

Towards a RIS3 strategy



Strasbourg, December 2012 4th

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Expectations from the Peer-Review Workshop



- **Key Enabling Technologies (KETs): systemic potential to induce structural change**
 - How to identify them on the regional area ?
 - In what extent are they fundamental ? How to use them ?
 - How to identify regional skills in Europe to complement Alsatian value chain and reach critical mass, then, being attractive?

- **Cluster for regional growth**
 - Do they play the major role in the RIS3 process ?
 - What are the methods to build/to merger cross-disciplinary projects?
 - How do they evolve in the future ?

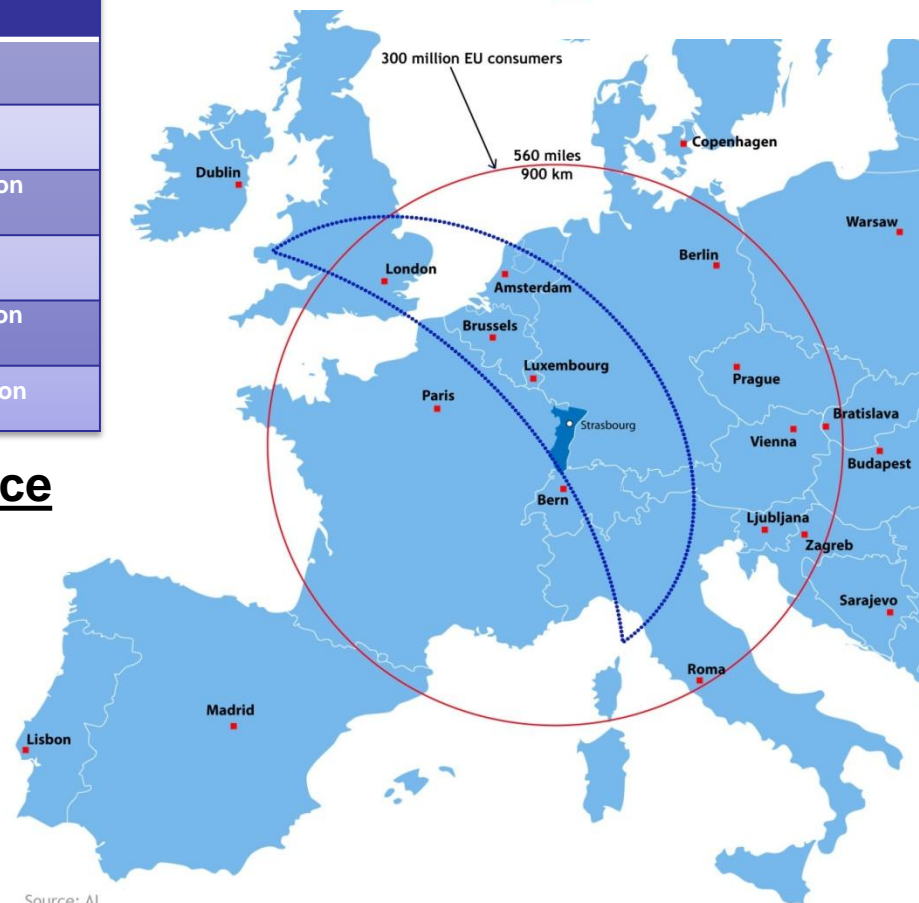
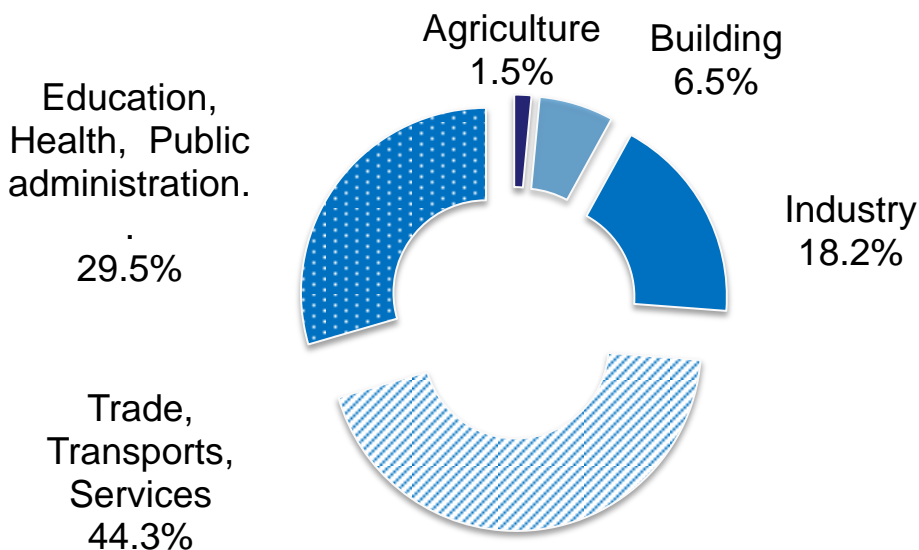
- **Innovation-friendly business environments for SMEs**
 - How to better involve civil society to build structural projects ?
 - How to create economic development with R&D projects ?
 - How to involve traditional SMEs in innovation process ?

