

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



Wallonia expectations from the Peer-Review Workshop



- Which issues?
 - Peer validation of Wallonia 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 fulfill 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.
 - 2006-2009: **“Marshall Plan”**: Competitiveness and Innovation Program targeting actions and resources on priority sectors, holders of innovation and added value.
 - 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

Marshall Plan 2. Green (2009-2014)

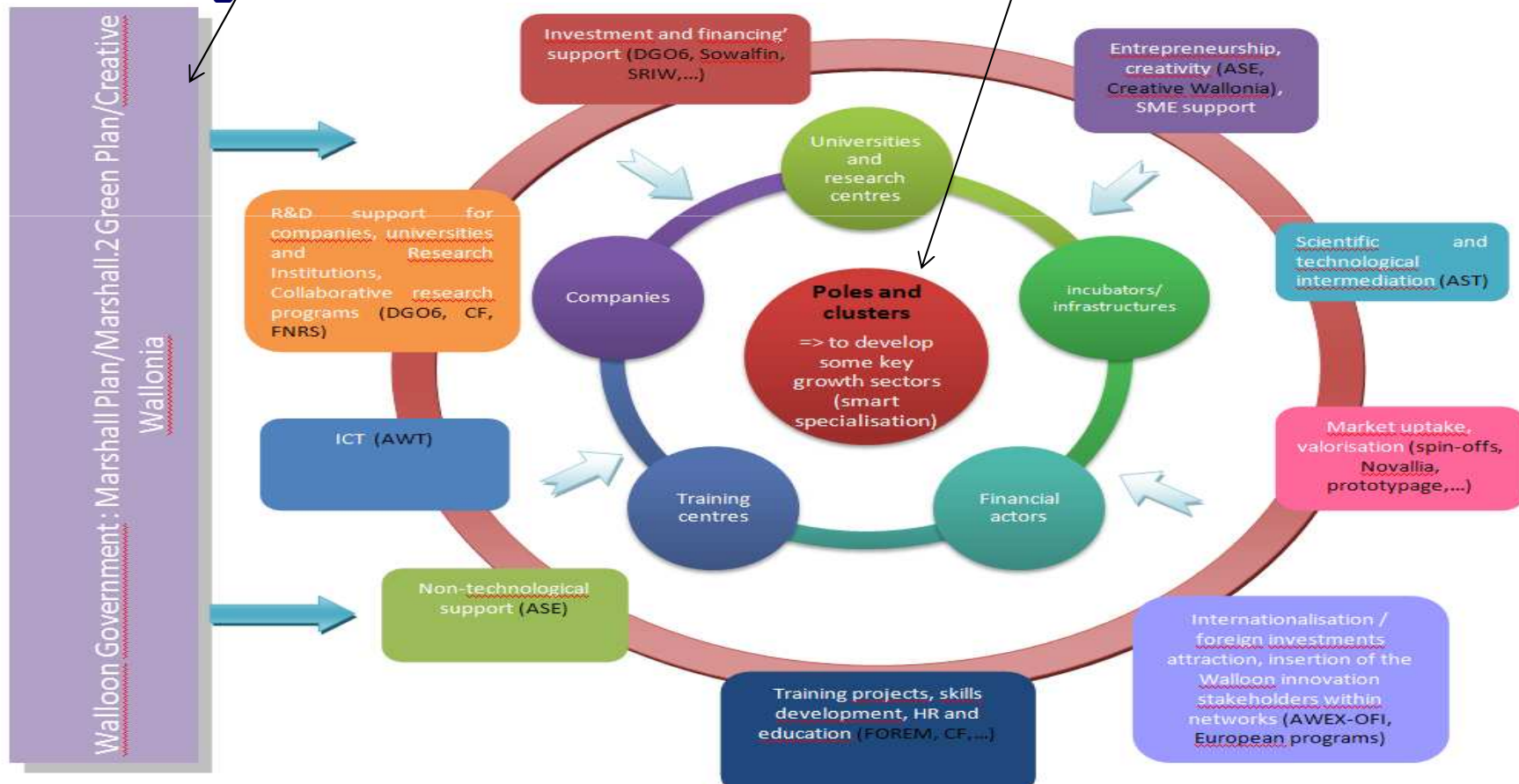
- **Continuation and reinforcement of the first Plan, with up-to-date priorities :**
 - New challenges and opportunities: climate change and greening of the economy, globalisation
 - Europe 2020 Strategy
 - Stronger synergies between regional and community (education and learning) priorities
 - **Budget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

