a central role in S3:

- Existing local resource concentrations build a **starting point for further development** and/or transformation of regional economic structures.
- The exploration of new areas of opportunity can lead to the **creation of new local resource concentrations**.



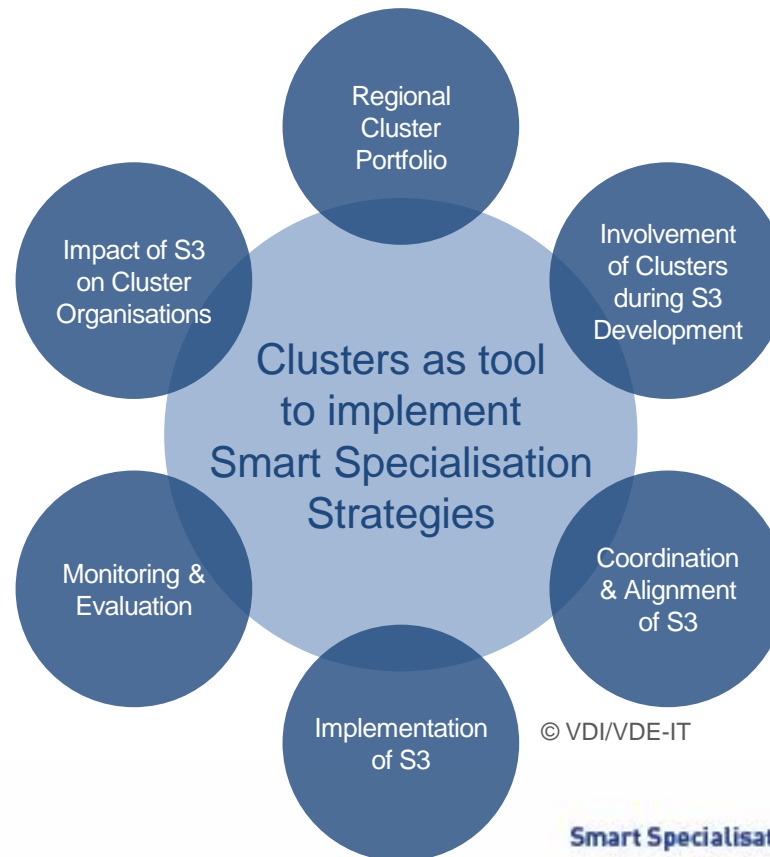
The **interplay between S3 and Clusters** implies a two-way relationship:

- 1) How can S3 be used to foster innovation processes and spark entrepreneurship within clusters?
- 2) How can clusters be used as a tool in the implementation of S3?



# Clusters as a tool to implement S3

Even though regions are different in many aspects, policy-making and the implementation process of S3 – using clusters as a tool - are nevertheless similar and follow **six key dimensions**:



# Six Key Dimensions

- **Regional Cluster Portfolio:** By a regional perspective, not a single cluster but rather the entire regional cluster landscape is of interest.
- **Involvement of Clusters during S3:** Clusters represent existing regional strengths and by actively involving cluster initiatives in the development of S3, regions can better identify their main existing capacities and needs for upcoming Transformative Activities.
- **Coordination & Alignment of S3:** S3 is not a closed process but rather benefits from complementarities with other policies and regions. Alignment enables regions to bundle resources or gain critical mass through cooperation.
- **Implementation of S3:** Implementation of S3 is the key and shall result in a spectrum of appropriate policy instruments. Clusters can contribute to S3-implementation in multiple ways, especially if recognized as a central stakeholder and tool by policy makers.
- **Monitoring & Evaluation:** Given that clusters are an important tool for S3, an adequate monitoring and evaluation system can measure cluster development.
- **Impact of S3 on Cluster Organisations:** S3 can help clusters to explore their potentials for newly emerging Transformative Activities and value chains if they are open to adapt to the idea of S3 and integrate it in their activities.





