Towards a RIS3 strategy for:  
Wallonia

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Outline

• Expectations from the workshop
• Regional profile
• Walloon innovation policy: overview
• Place-based dimension of the RIS 3 – SWOT
• Specialisation: critical mass and priorities
  – Industrial, innovation and R&D policies
• Entrepreneurial process of discovery: the case of Competitiveness Poles policy
• External context
• Governance
• Measuring the progress
• Summary and next steps
Walloon expectations from the Peer-Review Workshop

• Which issues?
  - Peer validation of Walloon RIS 3 and guidance to go further.

• Which concerns?
  - As RIS 3 concept is based on well-known concepts as clustering, … Is the demonstration of a pre-existing strategy which integrates basic principles of S3 will be sufficient to fullfill the ex-ante condition? How will DG REGIO appreciate this ex-ante condition?
  - Cohesion policy: how to integrate in the implementation of the concept its multidimensional approach, which must take into account technological and industrial dimensions?
  - Horizon 2020: How to avoid an European divide between “leaders” regions and the others? The excellence criteria must apply to innovation actors and projects, not to regions.
  - ROK: What are their role and place (modalities) within the Cohesion Policy?
Introduction: Wallonia – Regional profile

Institutional context

- Belgium, federal state: 3 regions, 3 communities
- The regions are autonomous and have exclusive competencies: economy, territorial development, research and innovation, learning, employment, agriculture, public works and transport, environment, external relations, energy and water,...
  - Legislative power (decrees)
  - No subordination links between levels of power
  - Own institutions (Parliament, Government) and own administrations
Introduction: Wallonia – Regional profile

- **Population**: 3,5 mios inhab., extension 16 844 km2, density: 207,69 inhab./km2.
- **GDP per head**: 86% (2009) of the EU27 average (Belgium : 118%).
- **Unemployment rate**: 11.2% (2011) – (Belgium: 7.6%, Eurozone: 9.9% - April 2011).
- **Industrial sector**: 23.3% of the regional GDP (2009) – (Belgium : 21.7%, UE 27: 24.4%).
- **Service Sector**: 75.8% of the regional GDP (2009) – (Belgium: 77.6%, UE 27: 73.6 %).
- **R&D**: 2.22% of GDP as R&D expenditure (2010) – (Belgium: 2.03%, UE 27: 2.01%).
- **High level of education**: 30.2% of the population from 24 to 64 years old has university or graduate school degree.
- **Economy base largely composed of SME’s**, but low level of entrepreneurial spirit
- **Small open economy**: Export amount to 50% of GDP (2010, Belgium : 59%)
Wallonia – Innovation policy strategy

- **Background:**
  - 1994-1999: **Structural funds**: regional innovation strategy development through European Structural Funds programming
  - 1999: **Walloon contract for future**: First integrated regional development strategy, coordination of all Walloon innovation stakeholders.
  - Since 2009: **Marshall Plan 2.Green**: Continuation and reinforcement of the first Plan, with up-to-date priorities.

  ➔ **Progressive building of an integrated and shared strategy**, based on synergies and networking between actors and policies: industrial and RDI policies, training and education, employment, infrastructures + integration of the ‘green’ dimension.
Wallonia – Innovation policy strategy

**Main steps for implementing the Walloon RIS 3 Marshall Plan (2006-2009)**

- **Objectives**: Create more enterprises, more competitiveness and more attractiveness, strengthen the economic base
- **Targeting of actions and resources** on priority sectors, holders of innovation and added value
- **5 priority axis:**
  1. To create competitiveness poles (280 million €)
  2. To stimulate the creation of activities: (872 million €)
  3. To reduce and remove some taxes on companies at local level (147.3 million €)
  4. To promote research and innovation, in close linkage with enterprises (150 million €)
  5. To improve the skills of the workforce (160 million €)
- **Results**: 11,000 enterprises beneficiaries, 27,000 direct jobs created, 115,000 people trained, 1,250 new researchers
Wallonia – Innovation policy strategy

**Main steps for implementing the Walloon RIS 3**


- **Continuation and reinforcement of the first Plan, with up-to-date priorities**:
  - New challenges and opportunities: climate change and greening of the economy, globalisation
  - Europe 2020 Strategy
  - Stronger synergies between regional and community (education and learning) priorities

- **Budget**: 2.75 billion € (additional to regional « recurring » budget);