Place-based dimension of the RIS3 - SWOT



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 :**

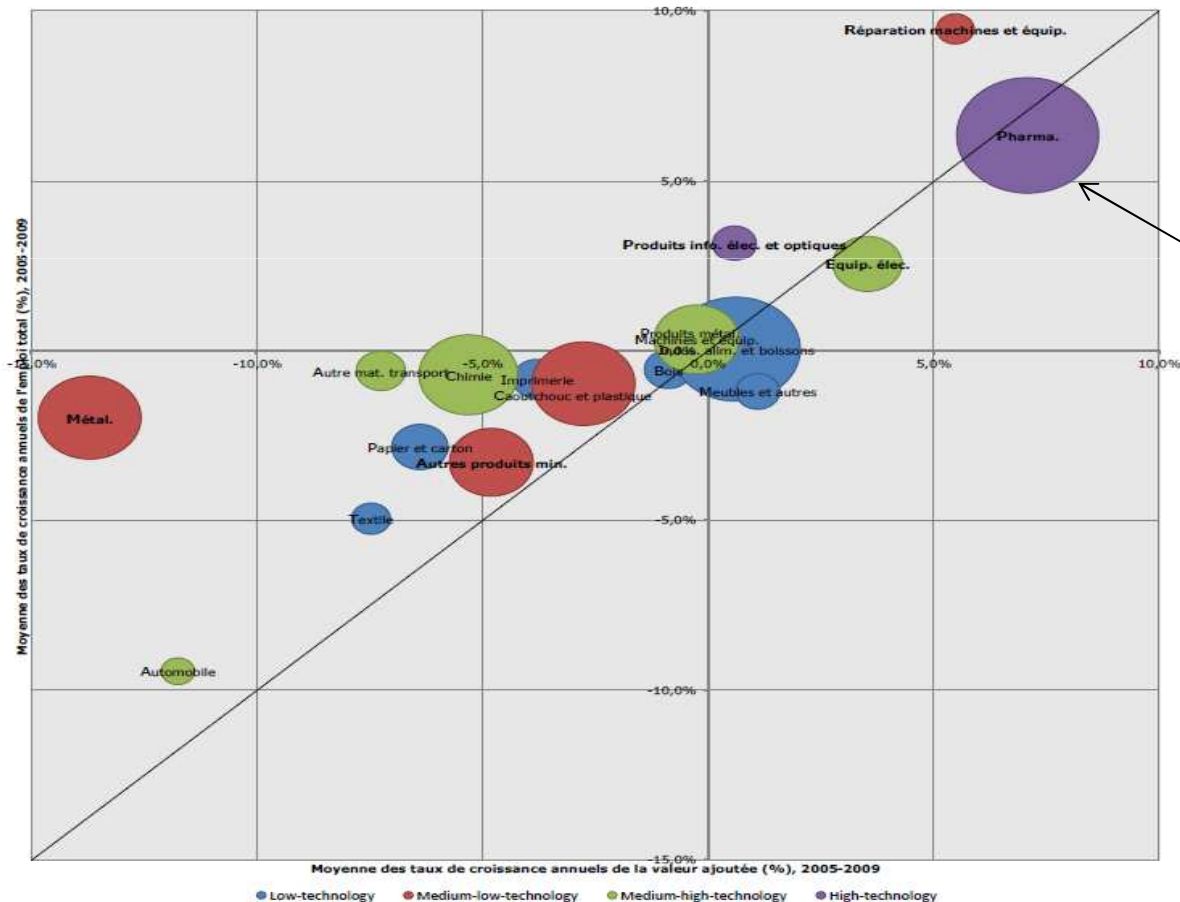
Through the 6 Walloon Competitiveness Poles, Wallonia has relevant results in global **high technologies niches markets** (mainly in the pharmaceutical and the aeronautic sectors).



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.
- But embedded in a comprehensive strategic framework addressing main competitiveness challenges : **The Marshall Plan**.

Clusters policy

- Launched in 2001
- 9 clusters / large sectoral scope
- SME's oriented
- +/- 1.000 members
- Obj: networking and innovation throughout the whole economy in Wallonia

Poles policy (Marshall Plan)

- Launched in 2005
- 6 poles / 6 identified priority sectors
- Large companies, technological SME's, research units and training centers
- +/- 650 members
- Objective: turning into European leaders in these 6 sectors



Specialisation: Critical mass and priorities



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**.

Fields	9 business clusters				6 competitiveness clusters	
Mobility & Transport	Logistics in Wallonia				Logistics in Wallonia	SkyWin
Environment & Sustainable Development	VAL+ (= solid waste)	Eco-building	TWEED (= sustainable energy)	CAP 2020 (= building energy efficiency)	GreenWin	
Food Health					WagrALIM	BioWin
Transversal technologies	ICT	<u>PlastiWin</u>	Photonics	TWIST (= image, sound & text)	MecaTech	

Specialisation: Critical mass and priorities



The Walloon Research Strategy 2011-2015

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 parks
- **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 (niches 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**



Wallon Competitiveness Poles

Priorities and budgets

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

Identify sectors in which Wallonia has a leading edge on an European basis (or even global) and focus significant resources on those sectors	➤ Public investments in common assets: structures, equipment,...	50
	➤ Support to export	4.5
	➤ Investment projects	45
	➤ Training projects	55
	➤ Foreign investments attraction	5.5
	➤ Research projects	120

+ financing of the animation structure of the Poles

Marshall 2.Green 2009-2014

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.

