

E-11023/10EN
Answer given by Mr Potočník
on behalf of the Commission
(28.2.2011)

1. The Commission is aware of the environmental impacts of barriers from hydropower stations inter alia on upstream and downstream migration of fish.

The Water Framework Directive (WFD)¹ establishes a comprehensive framework to protect and restore European waters. It includes the necessity to make an assessment of significant pressures and impacts resulting inter alia from hydromorphological alterations of surface waters such as dams and weirs, from water abstraction or from river regulation. The assessment of ecological status must reflect the impacts to existing pressures including hydromorphological changes. The most susceptible organism group to hydromorphological changes are fish although they are not the only ones.

There are numerous studies on the impacts of barriers on fish migration, both upstream and downstream. In this context, the Commission has developed guidance on how to deal with these and other hydromorphological pressures².

2. One of the main objectives of the WFD is to reach good ecological status in all surface waters by 2015. Good ecological status includes achieving good status for fish. Species composition, abundance and age structure of fish have to be in good status. Where there are dams and weirs that block fish from migrating, the status of fish is usually not good, although this needs to be assessed on a case-by-case basis. Where the barrier is the cause for not reaching good ecological status, Member States are obliged to create fish passes. Fish passes can take on different forms ranging from simple fish ladders to near-natural by-pass channels. A case study document prepared by the Commission illustrates different cases and their solutions³.

3. The WFD makes no difference between hydropower plants of different sizes. It focuses on assessing the extent of the environmental impacts on the aquatic environment. The type of impacts are in general the same for large and small hydropower plants, i.e. interruption of river continuity, change of river flow and effects on habitat/substrate composition and their natural dynamics. For economic reasons it may be more difficult for small hydropower plants to strike the balance between the benefits of hydropower production and the impacts on the environment and the necessary environmental measures. In terms of its environmental impacts, the Commission considers it better to concentrate hydropower production in fewer locations in large plants (generally on large rivers) than to have many small hydropower plants (generally on small rivers) creating environmental impacts in many locations throughout the basin. This is also part of the WFD's river basin management approach.

¹ Directive 2000/60/EC of Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, OJ L 327, 22.12.2000.

² http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/thematic_documents/hydromorphology/technical_studiespdf/_EN_1.0_&a=d.

³ http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/thematic_documents/hydromorphology/technical_reportpdf/_EN_1.0_&a=d.