- **Stronger focus on financial engineering**
 - Which tools ? How to mix them ?
 - How to attract private tools ?

Facts and figures

| (2010) | Alsace | France |
|------------------------------|-----------------------|--------------------|
| Surface | 8,280 sqkm | 1,5% |
| Population | 1,860,200 inhabitants | 3% |
| Density of population | 224,2 inh/sqkm | 3rd french region |
| Gross Domestic Product (GDP) | 52 076 mio Euros | 2,7% |
| GDP per capita | 27,986 Euros | 4th french region |
| Exportation per capita | 15 800 € (2011) | 1rst french region |

Share of jobs* by major sectors in Alsace



5 Competitiveness Clusters



“Alsace BioValley™”, a world-class cluster focused on the pharma, biotech and medical instruments www.alsace-biovalley.com



“Vehicle of the Future” focuses on the vehicle and mobility solutions of the future, in association with the Region Franche-Comté www.vehiculedufutur.com



“Fiber” focuses on the development of fibres (wood, paper, textile and composites) through innovative projects, together with the Lorraine region www.polefibres.fr



“Alsace EnergiVie” works on the development of energy-plus solutions in the building sector <http://pole.energivie.eu/>



“Hydreos” deals with continental water issues: pollution management, quality of water systems and water protection, in collaboration with the Lorraine region www.hydreos.fr

6 regional clusters



116 food producers, among whom the major regional players. Vocation: promote the Alsatian **food industry**, support the development of its members and encourage Alsace's economic development.



On the Biopôle place, Alsace Vitae brings together researchers, agricultural organizations, and service companies on two key themes: **vine health and wine quality and agronomy and environment**.



About 100 ICT members. To promote the use and the benefits of digital technologies, to support its members' development and to encourage Alsace's economic growth via digital technologies. Expertise: **E-marketing & web, free software, energy efficiency and information security**.



Around 40 companies representing industrial textile companies, textile schools, laboratories and research centers. Interactive interface for **innovative textile materials** and **new solutions in several market applications** (Building, Industry & Environment, Protection and Transports...).



A network that **federates eco-companies and Alsatian research specialized in environment**. To support export development, to organize participation to specific meetings (POLLUTEC) and to moderate a business intelligence platform as well as the Alsatian Eco-Companies Network Forum.



