

LSG Conclusions Report

(1st round)

Partner concerned:	<i>LP – CIM ALTO MINHO</i>
Policy Instrument concerned:	<i>ALTO MINHO 2020</i>
Date of the meeting:	<i>Ponte de Lima 27.01.2020</i>

This report should be sent to all partners

LSG Meeting General Information

A. Participants

Name	Institution/profile
<i>Júlio Pereira</i>	<i>LP representative</i>
<i>Bruno Caldas</i>	<i>LP representative</i>
<i>Luísa Garcia</i>	<i>LP representative</i>
<i>António Lisboa</i>	<i>Águas de Portugal (AdP) / Águas do Alto Minho (AdAM)</i>
<i>António Torres</i>	<i>Agrupamento Europeu de Cooperação Transfronteiriço Rio Minho (EGCT Rio Minho)</i>
<i>Maria da Luz Leitão</i>	<i>Administração dos Portos do Douro, Leixões e Viana do Castelo – APDL (Water Quality Officer)</i>
<i>José Alves</i>	<i>Administração dos Portos do Douro, Leixões e Viana do Castelo – APDL (Operations Manager / Viana do Castelo Marina)</i>
<i>Vasco Silva</i>	<i>Administração dos Portos do Douro, Leixões e Viana do Castelo – APDL (River operations – Douro River)</i>
<i>Ana Cristina Rodrigues</i>	<i>Instituto Politécnico de Viana do Castelo – IPVC (Teacher in the field of environment; ERSAR Auditor)</i>
<i>Francisco de Calheiros</i>	<i>Associação do Desenvolvimento Rural Integrado do Lima – ADRIL (Presidente)</i>
<i>Liliana de Sousa</i>	<i>GeoAtributo, Lda. – Technical Committee LP representative</i>
<i>Susana Queirós</i>	<i>GeoAtributo, Lda. – Technical Committee LP representative</i>
<i>Ana Ladeiras</i>	<i>Around Europe Advisors, Lda. – Project Technical Assistance</i>

B. Agenda

- BIGDATA4RIVERS project presentation;
- LSG members presentation;
- Presentation of Greek good practices / site visits;
- Sharing ideas and gathering inputs for the definition of the Action Plan.

C. Duration

Start: 15h16
End: 17h37

LSG Meeting Conclusions

A. Summary of the meeting

Executive summary of the meeting minutes

The meeting began with the presentation of each LSG members present, followed by the overall presentation of the BIGDATA 4RIVERS project, carried out by CIM Alto Minho. This presentation, in addition to the more formal aspects (summary, partners, budgets, calendar and outputs), included mention of the policy instruments addressed by each partner, the main challenges and restrictions to which they intend to respond and the main good practices to share. The role of stakeholders and the regional evolution that the project itself can generate were explained.

CIM Alto Minho shared some relevant areas for learning: water losses in water supply networks; monitoring water quality levels in rivers and river banks; planning of catchment / irrigation basins (climate change context), river flow transfers and their cross-border impact; monitoring and contingency for drought situations.

Among the interventions of the participants, the following stand out:

Main interventions by LSG members:

APDL:

- *Topics of interest: water quality monitoring (refined with new / innovative processes); contact with the Douro cross-border entity; interest in the La Loire valley and in the way they are responding to the widespread navigability and cruises pressure; information on actions related to water monitoring - port areas are a priority; finding solutions for data dispersion on flood monitoring / control systems (on quotas, river flows and speeds); need to ensure real and current information and make it available.*
- *Experiences they would like to know: cleaning the river banks, controlling the proliferation of invasive species, uses and pressures, tributaries and water oxygenation - examples of the Danube in promoting the movement of water for oxygenation; rivers as wastewater delivery points (capacity of treatment systems to respond to larger amounts of water); ships with discharge treatment and minimization systems.*
- *They would like to have more information about: how to manage the multiplicity of entities that are responsible for the management of water bodies - governance? who manages the WWTPs along the river? What is the impact of hotel ships circulating in the Douro river?*
- *Intervention area: Port of Leixões, Port of Viana do Castelo and Douro waterway.*

ÁGUAS DO ALTO MINHO:

- Topics of interest: junction of information systems - conjugation of data for better decision making and management of rainwater in the dry and winter periods; obtaining and monitoring data from WWTPs; protection and monitoring of groundwater abstraction.
- Other contributions: Indicated the relevance of participation and involvement of Águas do Norte, S.A. in LSG meetings, given their competences that were not delegated to Águas do Alto Minho, S.A., namely with regard to water abstraction.