# Objective

StressTest



# Review of the status-quo of S3-implementation through clusters

StressTesting of regional approaches reviewing the implementation of S3 through clusters is a **transnational benchmarking-based learning** approach.

The StressTest has multiple purposes:

- to analyse the status quo of current policy making and S3 implementation through clusters
- to identify possible areas for improvement
- to facilitate mutual policy learning with other regions

The overall objective of the StressTest is to better understand the **role that cluster initiatives** can play in **the six key dimensions** of policy-making and implementation processes.

The results are a valuable input for a substantiated discussion on designing, improving and implementing cluster-based regional economic development policies.



# Target groups

StressTest



# Target Group

Primary target group of the StressTest is the **policy level** (policy makers or related entities in charge with development and implementation of S3). StressTesting provides high added value for frontrunner regions and less advanced regions alike.

The StressTest involves the following stakeholder groups:

- **Policy level:** Regional policy makers
- **Operational level:** Cluster managers and similar innovation intermediaries
- **Intermediate level:** Other representatives of the regional innovation system: e.g. representatives for regional development agencies, regional councils, universities, research institutions, chamber of commerce, industry associations,...



# Components

StressTest



# Stakeholder Survey

By means of an **online questionnaire** (approx. 25 questions) representatives of the three stakeholder groups are asked to provide their perspective related to the **six dimensions** of policy making in order to explore respective determinants. The questions are adjusted to the specific role of the stakeholder groups within the regional innovation system.

The survey questions address the following determinants:

Key Dimension	Determinants
<b>Development phase of S3</b>	<ul style="list-style-type: none"><li>• Role of cluster organisations during development and design of S3</li><li>• Focus of S3 on cluster, cluster organisations</li></ul>
<b>Coordination &amp; Alignment</b>	Alignment of the implementation of S3 with other policy instruments: <ul style="list-style-type: none"><li>• on national level</li><li>• of neighbouring regions</li></ul>
<b>Implementation – Use of Clusters as a tool</b>	<ul style="list-style-type: none"><li>• Practical use of clusters as tool to implement S3</li><li>• Cluster support schemes</li><li>• Alignment of demand and availability of policy instruments</li></ul>
<b>Impact of S3 on Cluster Organisations</b>	<ul style="list-style-type: none"><li>• Effects of S3 Implementation on cluster organisations</li></ul>
<b>Monitoring &amp; Evaluation</b>	<ul style="list-style-type: none"><li>• Approach to monitor cluster development according to S3</li></ul>
<b>Regional Cluster Portfolio</b>	<ul style="list-style-type: none"><li>• Capabilities of cluster organisation</li></ul>



# Indicators

Based on the responses to the questions **21 specific indicators** are calculated for the determinants. Indicator values range from “0” (worst) to “4” (best).

For an assessment of the six key dimensions **composite indicators** are derived from these 21 specific indicators.

Example for the key dimension „Development phase of S3“:

Key Dimension	Determinants	Indicators	Indicator value
Development phase of S3	Role of cluster organisations during development and design of S3	Involvement of clusters initiatives during development phase	0-4
	Focus of S3 on cluster, cluster organisations	Alignment of cluster strategies with S3	0-4
	Focus of S3 on cluster, cluster organisations	Clarity of roles and tasks of clusters given in S3	0-4
<b>Composite Indicator Development Phase of S3</b>			<b>0-4</b>