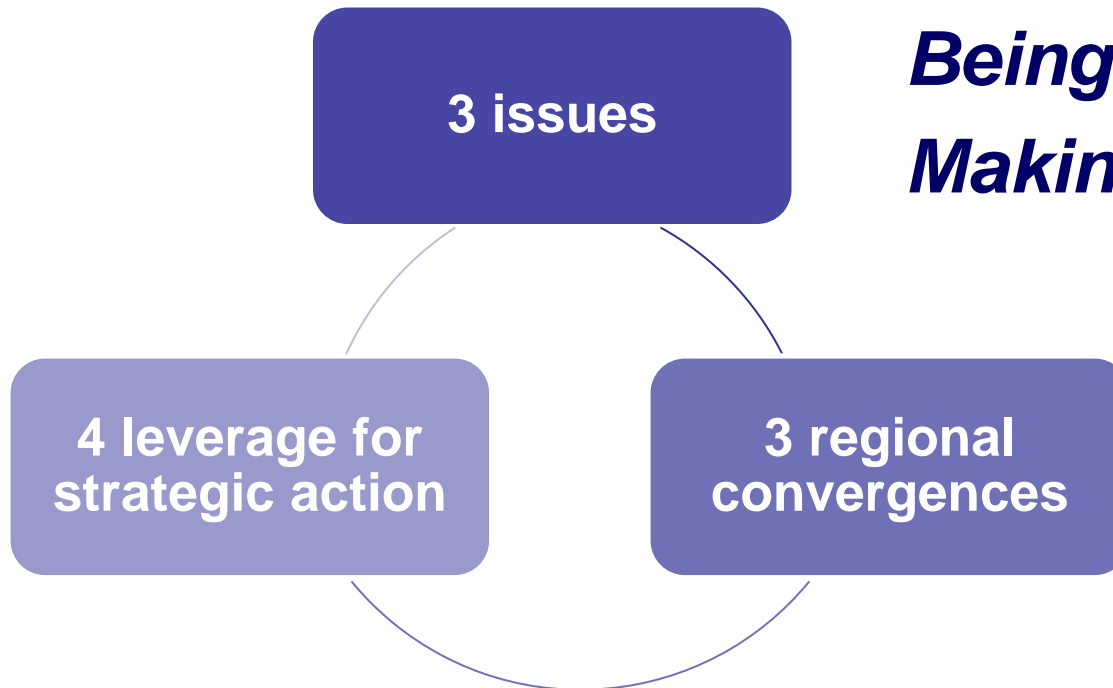
This cluster federates all the regional players in house furnishing and equipment in the sector around a common objective: **designing the specific house furnishing solutions of tomorrow**.

A favourable innovation ecosystem



- **2 universities** (University of Strasbourg, Upper Alsace University)
- **AlsaceTech** Network the 10 Alsace-based engineering schools, Strasbourg school of Management and Strasbourg School of Architecture. The network boasts over 7,500 students + **European Network of Administration and Rhine School of Arts**
- **3 national Public research center** (CNRS, INSERM, INRA)
- **SATT Conectus Alsace**: involving stakeholders in research and innovation to facilitate access to public research, technology transfer and public/private partnerships and financing proof of concept with a unique maturation funds.
- **Incubator SEMIA**: encouraging research and implementation through the creation of new businesses and of start-ups.
- **6 Regional Centers for Innovation and Technology Transfer (CRITT)**
 - AERIAL (food Industry, ionization, lyophilization),
 - CETIM-CERMAT (advanced mechanical engineering),
 - RITTMO-AGRO-ENVIRONNEMENT ("organic fertilization" industry)
 - IREPA LASER (treatment, assembly and machining of materials by laser),
 - MATERIAUX (material: from product design and improvement as far as production control),
 - HOLO 3 (optical and imagery techniques),
- + **Materials Institute Carnot Alsace (MICA)**
- **Alsace Innovation** supports and finances innovation projects deployed in Alsatian enterprises.

Research and Innovation Strategy in Alsace



Dare to innovate!
Being open to the world!
Making choices!