- **6 priority axis**:
  - **Human capital**, an asset to develop (337 million €)
  - **Competitiveness poles and business networks** : a success to amplify (388 million €)
  - **Strengthening scientific research** as an engine for future development (142 millions €)
  - A favourable framework for **creating businesses and quality jobs** (592 million €)
  - **Employment-Environment Alliances** : a new strategy for the future (879.6 million €)
  - **Mixing-up employment and social welfare** (422 million €)

**+ 2 transversal dynamics**: public governance efficiency and sustainable development in public action
Wallonia – Innovation policy strategy

- **The Walloon Government** is the relevant regional authority responsible for regional economic development and RD&I policies.
- Mainly developed through **Competitiveness Poles and clusters** in strategic economic sectors.
Place-based dimension of the RIS3 - SWOT

a) Walloon competitive advantages

- **Open economy**: good export dynamism and high level of attractiveness for foreign investors (central position in EU, quality of infrastructures, land availability, ...).

- **Region with strong industrial tradition** (steel/metal, machine-tool, glass, coal mining).

- **A consolidated cluster associations network**. For developing innovation and key industrial sectors in Wallonia and fostering cross-sectoral approach.

- **Significant scientific basis and R&D expenditures** at the European level (2.22% of GDP as R&D expenditure -2010). The knowledge spill-over is a significant one, namely as regards the capacity of private sector to mobilize resources for research.

- **Increasing importance of service sector** based on industrial activity and knowledge intensive activities.

- **Deep involvement of higher education in research activities.**

- **High level of labour productivity, high level of education.**

- **Relevant results in global high technologies niches markets**: double concentration of research activities: (1) high technologies niches (mainly in the pharmaceutical and aeronautic sectors) – 40% of R&D expenditures of the companies; (2) large companies with more than 1000 employers.
**b) Walloon key challenges**

- **Stimulating growth rate and job creation, process of industrial reconversion to complete**
- **Reinforcement of the innovation valorisation capacity**: Walloon innovation rate slightly superior of the EU-27 average but
  - Decrease of the technological innovation rate, namely in the manufacturing industry.
  - Marketing innovation rate lower than EU 27 average.
  - Risk that Walloon R&D performances are dependent on decisions of a limited number of multinational companies (large innovative companies). The number of successful high-growth SMEs in Wallonia is too low.

- **Deepening the Human Ressources capacity**:
  - Difficulties to improve further the research environment to attract more high quality researchers.
  - Underutilized “training” aspects.

- **Mobilisation of private expenditure in commercialisation of R&DI.**

**c) Main opportunities for future regional development**

- **Development of niches markets in the context of the global value chain**: Through the 6 Walloon Competitiveness Poles, Wallonia has relevant results in global **high technologies niches markets** (mainly in the pharmaceutical and the aeronautic sectors).
Place-based dimension of the RIS3 - SWOT

c) Main opportunities for future regional development

Industrial structure – sectorial growth

relevant results in high technologies niches markets (mainly in pharma)
**Specialisation: Critical mass and priorities**

**Industrial policy: cluster and competitiveness poles**

- Mainly developed through clusters and Competitiveness poles policies.

<table>
<thead>
<tr>
<th>Clusters policy</th>
<th>Poles policy (Marshall Plan)</th>
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<tbody>
<tr>
<td>• Launched in 2001</td>
<td>• Launched in 2005</td>
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<tr>
<td>• 9 clusters / large sectoral scope</td>
<td>• 6 poles / 6 identified priority sectors</td>
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<tr>
<td>• SME’s oriented</td>
<td>• Large companies, technological SME’s, research units and training centers</td>
</tr>
<tr>
<td>• +/- 1.000 members</td>
<td>• +/- 650 members</td>
</tr>
<tr>
<td>• Obj: networking and innovation throughout the whole economy in Wallonia</td>
<td>• Objective: turning into European leaders in these 6 sectors</td>
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</table>
Industrial policy: cluster and competitiveness poles

• Cluster initiatives are seen as political tools for implementing well-developed eco-systems (with a focus on SMEs strategic change and business environment improvement), for detecting innovative projects and new innovation methods and for fostering cross-fertilisation among different industries.

• **Triple helix approach** (Business – knowledge – training centres) + Government. All these parties cooperate and establish links to increase overall regional competitiveness. Focusing on the competitive strategic challenges.

• A cross-sectoral approach.

• A mix of top-down/bottom-up approach.

