FOREST RISK MANAGEMENT PLANS:

Best Practices and Pitfalls

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Agenda

- ✓ **Background**
- ✓ **CHABLIS project (storm risk)**
- ✓ **Risk Management Strategy and Contingency Planning**
- ✓ **Planning process**
- ✓ **Best practices/pitfalls**
- ✓ **Take-home messages**

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Personal background

Master in forest engineering (UCL, 2006)

Certificate in emergency planning and crisis management (ULG, 2010)

PhD in forestry (ULG, 2016)

"Dealing with storm impacts on the forest sector

through integrated and systemic approaches at the

systemic level"

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Professional background

Academic:

Research assistant (2008-2009)

PhD student (2009-2016)

Invited lecturer in crisis management (2010-)

Administration (civil service):

Project manager - Public service of Wallonia (2009-2016)

Policy adviser at the cabinet of Walloon Minister for Environment (2012-2014)

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CHABLIS project (2005-2015)

Gembloux Agro-Bio Tech
Université de Liège

Active risk and crisis management for mitigating storm impacts on the regional forest-based sector in Wallonia (Belgium)
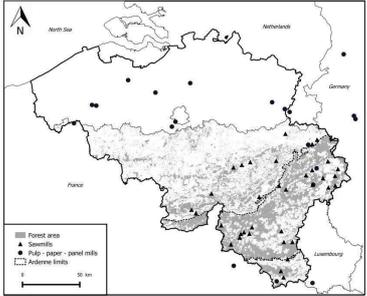
– by regional public authorities

– for public **and** private actors

– at a systemic level (forest sector, not individuals)

– in an (more) integrated way

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Wallonia (Belgium)

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Why managing actively forest risks in Wallonia ?

Economics of forest-based sector

Local employment (circular economy)

Innovation and market opportunities

Forest multi-functionality

Forests and Climate change (COP21)

Growing concern from population

Progressive loss of empirical knowledge

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CHABLIS project (2005-2015)

Gembloux Agro-Bio Tech
Université de Liège

Developing a systemic decision-making tool for supporting crisis management after (but also before) huge storms at a regional level

Supporting the implementation of windblown timber storage at strategic, tactical and operational levels

Coordinating regional emergency response

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CHABLIS project : outputs

Windthrow Contingency Plan (WCP)

DSS, GIS and Web tools

Peer-reviewed papers, talks, posters, etc.

Trainings for civil services (forest rangers)

Better risk management process ?

Reduction of storm impacts ?

Why a plan ?

Mobilizing people

Coordinating individual initiatives

Optimizing human and financial resources

Identifying knowledge gaps and operational issues

Improving emergency response

Risk assessment and management

Risk acceptance and response

Source: Gardiner et al. (2013)

Framework for risk management

FRAMEWORK FOR SYSTEMIC RISK MITIGATION

RESISTANCE | RESILIENCE

REDUCE VULNERABILITY | LOWER EXPOSURE | SPREAD FINANCIAL LOSSES | OPTIMIZE MANAGEMENT | INCREASE FLEXIBILITY

Enhance solidarity among FBS | Increase local use of wood products | Transfer losses (insurances) | Prepare contingency plans | Facilitate decisional processes

Eliminate/avoid bottlenecks | Control value at risk (growing stock) | Pool losses (rescue funds) | Strengthen and share knowledge | Enhance adaptative crisis management

Improve macro-economic context | Account for risk in forest policies | Diversify portfolios and market outlets | Support decision-making | Develop timber storage facilities

Risk avoidance | Risk acceptance

LEVEL OF DECISION-MAKER'S RISK TOLERANCE

Riguelle et al. (2016)

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Wallonie / SPW Service public de Wallonie

Prerequisites to planning

Main goals ?

Planning process ?

Stakeholders ?

Context (constraints) ?

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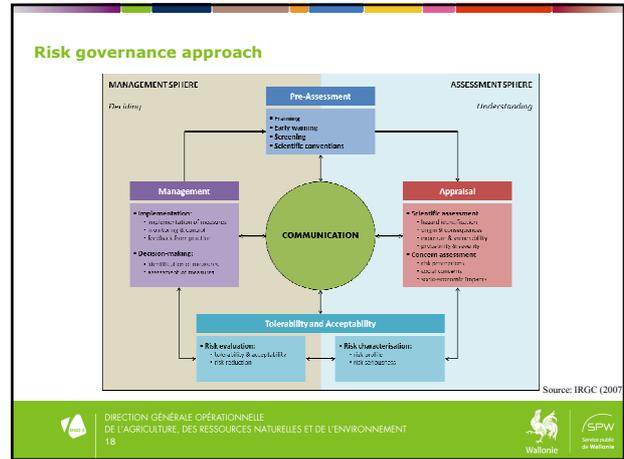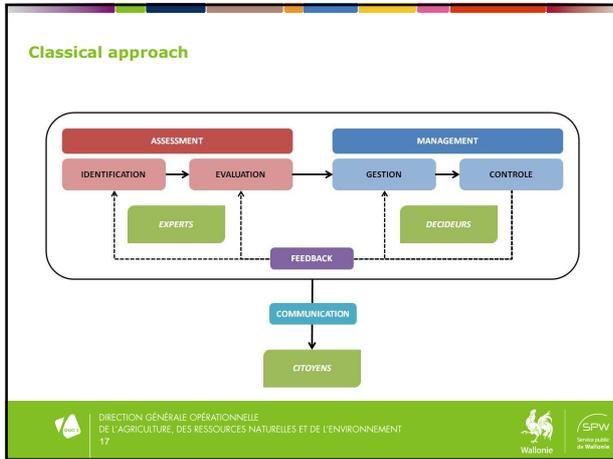Wallonie / SPW Service public de Wallonie

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Goal of the plan ?