Research and Innovation Strategy in Alsace



4 leverage for strategic action

- Addressing culture of innovation & creativity within SMEs
- Developing the skills and capabilities of firms to carry many innovative approaches
- Promoting collaborative approaches and partnerships based on academic research (*including research driven clusters*)
- Promoting the territory, its talents, attractiveness and strengths in international (*infrastructure and innovative territories*)

3 Regional convergences

- Green Economy
- Health & Wellness
- Humanities and social issues

Place-based dimension of the RIS3



Main competitive advantages

- A diversified economy with SMEs and some leader companies (from foreign invest) with a strong industry sector (16% of regional added value)
- A critical mass in public research (7,000 public researchers)
- A well-developed and multi-disciplinary higher education environment (67,000 students)

Key challenges

- Foster the development of SMEs in medium-sized companies (between 250 and 4,999 employees, turnover between 50M€ and 1.5Bio€)
- Strengthen the industrial footprint through innovation
- Facilitate the placing of innovations on the market
- Strengthen interdisciplinary approach between emerging markets and the R&D process
- Facilitate creativity and uses approach
- Foster attractiveness of talents

Main opportunities for future regional development

- Cross-border situation of Alsace
- A favorable institutional environment (a strong governance for innovation - a national / regional cluster policy)
- 1 Bio€ (ever ten years) earmarked for Alsace for its excellence in research (national call for project "Investment for the future")
- A project for a single local authority

Main steps of the process



Jun-Nov 2012

• **DIAGNOSTIC**

- General diagnostic multi-funds 2007-2013
- RIS actions: swot analysis, issues and strategic orientations
- Evaluation of innovation actions in the Project contracts State-Region 2007-2013

Nov – Jan 2013

• **S3 DEFINITION**

- Astonishment report based on all of the diagnostics executed
- Identification of main actors (private & publics) to mobilize in the RIS3 process
- Working group (« metaproject ») based on the 3 convergences and on the tools to be strengthened or developed

Feb– May 2013

• **STRATEGIC DOCUMENT S3 ELABORATIION**

- Ex-ante multi-funds evaluation
- Definition of indicators of impact and evaluation score board (index)
- Innovation Advisory Committee Consultation
- Validation of the RIS3 document by the Steering Comittee of Innovation Strategy

RIS diagnostic :

Main analysis of the 4 leverage issues

| Leverage issues | Strengths/Opportunities | Weakness/Threats |
|--|---|---|
| 1st : Addressing culture of innovation & creativity within SMEs | <ul style="list-style-type: none"> - Institutional actors mobilized - A favourable situation to promote innovation | <ul style="list-style-type: none"> - No place to develop creativity and difficulty to measure the impact in companies and civil society - Difficulties to measure company needs |
| 2nd : Developing skills and capabilities of firms to carry many innovative approaches | <ul style="list-style-type: none"> - A simplified innovation ecosystem and financial tools in line with companies needs - National policy reflexion in favour of innovation | <ul style="list-style-type: none"> - Few impacts of the innovation process on the territory - Less and less diversified regional economy |
| 3rd : Promoting collaborative approaches and partnerships based on academic research | <ul style="list-style-type: none"> - Regional clusters policy and 50% increase of the R&D private investment - New infrastructures through the national call for projects "Investment for the Future" | <ul style="list-style-type: none"> - Lack of business managers to develop innovation projects and low impact of the collaborative projects on markets - New role for Alsatian competitiveness clusters has to be defined |
| 4th : Promoting the territory, its talents, attractivity and strengths in international | <ul style="list-style-type: none"> - Excellence in Chemistry and Life Sciences Research (2 Nobel Prizes) and dynamic specific transfer actors - 1st French Life science campus (after Paris region) | <ul style="list-style-type: none"> - This new deal has to cope with public expenditure decrease and to build on the high attractiveness of Upper Rhine region - More and more fierce competition between European regions |

RIS diagnostic :