<table>
<thead>
<tr>
<th>Fields</th>
<th>9 business clusters</th>
<th>6 competitiveness clusters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility &amp; Transport</td>
<td>Logistics in Wallonia</td>
<td>Logistics in Wallonia SkyWin</td>
</tr>
<tr>
<td>Environment &amp; Sustainable</td>
<td>VAL+ (= solid waste)</td>
<td>GreenWin</td>
</tr>
<tr>
<td>Development</td>
<td>Eco-building</td>
<td></td>
</tr>
<tr>
<td>Food Health</td>
<td>TWEED (= sustainable energy)</td>
<td></td>
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<tr>
<td>Transversal technologies</td>
<td>ICT</td>
<td>WagrALIM</td>
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<td></td>
<td>PlastiWin</td>
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<td></td>
<td>Photonics</td>
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<tr>
<td></td>
<td>TWIST (= image, sound &amp; text)</td>
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<td></td>
<td>MecaTech</td>
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</table>
Specialisation: Critical mass and priorities


Objectives

• Pursue efforts to raise R&D budgets ⇒ co-operative applied R&D, excellence programmes in Universities, Public-Private Partnerships, support to SMEs, infrastructures and technology parcs

• Excellence in scientific research and support to human capital in R&D

• Researchers carriers and support to insertion in international networks

• Definition of a common research strategy for Wallonia and Brussels with a focus on 5 target markets for the future, linked to societal challenges and Competitiveness Poles:
  – sustainable development,
  – renewable energies,
  – quality and length of life,
  – health,
  – key technology domains.
Entrepreneurial process of discovery

**Walloon Competitiveness Poles**

Marshall Plan: The university study of Henri Capron

• On the basis of the university study of HENRI CAPRON (2005 - Free University of Brussels), sectors in which the Region has a high innovative potential were identified:
  - Life Sciences and health,
  - the Agri-Food Industry,
  - the Aeronautics and space Industry,
  - Mechanical Engineering,
  - Transport & Logistics.

• **36 indicators were gathered in 8 main categories:** Economic basis (1) and its evolution (2), Technological base (3) and its evolution (4), Scientific base (5) and its evolution (6), the state of the redeployment process (7) and the prospects for the development of the strategic assets (8).

• **Scientific basis:** analysis of regional potentials and development perspectives.

• Moreover, The potential projects are analysed by an independant and international Jury of experts. By this way, the strategy of clusters is continuously evaluated and involves a specialisation of certain themes of the key sector (niche markets).
Entrepreneurial process of discovery

**Walloon Competitiveness Poles**

**Marshall Plan 2.green:**
- Complementary study of Henri Capron to develop a “green Pole” => in the field of sustainable chemistry and materials

For each sector, call for projects to constitute a Competitiveness Pole

The 6 sectors considered as essential for the regional economy:
Entrepreneurial process of discovery: Creating spaces for connection and exchange of knowledge

**Walloon Competitiveness Poles**

**Call of proposals: a public/private partnership**

- **Competitiveness Poles**: calls for projects launched by the Government (public leadership).
- The strategy of Competitiveness Poles (niche markets and technology fields) is defined by industrials and scientists which are also responsible of the management of Poles (private leadership). The government is present in the poles only through the intermediary of observers in charge of verifying that the philosophy of the poles as defined by the government is implemented.
- Internal calls for projects are launched and selected by an internal jury and the Governance Council of the Competitiveness Pole.
- Checking of the eligibility of the projects by the relevant administrations.
- The quality assessment of projects is entrusted to the international jury.
- On the basis of the opinion of the jury, the government labels the relevant projects and allocates the financial means.
Walloon Competitiveness Poles
Priorities and budgets

Marshall 1.0 (2006-2009):
- budget « pole » of 280 million €

<table>
<thead>
<tr>
<th>Identify sectors in which Wallonia has a leading edge on an European basis (or even global) and focus significant resources on those sectors</th>
</tr>
</thead>
</table>
| ➢ Public investments in common
  | assets: structures, equipment,… |
| ➢ Support to export |
| ➢ Investment projects |
| ➢ Training projects |
| ➢ Foreign investments attraction |
| ➢ Research projects |
| + financing of the animation structure of the Poles |

- Budget « pole »

- Budget of 388 million €
  - R&D, training and investment projects: 280 million €
  - Public investments in common assets: 65 million €
  - Support to export: 20 million €
  - Foreign investments attraction: 15 million €
  - Animation structure: 8 million €

- Creation of a sixth Pole in February 2011: new environmental technologies
- Seventh call for projects launched in January 2011
- Adoption of a new clustering decree
The external context, national/international

- The different plans foresee important supports to open up the economy and the RDI System:
  - The priority of “open economy” within the Marshall Plan 2. green
  - International initiatives within the Walloon research strategy 2011-2015

1) International dimension through Walloon Competitiveness Poles

- The main objective of this policy is to develop some key growth sectors on the basis of strong partnerships projects between enterprises, research centres and training centres.