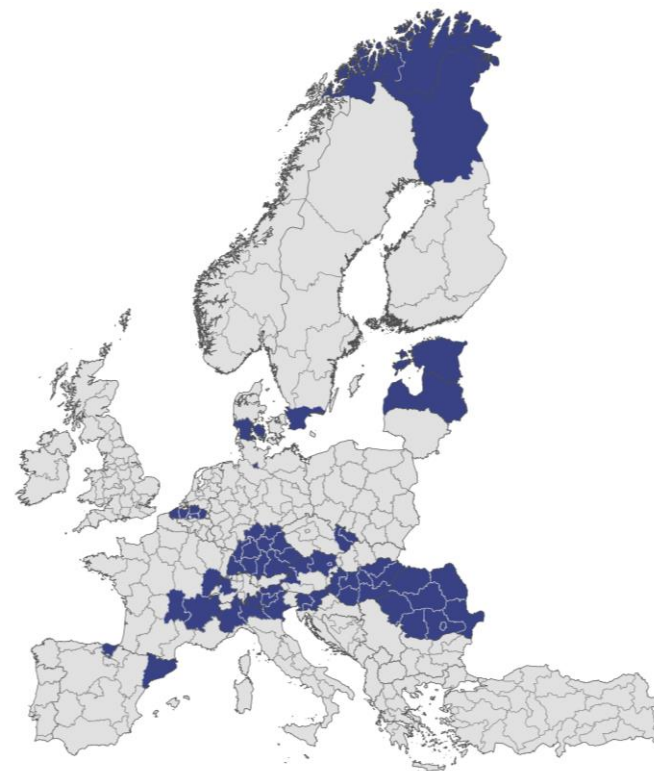
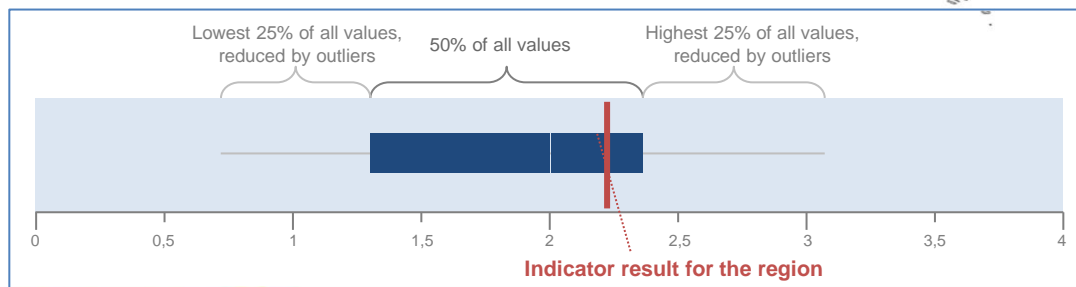


# Benchmarking

The StressTest follows a benchmarking approach and allows a **comparison** with other regions and stimulates mutual learning. The benchmarking portfolio of the StressTest currently contains **26 European regions** and is continuously increased.

The results of the specific indicators for the region are presented by **boxplots**. This display allows a comparison of the regional performance with the results of the regions of the benchmarking portfolio.

Example for a boxplot display for the indicator:  
„Alignment of cluster strategies with S3“:





# StressTest-Report

The results of the StressTest analysis are presented in a **StressTest-Report** that provides a “snap-shot” portrait of the region’s theoretical and practical approach to implement S3 through clusters and illustrates strengths and weaknesses.

The **StressTest-Report** is structured in the following **chapters**:

- Introduction
- The Context: Interplay between Smart Specialisation and Clusters
- The StressTest Approach
- **Results for the six key dimensions**
  - Introduction to the rationale of the related dimension
  - Leverage through clusters
  - Regional perspective: explanation regarding individual performance
  - Good practice case from the comparative portfolio to facilitate mutual learning
- Summary



# Policy Learning Workshop

The objective of the StressTest is to stimulate policy learning and continuous improvement. This can be achieved in an efficient way if the StressTest results discussed among the participants.

The Policy Learning Workshop is facilitated by an StressTest expert. It involves the different stakeholders and aims to better understand certain StressTest results and to identify dedicated improving actions.