Main analysis of the 3 regional convergences

| Convergences | Strengths/Opportunities | Weakness/Threats |
|-------------------------------------|---|---|
| Green Economy | <ul style="list-style-type: none"> - Action plan to support eco-technologies and the 4 competitiveness clusters involved in this field - Alsatian market is aware of eco-design | <ul style="list-style-type: none"> - Individual and collaborative know-how has to be developed - Regional economy needs to be specialised |
| Health and Wellness | <ul style="list-style-type: none"> - A lot of infrastructures in life sciences and A well developed wine sector - Alsace is well-perceived at international level | <ul style="list-style-type: none"> - Few connections between sectors and low RDI process in food sector - Fierce competition in these sectors |
| Humanities and social issues | <ul style="list-style-type: none"> - A cross border region which has developed an open vision - A high development potential | <ul style="list-style-type: none"> - A low implication of human sciences in innovation process and too small sized Companies to support innovation process - An convergence that has to be defined and structured (Social economy, ICT, creativity ...) |

Looking beyond Your Region's boundaries



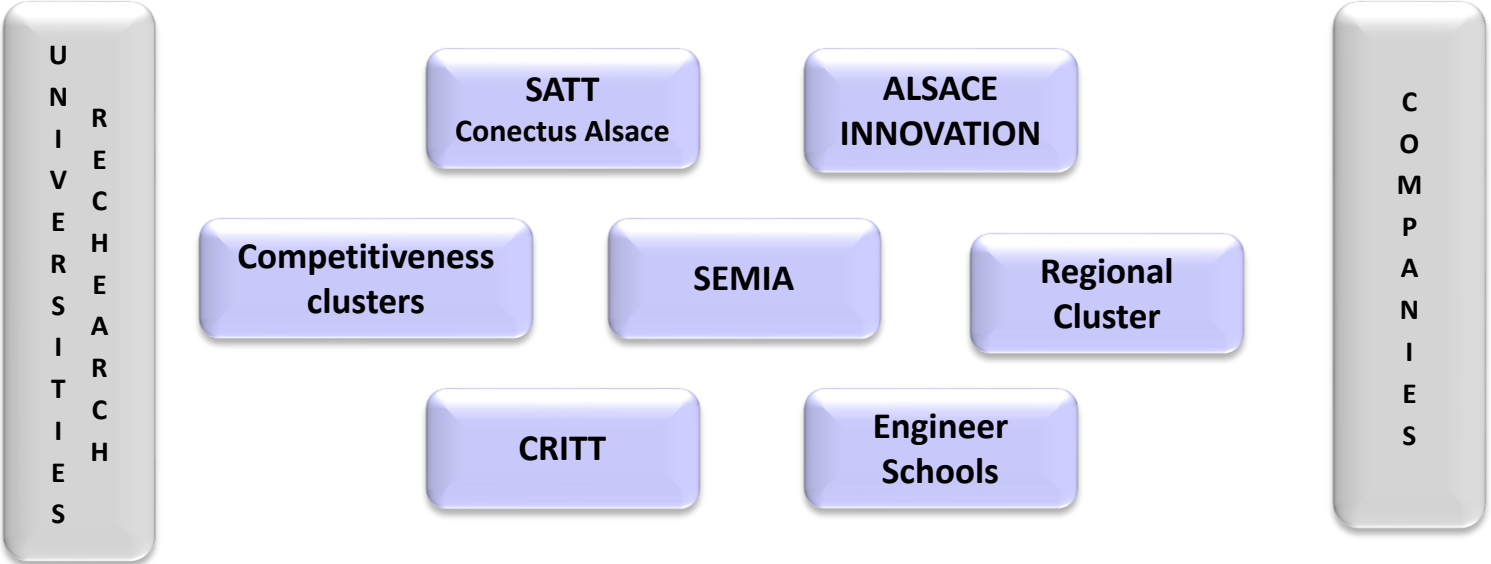
- **Regional innovation diagnostic and strategy in 2008**
 - Comparaison with 5 other European regions (Piemonte (I), West Midlands (GB), Upper Austria (A), Flanders (B), Basque Country (SP))
- **Cluster and research cooperation**
 - Alsace Biovalley (trinational, ABC Europe, CQDM/ABV), Vehicle of the Future (S_Life, ELMO's), EnergiVie (Trion),
 - 3 cross-regional competitiveness clusters (VdF, Fiber, Hydréos)
 - Trinational neurosciences network Neurex
 - Worldwide institute IRCAD (France, Taiwan and Brazil)
 - University of Strasbourg (member of the League of European Research-based Universities)
- **Upper Rhine Metropolitan Region**
 - "Science Offensive" – the first trinational funding instrument for cross-border flagship research projects
 - Trinational Metropolitan Region of the Upper Rhine (with a "Structural Science Pillar")
 - Upper-Rhine University EUCOR
- **Tools to develop cooperation between regions**
 - 3 ERA-NETs: EuroTransBio, CrossTexNet, Lead-Era
 - INTERREG projects, Fulbright programme (USA), regional cooperation (Quebec, Lower-Silesia,...)
 - Benchmarking with European region in S3 process