AECT RIO MINHO:

- Topics of interest: challenge of cross-border governance of the river Minho - management of cross-border interventions (which “duplicate” the associated bureaucracy); managing expectations of activities associated with rivers in relation to the release of flows (including fishing and sports activities); cleaning the river banks and combating the proliferation of invasive species; biodiversity preservation; exploitation of good agricultural practices.
- Local challenges: the local community is not aware of the impact of these problems (in particular the biodiversity and habitats protection).

IPVC:

- Topics of interest: residual waters; management of river banks and conservation of riparian galleries (riparian vegetation as a limiter for water leaching); regulatory bodies for water and waste services (ERSAR has played a key role in improving water quality through control processes);
- Local challenges: analysis of the monitoring results is pending and is not used for decision making; the need to ensure the licensing processes for WWTPs by management entities and by Portuguese Environment Agency (APA) (existence of WWTPs without licensing); scarcity of human resources in the municipalities capable of ensuring low-water management (monitoring and inspection).
- Regional good practice: information system and decision support at ARH Norte.
- Good practice for replication: elaboration and implementation of Local Action Plans in areas where pressures on water resources justify it (example from Swedish partner).

ADRIL:

- Local good practice: individual water treatment in Paço Calheiros - wastewater treatment centre using phyto-WWTP that uses vegetation, substrate (such as expanded clay) and microorganisms, as water treatment technology, recreating and trying to mimic the purification conditions found in natural wetlands. Treated water is reused for irrigation and returned to the stream.

MAIN CHALLENGES / CONCLUSIONS:

- The need to reinforce the sharing and availability of existing data;
- Need to improve the management of river banks and riparian galleries;
- Need to strengthen cooperation and collaboration between entities (governance).

The presentation of the macrostructure of the local action plan by the Expert, who is part of the project's technical committee, was then presented:

- *Explanation of the project's technical committee;*
- *Presentation of the tasks related to the joint report;*
- *Presentation of the action plan purpose;*
- *Role of the stakeholder group for these two products (joint report and action plan).*

The meeting continued with the sharing of good practices and conclusions of the first interregional learning activity (study visit in Athens):

- *Monitoring of Asopos river basin waters - assessment of pollution / contamination and qualitative and quantitative investigation of contamination levels and possible sources of pollution;*
- *Development and application of novel, integrated tools for monitoring and managing catchments – water quality monitoring with the use of robotic boats.*

The majority of stakeholders expressed their willingness to collaborate with CIM Alto Minho in the BIGDATA 4RIVERS implementation, recognizing their interest in the action plan results, as well as in the exchange of knowledge and sharing of experiences.

Finally, other relevant stakeholders were suggested to CIM Alto Minho to join LSG.

B. Recommendations of the LSG

Recommendations of the LSG for the partner

LSG had agreed on the relevance of the exchange of information about the regional rivers once almost all of them are implementing, at the individual level, quality of water monitoring systems/actions without knowing about the other participants activities and results.

They consider as key for the region to exchange data and information to have better and more efficient decision-making processes and to avoid overlaps of actions and investments duplications.

They had also recommended to enlarge the LSG to other organizations and regional authorities that also act and have competences in the field of river basin management and quality of water policies and controls.

Recommendations of the LSG about the good practices/site visits

LSG members will receive the presentations made during the meeting by email and after a more detailed analysis they will send their comments, if they see fit.

C. Information Request

Request of additional information to the partnership/a particular partner

APDL representative ask for more information about the Spanish partner once they have also competences and develop activities in the Douro River.

They also want to know the best practices the French partner may have concerning river cruises/hotel boats as Pays de la Loire are also known for this kind of activities in their rivers.

LSG Conclusions Report

(2nd round)

Partner concerned:	LP – CIM ALTO MINHO
Policy Instrument concerned:	ALTO MINHO 2020
Date of the meeting:	Ponte de Lima 18.02.2020