Crucial to define the goal(s):

compel with legal obligations ?

and/or improve risk management ?

Necessity of a risk management policy

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Wallonie / SPW Service public de Wallonie

Planning process

- **Contingency planning methodology**

  – Recommended to learn from social / political sciences (e.g.)

- **Risk management approach**

  – Classical (modern)

  – Post-modern (inclusive governance)

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Wallonie / SPW Service public de Wallonie

Classical approach

Risk governance approach

Source: IRGC (2007)

Stakeholders (1)

Who is the plan's owner and users : public authorities (government, civil services), forest-based sector, forest owners, researchers, etc. ?

➔ **What do they want ?**

Type of stakeholders:

– Directly/indirectly involved
– Providers of information/data
– Internal/external (i.e. in bordering countries)

➔ **Reliable ? Aware of the planning process ? Supportive ?**

Stakeholders (2)

• **Attitude towards (the) risk (at stake) ?**

– Risk perception / aversion

– Willingness to spend money for risk management

– Priorities (political and administrative levels)

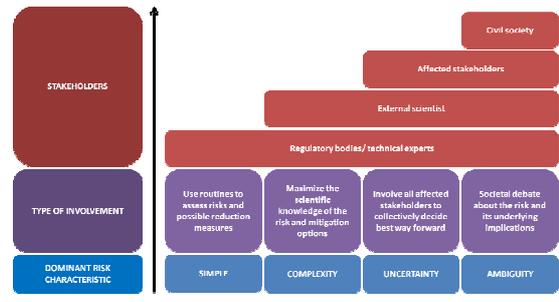• **Individual ≠ collective**

Slide 21

"I always avoid prophesying beforehand because it is much better to prophesy after the event has already taken place"

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Slide 22 — Inclusive governance

STAKEHOLDERS				
				Civil society
			Affected stakeholders	
		External scientist		
	Regulatory bodies/ technical experts			
TYPE OF INVOLVEMENT	Use routines to assess risks and possible reduction measures	Maximize the scientific knowledge of the risk and mitigation options	Involve all affected stakeholders to collectively decide best way forward	Societal debate about the risk and its underlying implications
DOMINANT RISK CHARACTERISTIC	SIMPLE	COMPLEXITY	UNCERTAINTY	AMBIGUITY

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Slide 23 — Context

- **Planning level**
  - Regional, national, transnational
- **Legal constraints**
  - Regional, national, European or international levels
- **Collaboration or competition ?**
  - Protectionist trend doesn't help

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Slide 24 — The Windthrow Contingency Plan (WCP)
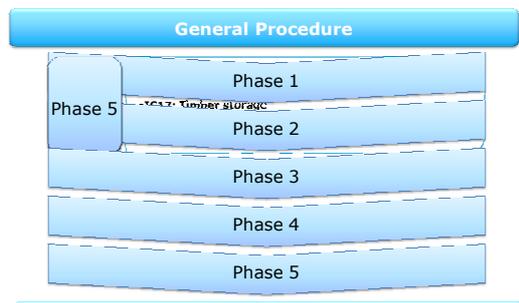
General Procedure

Phase 1
Phase 5   YC17: Timber storage
Phase 2
Phase 3
Phase 4
Phase 5

Thematic folders (operational management)

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Improvements and updates

- **Incorporate latest scientific knowledge**
  - Relevance of information *versus* added-value for the plan
  - Which frequency ?
- **Useful to foresee a set of technical annexes**
- **Crucial to have a continuous technological watch…**

  …especially if the plan is managed by public authorities…

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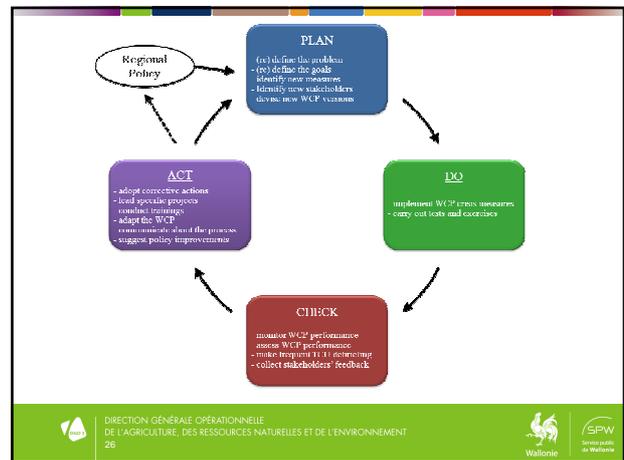
Best practises

Keep content accessible to non-experts

Check and validate the plan step by step

Organize crises exercises regularly

Insist on internal and external communication

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Difficulties

Reach public deciders' involvement despite uncertain crises

Create a trustful relationship between science and politics

Mobilize individual actors (SMEs *versus* multinationals)

Update data and contents efficiently

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Be careful !

A crisis plan is not an umbrella !
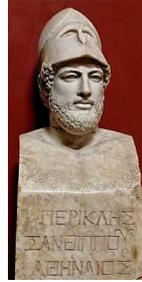
"Predicting the future accurately is not so important, being ready for it is"

Key messages

- ✓ **Understand and integrate (if reasonable) decision-makers constraints**

- ✓ **Turn scientific knowledge into concrete indicators for decision-makers**

- ✓ **Rely on (and improve) existing framework**

- ✓ **Holistic and integrated approaches**

- ✓ **Share and learn from good practises (EU level)**

References – Contact

- **Academic repository:** http://tinyurl.com/riguelle

- **Or contact me:** simon.riguelle@spw.wallonie.be