STRATEGIC LEVEL
Validates strategy, grants funding + evaluation, communication and prospective



MANAGEMENT LEVEL
manages and coordinates actions of Alsatian actors of innovation



OPERATIONNEL LEVEL
Implementation of the projects



14
MISSIONS

Governance & Implementation



- **Project Group S3 in coordination with the Operational Committee**
 - Validation of the Alsace Region steering in partnership with the State through the Steering Committee of the Innovation (July 2012)
 - Role: Realization of diagnostic RIS actions, implementation planning, elaboration of the S3 strategic document, articulation with the governing bodies of the innovation (Operational Committee, Advisory Committee)
 - Participants: State, Region, Consular chambers, University
- **Implementation of the RIS3 based on the current RIS governance**
 - Engaging relevant actors throughout « meta-projects »
 - Use S3 process to develop the « quadruple helix »
 - **Budget**
 - Regional innovation budget between 2007/2011 (State, Region, Oseo) : around 37 M€ per year + 9 M€ per year for ERDF
 - Policy mix with ERDF, INTERREG, Era-Nets, ESF (?), EAFRD (?), CPER (?)
 - 100 M€ equity investment for regional companies

Entrepreneurial dynamics



- Assessing entrepreneurial dynamics
 - RIS : two complementary approaches : state-region participation based on common diagnostic and a participatory approach built on working groups of 60 “civic entrepreneurs” engaged in everyday innovation but ...
 - “Marque Alsace”: 500 stakeholders implicated in the brand initiative
 - Around 600 companies involved in the competitiveness and regional clusters: “fertile ground” for mobilisation
 - Around 500 companies subsidized by public funds
 - Entrepreneurial networks (ETENA, OCRE)
 - ***Weak connection between entrepreneurial dynamics and strategic orientations (top-down approach)***
- Involvement of entrepreneurial actors :
 - “Meta-projects “ with project manager assistance which will include stakeholders from the 3 convergences
 - Reinforce both top-down/bottom-up pushes through the Operational committee
 - ***How to underline the added value of entrepreneurial actors ? With which tools ?***