This report should be sent to all partners

LSG Meeting General Information

A. Participants

Name	Institution/profile
<i>Luísa Garcia</i>	<i>LP representative</i>
<i>Teresa Neves</i>	<i>Agência Portuguesa do Ambiente (APA); Administração da Região Hidrográfica do Norte (ARH Norte) / Portuguese Environment Agency; Northern Hydrographic Region Administration</i>
<i>Vitorino José</i>	<i>Agência Portuguesa do Ambiente (APA), Administração da Região Hidrográfica do Norte (ARH Norte) / Portuguese Environment Agency, Northern Hydrographic Region Administration</i>
<i>Luís Brandão</i>	<i>Direção Regional de Agricultura e Pescas do Norte (DRAPN) / Northern Agriculture and Fisheries Regional Directorate</i>
<i>Abel Costa</i>	<i>Capitania do Porto de Caminha / Captaincy of the Port of Caminha</i>
<i>Luís Macedo</i>	<i>Município de Arcos de Valdevez / Arcos de Valdevez Municipality</i>
<i>Cátia Gonçalves</i>	<i>Município de Monção / Monção Municipality</i>
<i>Gonçalo Rodrigues</i>	<i>Município de Ponte de Lima / Ponte de Lima Municipality</i>
<i>Jorge Azevedo</i>	<i>Município de Valença / Valença Municipality</i>
<i>Carlos Pereira</i>	<i>Município de Vila Nova de Cerveira / Vila Nova de Cerveira Municipality</i>
<i>Liliana de Sousa</i>	<i>GeoAtributo, Lda. – Technical Committee LP representative</i>
<i>Susana Queirós</i>	<i>GeoAtributo, Lda. – Technical Committee LP representative</i>
<i>Ana Ladeiras</i>	<i>Around Europe Advisors, Lda. – Project Technical Assistance</i>

B. Agenda

- BIGDATA4RIVERS project presentation;
- LSG members presentation;
- Presentation of Greek good practices / site visits;
- Sharing ideas and gathering inputs for the definition of the Action Plan.

C. Duration

Start: 15h10

End: 16h45

LSG Meeting Conclusions

A. Summary of the meeting

Executive summary of the meeting minutes

CIM Alto Minho explains the reason for holding a second stakeholder meeting with an additional group of local agents.

The meeting began with the presentation of each LSG members present, followed by the overall presentation of the BIGDATA 4RIVERS project, carried out by CIM Alto Minho. This presentation, in addition to the more formal aspects (summary, partners, budgets, calendar and outputs), included mention of the policy instruments addressed by each partner, the main challenges and restrictions to which they intend to respond and the main good practices to share. The role of stakeholders and the regional evolution that the project itself can generate were explained.

Technical assistance takes the floor and gives a brief explanation of how the Interreg Europe program works, highlighting the importance (and mandatory) of LSG for the correct development of the project. CIM Alto Minho reinforces the relevance of this group, in its specific case, to contribute to the improvement of CIM's strategic action in the near future.

The presentation of the macrostructure of the local action plan by the Expert, who is part of the project's technical committee, was then presented:

- *Explanation of the project's technical committee;*
- *Presentation of the tasks related to the joint report;*
- *Presentation of the action plan purpose;*
- *Role of the stakeholder group for these two products (joint report and action plan).*

The meeting continued with the sharing of good practices and conclusions of the first interregional learning activity (study visit in Athens):

- *Monitoring of Asopos river basin waters - assessment of pollution / contamination and qualitative and quantitative investigation of contamination levels and possible sources of pollution;*
- *Development and application of novel, integrated tools for monitoring and managing catchments – water quality monitoring with the use of robotic boats.*

CIM Alto Minho referred to the possibility of LSG members participating in similar activities that will be developed during its implementation.

Main interventions by LSG members:

MONÇÃO MUNICIPALITY:

- *Local challenges: they consider that the solutions presented in Athens are not suited to the reality of the Alto Minho region where industry is not a significant polluter. Existing pollution cases are punctual, but it is still important to know potential solutions that can answer them.*

CAPTAINCY OF THE PORT OF CAMINHA:

- *Local challenges: relevance of cleaning the river banks and combating invasive species; study of the flow variations consequences on the ecological status of the river (there has been a very significant variation, in the order of meters per night); the challenge of flood management, namely for timely communication and protection of riverside communities; overlapping competences and different levels of governance as a limitation to good management.*
- *Other contributions: Despite the existence of specific points of pollution in the Minho River, these will be residual and do not jeopardize the global water quality, attested by the capture of salmon in the river, a species very sensitive to pollution (bioindicator).*
- *Intervention area: Minho river, Couro river and Âncora river.*

ARCOS DE VALDEVEZ MUNICIPALITY:

- *Local challenges: the phenomena of degradation of the ecological status of rivers (banks, flows, water quality, etc.) are not due to the lack of legislation, but to their non-compliance; on the Vez River there is a particular need to protect the riparian gallery, which is fundamental in guaranteeing the quality of water bodies; on the Lima River there is evidence that the leaching of aggregates associated with old mining operations (e.g. wolfram) is transporting pollutants to the water bodies (this phenomenon being enhanced by forest fires).*
- *Topics of interest: preservation and management of riparian gallery; water monitoring in an urban context (find monitoring mechanisms that allow, through physical parameters, to make an extrapolation to microbiological parameters); challenge of transboundary management of the Lima River (history of detection of pollutants with Spanish origin); biodiversity management (protection of native species).*
- *Intervention area: the municipality's concern is centred on the rivers Lima and Vez because they are the ones that cross the municipality.*

PONTE DE LIMA MUNICIPALITY:

- *Local challenges: pollution will not be the main problem in the management of water resources, so the good practices in Athens will not be applicable to the municipal reality; despite being legally protected, riparian galleries have been losing representativeness in the municipality, some of*

which have priority habitats and / or species; urgency to operationalize and reinforce the protection actions of riparian galleries, in the context of climate change; difficulty in combating the proliferation of invasive species (existence of a large seed bank); pollutants transported by washing inert materials from quarries (especially in places affected by forest fires).

