LITERATURE SURVEY:

[1] G. Kallis and D. Butler, “The eu water framework directive: measures and implications,” Water policy.

[2] D. OJEC, “60/ec of the european parliament and of the councilof 23 october 2000 establishing a framework for communityaction in the field of water policy,” Official Journal of the European Communities, 2000.

[3] Q. Chen, Y. Zhang, and M. Hallikainen, “Water qualitymonitoring using remote sensing in support of the eu water framework directive (wfd): A case study in the gulf of finland,” Environmental monitoring and assessment.

[4] S. Winkler, N. Kreuzinger, A. Pressl, N. Fleischmann, G.Gruber, and M. Ecker,“Innovative technology for integrated water quality measurement,” in Proceedings International Conference on Automation in Water Quality Monitoring (AutMoNet2002), 2002.

[5] S. Mijovic and B. Palmar, “Water quality monitoring automation of rivers in serbia,” Facta universitatis-series: Working and Living Enviromental Protection, 2012.

[6] Directive No. 269 of Slovak republic government with requirements for good state of water bodies. 2010.

[7] (Folster et al., 2014) Optimizing – Lakes and rivers – Main use case: Determine monitoring objectives Comprehensive paper of the need for adaptive monitoring based on: new knowledge needs, evolving science and new requirements

[8] (Lim and Surbeck, 2011) Optimizing – Lakes – Main use case: Prepare data handling, storage, analysis and reporting Approach to make further use of data collected on a set of lakes for regulatory reasons. The aim is to obtain information on spatial and temporal water quality variations. Lake hydrology is taken into account in order to interpret the results of the statistical analysis. Since WQMPs can be based on imprecise monitoring objectives and old data sets need to be used to yield new information, this approach provides interesting leads to data valorization and WQMP optimization.

[9] (Memarzadeh et al., 2013) Optimizing-Rivers – Main use cases: Assess a sampling site network; select and classify water quality parameters Entropy based approach with a previous application of dynamic factor analysis.

[10] (Thoma et al., 2012) Planning and optimizing – Lakes and rivers – Main use case: Plan quality control and quality assessmentThe authors propose a methodology (alternative measurement sensitivity technique) to assess the accuracy of WQPs measured in the field by probes in order to provide information on measurement certainty. The method is an alternative to the method detection level used in laboratories. This paper is particularly pertinent, as more and more data are being collected through probes. Calibration, handling and stabilization times are discussed as very important factors to ensure that the probe data is reliable. More often than not, the values of probes are taken at face value, as the sensitivity of probes is underestimated.