Hydropower and its future role,
BIH RELEVANT REGULATIONS

• Complex administrative structure – 2 entities (FBiH and RS) and Brcko District, each having own legislation

• Relevant Laws (with own bylaws) :
  – Entity Water Laws, based on EU WFD 2000/60/EC, RBMPs preparation ongoing
  – Energy Laws
  – Laws on Electrical Energy
  – Laws on Renewable Energy Sources and Cogeneration
  – Laws on Nature Protection
  – Laws on Concessions
  – Regulations on Spatial Planning and Landuse ...
ENERGY USE AND HYDROPOWER POTENTIAL

• Main BiH in-country energy sources are coal and hydropower; gas and oil imported

• Primary energy structure (estimate): coal 56%, hydropower 10%, liquid fuel 28% and gas 6%

• Electricity production (estimate, varies depending of the precipitation): 60% coal, 40% hydropower

• Within SEE highest hydropower potential in Romania (35,000 GWh/y), than BiH (24,000 GWh/y) – estimate from 2013 study

• Present use of hydropower potential in BiH estimated 20-35%

• HPP produced electricity as addition to coal-based thermal-power plants (TPPs) for peak demands

• Pumped storage plant Čapljina rare such case
EXISTING AND PLANNED PLANTS

- 15 large HPPs total 2.060 MW, 4 TPPs total 1.750 MW
- Most HPPs planned as multipurpose, but later energy production became absolute priority
- Significant and yet unused hydropower potential at
  - Rivers Una, Vrbas and Bosna, with tributaries
  - Upper, middle and lower Drina river
  - Neretva and Upper Horizons of Trebisnjica, Cetina river
  - Large number of smaller water streams, primarily for small HPPs
- Ongoing projects of Stanari TPP, upgrading Tuzla TPP, Ulog HPP, Una HPP, Vranduk HPP, Janjici HPP ...
- Large number of small HPPs planned (weak implementation – in RS 112 concessions given, only three HPPs constructed)
LICENCING PROCESS

• No integrated licence:
  – Concession (for use of public good)
  – Preliminary water licence (certifies availability of resources)
  – Water licence (allows water use)
  – Environmental licence (*certifies* minimized impacts to environment)
  – Construction licence (allows starting plant construction)
  – Use licence (*certifies* that construction is implemented in line with the project design which is accepted)

• Each defined by separate legislation

• Prescribed EIA study

• Environmental flow regulation in FBiH in force last 2 years – compromising diverse interests and minimizing conflicts