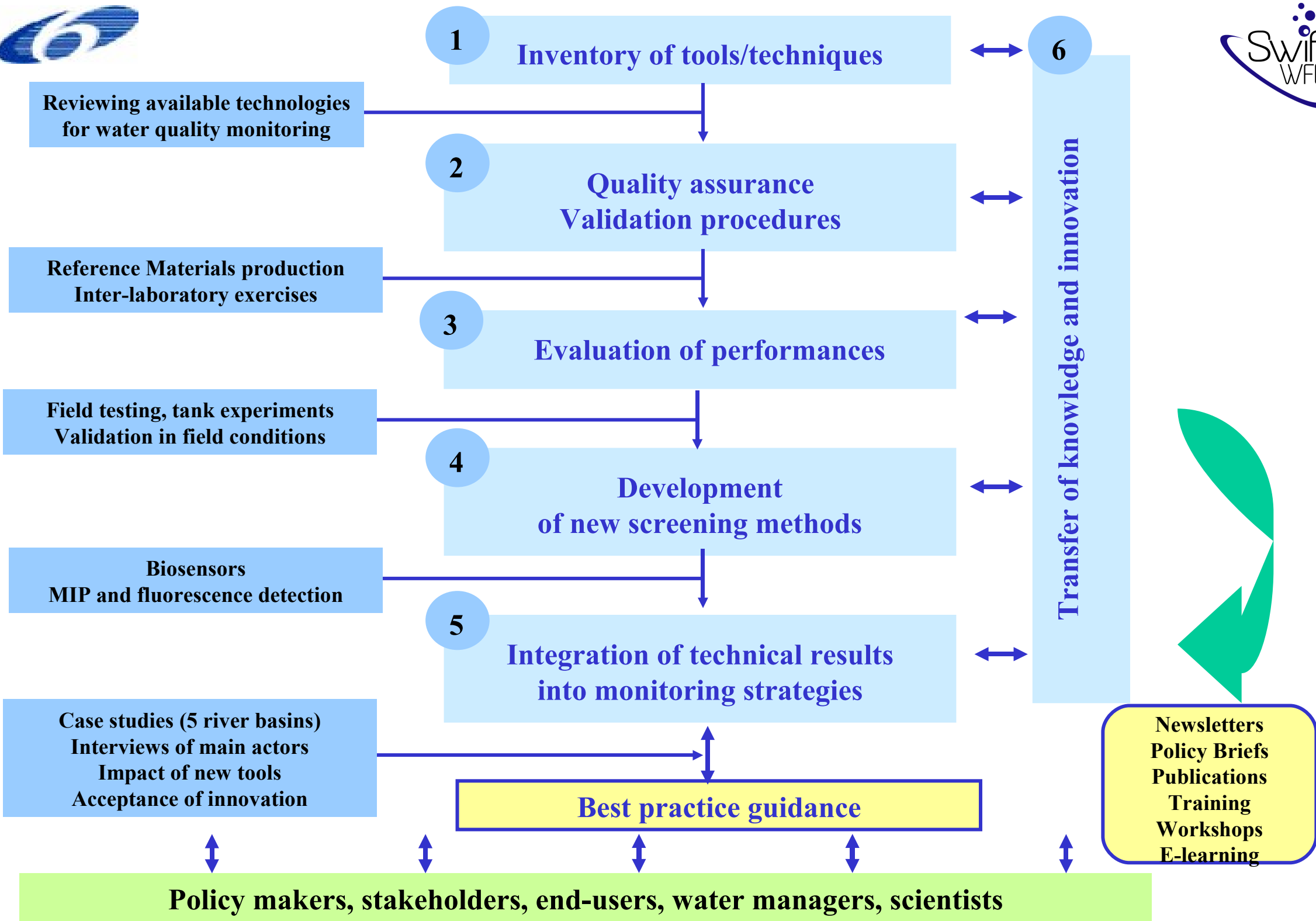




Screening methods for Water data
InFormaTion in support of the
implementation of the Water Framework
Directive (SWIFT-WFD)
(www.swift-wfd.com)



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- ❖ **Surveillance monitoring**
 - To establish baseline status and assess long term changes
- ❖ **Operational monitoring**
 - To provide extra data on water bodies at risk or failing to meet the environmental objectives of the WFD
- ❖ **Investigative monitoring**
 - To determine the causes of such failure where they are unknown

Quality elements	Surveillance monitoring	Operational monitoring	Investigate monitoring
Biological			
Hydromorphological			
Physico-chemical			
Priority Hazardous pollutants			
Priority pollutants			



Monitoring requirements	Function of screening methods	Relevant screening methods
Design future monitoring programmes	Water quality variability (frequency of monitoring)	Sensors (continuous monitoring) BEWS, passive samplers,
	spatial variability (density and location)	Chemical/electro-chemical sensors BEWS, passive samplers,
Surveillance monitoring:	Testing for long term trends	Biosensors, Sensors Biological Early Warning Systems (BEWS) Passive samplers
	Monitor significant new/emerging pollutants	Biosensors, Bioassays
Operational monitoring:	Identify point of pollution Select monitoring sites	Chemical/electro-chemical sensors, Immunoassays
Investigative monitoring:	Identify locations of pressures/sources	Bioassays, biosensors, chemical/electro-chemical sensors Passive samplers



Conclusions and perspectives

- ❖ **SWIFT-WFD (FP6 project)**
 - Best practice guide (general approach, field monitoring methods)
- ❖ **Potential role of novel monitoring tools:**
 - Should be used as complementary approach
 - Obtained information are complying the WFD
 - Real performances for investigative and operational monitoring
- ❖ **Perspectives**
 - Systems allowing timely warning and information on water pollution
 - Instruments that could be used on location, in-situ (remote control)
 - Miniaturized sensing systems