Digital Growth Priorities

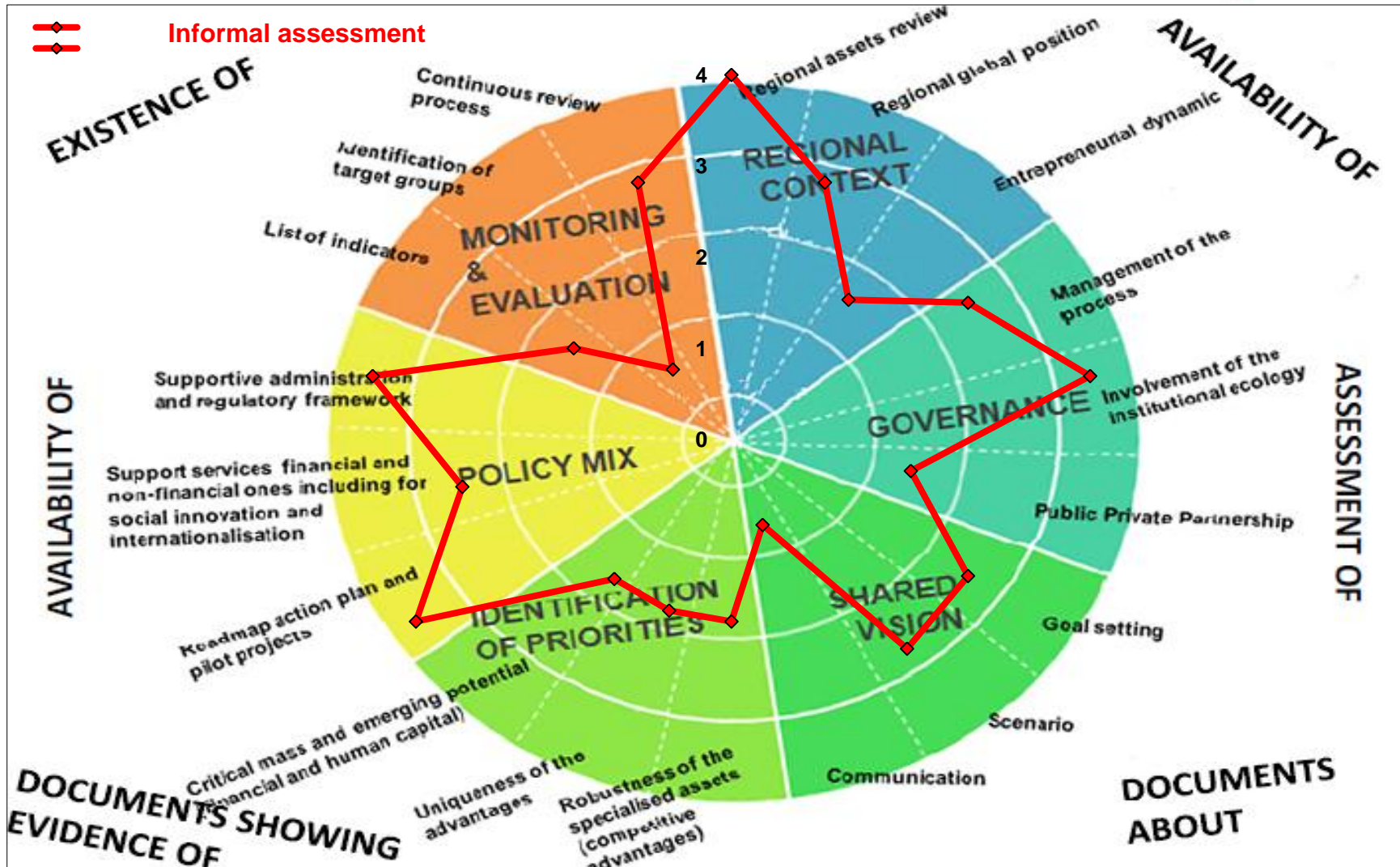


- SWOT analysis:
 - Small and diversified companies
 - Reinforce skills and learning
 - Indicators link with the European strategy (infrastructures, skills) and regional context (turnover Alsatian companies).
- A framework agreement on “numeric economy” 2012-2014 signed between Regional Council and Regional Council Chamber.
- Including some actions with an identified budget (SDAN-Infrastructure, financing engineer schools)
- Technologies and uses: internet of things, digital ubiquity, open source, e-business, new process, social organisation

Measuring the progress

- Current state: index, Operational Committee scoreboard
 - *only indicators of achievement*
 - *objectives to be redefined*
- What about the impact indicators? (which tools?)
- Analysis of the perceived value (qualitative surveys)

Alsace self-assessment



Summary and next steps



Work with external experts

(november 2012 / may 2013)

- CE expert (D. Foray)
- platform S3
- Project manager assistance

Mobilisation of the regional stakeholders

(january / may 2013)

- Wokgroups (“metaprojects”)
- Seminar
- Advisory Committee
- Strategic Committee

RIS3 document writing

(march / may 2013)

- By regional technicians
- In coordination with ERDF Operational Program

Thank you for your attention!

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