The Policy Learning Workshop will cover the following content:

<b>Presentation of StressTest Results</b>	<ul style="list-style-type: none"><li>• Impulse presentation: StressTest Approach and key dimensions of the policy cycle</li><li>• Presentation of the results of the StressTest and clarifications</li></ul>
<b>Review of the StressTest Results</b>	<ul style="list-style-type: none"><li>• Interactive Discussion of the results<ul style="list-style-type: none"><li>– What are strengths and weaknesses in the interplay of clusters and S3 in the region?</li></ul></li><li>• Prioritizing areas of high immediacy for the further discussion</li></ul> <p><b>Outcome:</b> common understanding of the regional strengths and weaknesses of the interplay S3 and clusters; definition and prioritisation of areas for improvement</p>
<b>The way ahead: Definition of Fields of Action</b>	<ul style="list-style-type: none"><li>• Impulse presentation of good practices in other regions</li><li>• Interactive Discussion:<ul style="list-style-type: none"><li>– How can clusters be better integrated and used as a tool in implementing S3?</li><li>– What advantages are expected from an improved interplay – for the region, for the clusters and its enterprises?</li><li>– What fields of actions can be identified – an which level (policy/cluster)? Who needs to be involved?</li></ul></li></ul> <p><b>Outcome:</b> identified fields of action</p>



# StressTest: contribution to the process

The StressTest outputs contribute to the overall process by providing valuable insights to create a **Base of Evidence** (1. Action Line – Base of Evidence):

## StressTest Outputs:

### StressTest Report

- Assessment of the regional interplay of clusters and S3
- Benchmarking for an interregional comparison
- Good practice examples for mutual learning

Optional: **Policy Learning Workshop** to identify options for improvement

Qualitative & Quantitative  
Analysis



StressTest



Synergy Diamond

Input for:

## 2. Identification

Entrepreneurial Discovery Workshop  
regional / cross-regional



# Success Factors

StressTest



# Fundamentals

- ⦿ Strong regional commitment is key to achieve the best possible outcome of the StressTest exercise.
  - The policy level need to have a genuine interest in learning about the status-quo in all key dimensions and a willingness to improve the S3-implementation.
- ⦿ Assign a person who is responsible to coordinate the implementation of the StressTest in your region.
  - This includes identification of and continuous communication with the stakeholders involved.
- ⦿ Identify and invite sufficient stakeholders of each category to participate in the survey (at least a representative group of each stakeholder category) to achieve robust results.
- ⦿ Consider sufficient time for conducting the StressTest (2-3 months)
  - Allow sufficient time for the stakeholders to fill out the questionnaire (2-3 weeks)
- ⦿ Integrate the StressTest in an overall process for further development of the interplay between S3 and clusters.
  - The StressTest is a starting point and contributes to create a base of evidence.



# Success Factors

- ⊙ Inform the stakeholders who should participate in advance about the StressTest.
  - Invite the stakeholders personally to participate in the StressTest (e.g. via phone call).
  - Explain the aim of the StressTest and how the results are used.
- ⊙ Remind the stakeholder kindly to fill out the online questionnaire to achieve a higher response rate (e.g. via phone call or via e-mail).
- ⊙ Accompany the StressTest with a glossary that explains the most important concepts and terms used in the questionnaire.
- ⊙ Highlight the purpose of the StressTest when communicating the results.
- ⊙ Review the results of the StressTest with the stakeholders involved.
  - Invite them to contribute with their perspectives and expertise to define next steps for further improvement.
- ⊙ Conducting the StressTest on a regular basis can show progress made over time.



# Contact and further Information

StressTest



# Contact and further information

The StressTest is a service offered by the **ClusterAgentur Baden-Württemberg**.  
Terms and conditions for conducting the StressTest depend on the scope of the service.

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Youtube: <https://www.youtube.com/channel/UCXf4dSJMZiTRCSSmaEGmMNq>

LinkedIn: <https://www.linkedin.com/groups/8584656>

The training tool is based on the StressTest concept, developed by Gerd Meier zu Köcker, Mateja Dermastia and Michael Keller. Input was gathered from all project partners.

The training tool was prepared by Simone Weiss (Innovation and Technology Transfer Salzburg GmbH) in cooperation with Renate Handler and Markus Gruber (convelop gmbh).

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## S3-4AlpClusters Partners



Haute école d'ingénierie et d'architecture Fribourg  
Hochschule für Technik und Architektur Freiburg



Veneta  
innovazione



REGIONE DEL VENETO