<u>3 OPERATORS CATEGORIES</u>	<u>3 CENTRAL FACTORS</u>
Enterprises Research units Training centers	Partnerships Setting up of joint innovative projects International visibility ←

- **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 **independant 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



2) Walloon Research Strategy 2011-2015

- 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.



The external context, national/international



3) International benchmarking and comparison of key indicators

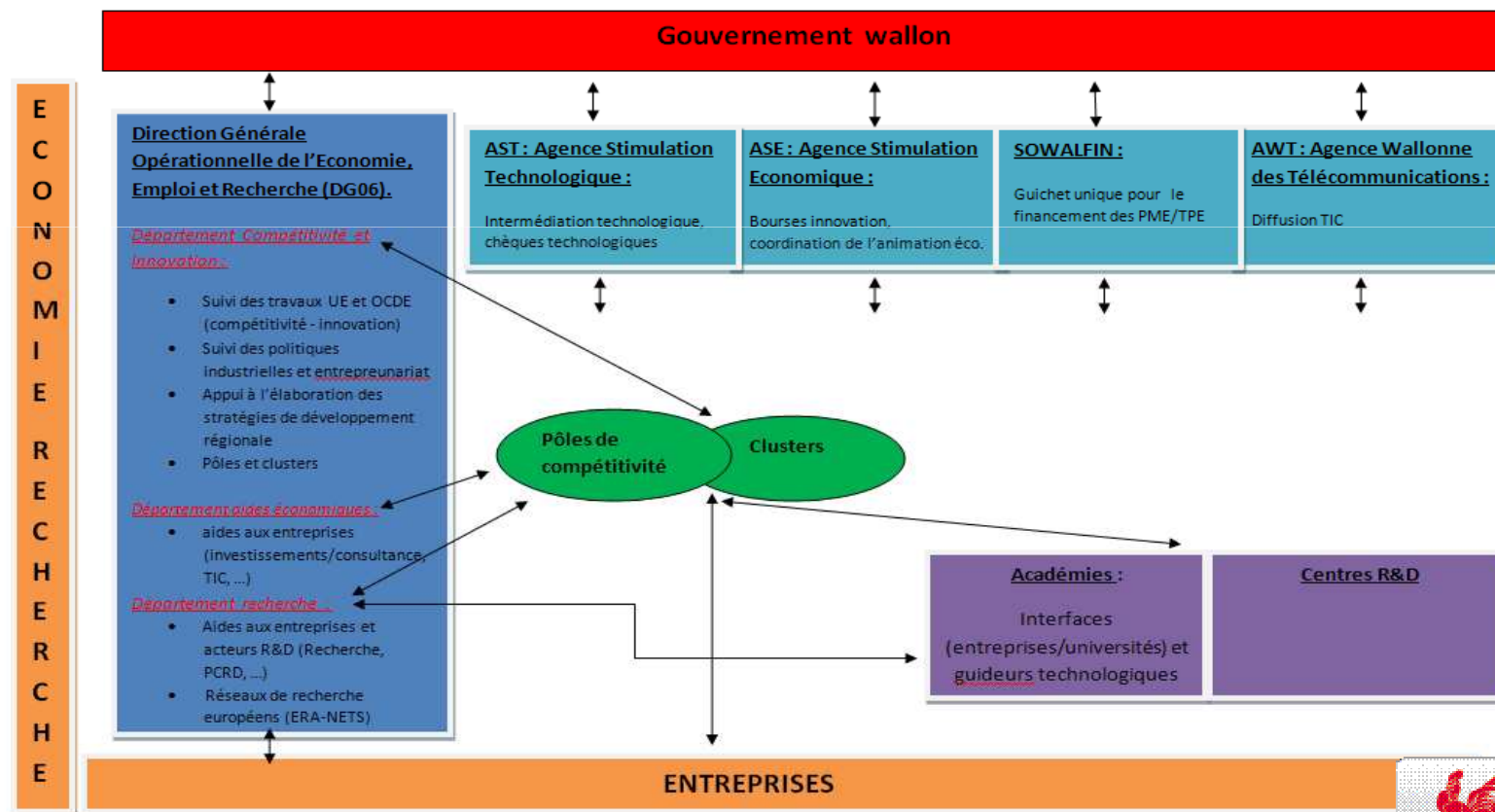
- The analysis of the competitive position of the Walloon RIS are based on **several international peer-reviews studies**:
 - The international indicators of the “Bureau Fédéral du Plan”
 - Study of Henri Capron
 - European good practices
 - The OECD peer review study (in progress)
 - The industrial 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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