- *Topics of interest: preservation of riparian galleries as a key aspect for improving the management of water resources; innovative and economically viable solutions for monitoring and combating the proliferation of invasive species; involvement of local actors in monitoring the quality of the river in the long term.*
- *Local good practice: recent projects to combat invasive species using a technique never used before in Portugal (using machinery from Finland).*

VILA NOVA DE CERVEIRA MUNICIPALITY:

- *Local challenges: Local challenges: the local industry has its own WWTPs, so the development of industrial discharge monitoring solutions is not a priority; impact of the floods and discharges of the Spanish reservoirs on the river banks (most of them are carried out without prior notice, making it impossible to control the respective flow); great effort of operational response and cleaning of river banks after the occurrence of floods.*

PORTUGUESE ENVIRONMENT AGENCY (APA):

- *Local challenges: the Minho and Lima Hydrographic Region (RH1), which encompasses the water resources of the Alto Minho, is the one with the best quality status of water bodies at national level; existing pollution problems are quite residual; managing the change in precipitation patterns associated with climate change (periods of extreme precipitation alternating with periods of great scarcity); importance of cross-border cooperation.*
- *National challenges: the need to reinforce the sharing and availability of existing data (monitoring data collected by APA are available on an open platform, but the same does not happen with other entities, in due time); monitoring is a fundamental process, but very expensive and its extension to new substances (emerging pollutants) represents a very significant increase in cost.*
- *Good practices: cross-border cooperation projects in progress with an emphasis on water management, in which the national entity participates (projects: MIGRA MIÑO-MINHO - Protection and conservation of migratory fish in the international section of Minho and its tributaries; RISC_ML - Prevention of Flood and Drought Risks in the International Minho-Lima Basin; NOR-WATER - Emerging pollutants in Águas de Galiza - Northern Portugal: new tools for risk management); availability of monitoring data collected by APA on an open platform.*
- *Other contributions: the elaboration of the Hydrographic Region Management Plans (PGRH) of the 3rd Cycle is in progress; the RH1 PGRH will be developed in cooperation with the Hydrographic Confederation of Minho-Sil.*

NORTHERN AGRICULTURE AND FISHERIES REGIONAL DIRECTORATE (DRAPN):

- *Local challenges: agricultural activity has not resulted in a loss of water quality in RH1; the region has seen an increase in the need for water for irrigation, mainly in the summer period, namely of vine crops (i.e. green wine), as a result of the progressive installation of these crops in higher altitude areas and the alteration of irrigation processes.*
- *National challenges: the recognition of the implications of agricultural activity on the quality levels of water bodies motivated the existence of specific legislation that seeks to regulate and control it; the transformation of the soil profile by agricultural activity has potential effects on the stability*

of slopes and margins (risk); the process of sensitizing the population to the conscious use of agricultural fertilizers and regulating access to these products has had positive effects in improving water quality.

- *Topics of interest: use of new technologies to achieve more efficient irrigation systems (innovation).*
- *Good practices: DRAPN has developed a manual of good agricultural practices with a view to protecting water and combating pollution (which can be transferred to other European regions).*

The majority of stakeholders expressed their willingness to collaborate with CIM Alto Minho in the BIGDATA 4RIVERS implementation, recognizing their interest in the action plan results, as well as in the exchange of knowledge and sharing of experiences.

Finally, other relevant stakeholders were suggested to CIM Alto Minho to join LSG.

B. Recommendations of the LSG

Recommendations of the LSG for the partner

No relevant recommendations had been done (participants consider they need more time to know in deep the project and to propose recommendations at this stage).

Nevertheless, discussion had allowed to identify the following good practices that can be shared with the other project regions:

- Agriculture good practices manual (DRAPN);
- Investments in new technics for fighting exotic invasive species in the Lima River (Municipality of Ponte de Lima);
- Monitoring results open data platform (APA).

Recommendations of the LSG about the good practices/site visits

LSG members had considered the Greek good practices very interesting but not applicable to the current reality of Alto Minho region.

C. Information Request

Request of additional information to the partnership/a particular partner

No request for additional information was made.