<table>
<thead>
<tr>
<th>3 OPERATORS CATEGORIES</th>
<th>3 CENTRAL FACTORS</th>
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<tbody>
<tr>
<td>Enterprises</td>
<td>Partnerships</td>
</tr>
<tr>
<td>Research units</td>
<td>Setting up of joint innovative projects</td>
</tr>
<tr>
<td>Training centers</td>
<td>International visibility</td>
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</table>

- Clusters/poles initiatives = a market intelligence tool to detect trends in business models
- For developing international linkages, each pole recruited a sectoral expert (AWEX – Walloon Export and Foreign Investment Agency) with a view to developing an international promotion strategy for the Competitiveness Pole.
- Potential projects are analysed by an independent and international Jury of experts.
- Focus on societal challenges in front of globalisation.
- Participation to RDI European programmes: FP7 (RoK), CIP (Europe INNOVA/Innovation Express) and Interreg projects.
- Promotion of partnerships (in R&D projects, internationalisation) through specific grant programmes
The external context, national/international


• Specific initiatives are dedicated to international activities (External Knowledge):

  – Circulation of Ideas: 5 millions €/yearly are dedicated to support high-level research infrastructures. It allows research teams to involve in the strategic plan of ESFRI.

  – Mobility of researchers: launching “First international” tool (2011).
    • Funding of 10 assignments for Walloon researchers.
    • Providing them with training in emerging technologies
    • Gaining an international partnership experience through a minimum 6 months training period abroad.
3) International benchmarking and comparison of key indicators

• The analysis of the competitive position of the Walloon RIS are based on several international peer-reviews studies:
  - The international indicators of the “Bureau Fédéral du Plan”
  - Study of Henri Capron
  - European good practices
  - The OECD peer review study (in progress)
  - The industrial prospective analysis managed by IDEA Consult.Ltd (in progress).
Governance
Wallonia – Regional governance structure

- **Walloon government** is the relevant regional authority responsible for regional economic development and RD&I policies:
Measuring the progress

a) Monitoring and evaluation of Marshall Plan
   - Permanent monitoring by the Government
   - Independent evaluation by Evaluation institution
   - Evaluation of specific policies (ex post evaluation of R&D projects, clustering policies, ...)

b) Competitiveness Poles calls for proposals: results (2006-2011)
   - 7 calls for projects, 225 projects selected
   - Public budget of 432 million €
   - Expected creation of more than 10,600 jobs
   - Mostly R&D projects (144 out of 225 for an amount of 375 million €)
   - Mobilisation of a large number of operators
   - Growing involvement of SME’s as calls for projects
   - 8th call for proposals is currently launched

c) Several international peer-reviews studies
Summary and next steps

• Since early 2000’s, Wallonia have been building an integrated innovation strategy closely linked to its industrial policy and including basic principles of S3.

• Walloon Competitiveness Poles and clusters play an important role in that context.

• On going process, with still important (new) challenges to face and improvements to bring (on basis of evaluation):
  – Better leveraging of complementary research and innovation assets (through cross-fertilisation, KET, internationalisation).
  – Moving from collaborative research projects to a real commercial exploitation of the research results
  – To strengthen the international business activities and the international capability of SMEs: Global Value Chains.
  – To reach smaller and rather non-innovative companies and include them into strategic action.
  – More young, innovative companies are needed to transform to support the transformation to a greener, sustainable economy.
Summary and next steps

- Reflection in development, building on recent EU orientations (Industrial and Innovation flagship initiatives):
  - OECD peer review
  - Prospective study on industrial policy and value chains
  - (Coming): strategy for structural funds programming 2014-2020
- Importance of EU support programmes to complete and consolidate regional tools and strategies and foster integration of regional actors in EU and global networks:
  - Industrial and innovation policy tools
  - Financial instruments
  - Horizon 2020
  - Structural Funds
  - Regions of Knowledge
  - Clustering policy
  - ...

!!! Articulation between programmes, access for regional actors and clusters
Thank for your attention!

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