



Výskumný ústav vodného hospodárstva Bratislava

Implementation approaches resulting from requirements of the Article 4(7) WFD in the Slovak Republic

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Implementation approaches resulting from requirements of the Article 4(7) WFD 2000/60/ES

- ❑ The article 4(7) WFD was transposed to national legislation via §16 in Water act (Act no. 364/2004 Coll.), and by the Decree of the Ministry of Environment SR No. 224/2005 Coll. specifying the details on identification of river basin districts, environmental objectives and water planning; that was replaced in 2010 by Decree of the Ministry of Agriculture, Environment and Regional Development No. 2/2010 Coll. defining specifications for the designation of river basin districts; environmental objectives; economic analysis and water planning process
- ❑ The Act No. 409/2014 Coll. amending Water act No. 364/2004 Coll. includes requirements mentioned in the Decree above which arise from Article 4(7) WFD and these requirements are transposed in the Water Act



Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

- Based on ***Guidance Document no. 20 Exemptions to the environmental objectives*** the recommendation material was prepared and publicly available at the web site of Ministry of Environment of the Slovak Republic : "**Procedures for assessment of infrastructure projects according to Art. 4.7 of Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy** " (<http://www.minzp.sk/files/sekcia-vod/rsv-4.7-postupy-pre-posudzovanie-infr-projektov.pdf>), according to which the assessment of new infrastructure projects is carried out in two steps:





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- ❑ **Primary (preliminary) assessment of the new infrastructure project** will be carried out on the request of applicant of a new infrastructure project by **authorized body** appointed by of the Ministry of the Environment of the Slovak Republic - **the Water Research Institute**. The outcome of the assessment is the Expert Assessment of the authorized body whether a subsequent assessment of a new infrastructure project according to Art. 4.7 WFD is necessary (based on the assessment of the significance of the impacts of the proposed project on the achievement of the WFD environmental objectives)
- ❑ The applicant of new infrastructure project on the base of the Expert Assessment issued by the primary assessment authorized body will carry out/ensure through **another body subsequent assessment of the new infrastructure project under Art. 4.7 WFD** that is proving compliance and fulfilling all the conditions specified in Art. 4.7 WFD





Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

Primary (preliminary) assessment of the new infrastructure project

- ☐ The reason of the assessment is finding, whether the new project causes :
 - modifications of the physical (hydro-morphological) characteristics of surface water bodies
 - alterations to groundwater level of the groundwater body
that can cause the failure in reaching the environmental objectives to achieve good status of affected water bodies
- ☐ The result of the primary assessment will be the Statement, whether there exists the cause for the project to be further assessed under art. 4.7 WFD or the cause does not exist and the next assessment of the project is not necessary.



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- ☐ Introduction – basic information about project or new development activity (such as purpose of the project, explanation of the implementation needs, etc.)
- ☐ Delineation of the area of interest (affected water bodies)
- ☐ Characteristics of the affected water bodies divided into:
 - Natural surface water body (WB), heavily modified water body (HMWB), artificial water body (AWB)
 - Body of groundwater
 - Status of water body (ecological status/potential of surface water body and quantitative status of groundwater body)
- For each water body, there will be information about:
 - Sub-basin, code and name of the water body
 - For the surface waters - river kilometer (rkm) from – to and length of WB
 - For groundwater - area of the body



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☐ Surface water bodies

- Annex No. 2 of decree No. 418/2010 Coll. of Ministry of Agriculture, Environment and Regional Development of SR – list of water bodies
- Annex No. 5.1 of RBM proposal (ecological status/potential)

☐ Groundwater bodies

- Annex No. 2 of the Governmental Decree of SR No. 282/2010 Coll.
(list of the bodies)
 - chapter 5.2.3 of RBM proposal (chemical status)
 - chapter 5.2.4 of RBM proposal (quantitative status)

☐ RBM of Slovakia is available at the web page:

http://www.vuvh.sk/rsv2/index.php?option=com_content&view=article&id=106&Itemid=122&lang=sk



Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

To assess significance of possible modifications of the physical (hydro-morphological) characteristics of water bodies or alterations to groundwater level of the groundwater bodies the next information are necessary :

In surface water bodies:

- ☐ basic data about project or its part (e.g. construction objects), which can cause the modification in affected water bodies
- ☐ description of the construction location in the affected water bodies with indication of:
 - the type of structure/building object (e.g. bridge pillar, regulation of watercourse, regulation of a river bed, relocation of a watercourse, etc.)
 - the dimensions of the ground plan of the construction, the structure of the construction and the rkm in which the construction will be located



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In adjacent area of the affected surface water bodies:

- ☐ description of the location of the project or its part (construction objects) in adjacent area of the affected surface water bodies (possible disruption of the lateral connection of wetlands / floodplains) consist of:
 - type of construction (dimension of ground plan of construction, building of construction, engineering type of foundation (its depth)
 - river kilometers in which surface water body/bodies can be influenced
 - distance of construction from affected surface water body
 - induced cost, e.g. river banks strengthening in surface water body in river kilometer from-to



Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

In groundwater bodies:

- ☐ In groundwater body (possible alteration to the level of groundwater) includes information about:
 - type of construction foundation (depth of foundation) to assess whether the building can influence groundwater level regime (or interaction between groundwater and surface water)



Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

Possible influence of the project or its part on the physical (hydro-morphological) characteristics of surface water bodies or on alterations to groundwater level of the groundwater body are assessed in case of:

- ☐ foundation engineering
- ☐ under construction
- ☐ after finishing construction
- ☐ during operation

Within each phase of the project will be assessed:

- ☐ Possible/anticipated impact of the project or its part (construction object) on the hydrological regime, river continuity, morphological conditions of the surface water body, disturbance of the lateral continuity of wetlands/floodplains (biotops) or alteration to the groundwater level of groundwater bodies;
- ☐ an estimation of the local impact of the construction on habitat changes, which should not exceed 10% of the total length of the water body.



Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

To determine the significance of the new changes the following issues must be taken account:

- ☐ whether the new change is temporary or long-term
- ☐ evaluate existing or earlier identified changes
- ☐ potential cumulative effect of the existing or new changes on water status

If the anticipated impact on the water status will be significant, in order to eliminate it, there will be necessary:

- ☐ To complete the project by proposal of mitigation measures
- ☐ Or, modify the project with the better environmental choice or better environmental solution
- ☐ Mitigation measures should be proposed also in the case when the new change is not assumed to cause a deterioration of the status of the affected WB but may affect the status of the neighboring WB (the construction is situated nearby the adjacent WB)



**Procedure for assessing infrastructure projects under Article 4.7 WFD
according to the Guidance Document no. 20**

- ☐ **If the anticipated change is temporary** with predicted only short-term effect on good ecological status/potential of surface water bodies, the achievement of good status of groundwater body, or short-term deterioration of surface water bodies or groundwater bodies (e.g. during construction), Art. 4.7 WFD is not necessary to be applied.

- ☐ **If the anticipated change is permanent** with assumption that it will be the reason of failing to reach good ecological status/potential of surface water bodies or good groundwater bodies status, or long-term deterioration of bodies of surface water or groundwater, the Art. 4.7 WFD is needed to be applied.



Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

- ❑ The Expert Assessment of the authorized body or resulting from Expert Assessment of authorized body, the subsequent assessment in accordance with Art. 4.7 WFD is **a prerequisite for the permitting process of construction for state authorities issuing Assessments and Decisions on the location of the construction.**
- ❑ Measures which result from the project assessment in accordance with Art. 4.7 WFD (both from the primary and from the subsequent assessment) should not be a subject of **additional changes or** adjustments of the project/construction before its completion without **re-assessment.**





Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

- ☐ These procedures, as well as an overview of new planned infrastructure projects (including assessments already made) are part of the River Basin Management Plan of Slovakia that is the part of the Danube River Basin Management Plan and the Vistula River Basin Management Plan for 2016-2021.
- ☐ Responsibility for demonstrating the benefits and the best environmental choice in accordance with Art. 4.7 WFD has a relevant sector that is planning to implement the infrastructure project.
- ☐ Public comments are applied within the area management and within the river basin management plans marking up in accordance with Art. 14 WFD.



Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 20

- ❑ During the period February 2015 - January 2017 - 108 new infrastructural project from different sectors were primary assessed in accordance with Art. 4.7 WFD. Referred to the number and the extent of new infrastructure projects, the first are flood protection projects (39), the second new transport infrastructure projects (34).
- ❑ In terms of the significance of the identified new hydromorphological changes, the biggest group is represented by small hydropower plants (6), then flood protection (3) and reservoir (1 water-supply reservoir and 1 water reservoir). For these infrastructural projects the most often was assumed that these changes would have a significant impact, and it was necessary to assess them in accordance with Art. 4.7 WFD.



Procedure for assessing infrastructure projects under Article 4.7 WFD according to the Guidance Document no. 36

- ☐ On 14. December 2017 in connection with preparation of the Guidance Document No. 36, MoE SR initiated the organisation of the working meeting with JASPERS: ***Assessing Project Compliance with the EU Water Framework Directive/Introducing the Checklist Tool***
- ☐ Guidance Document no. 36 was endorsed by EU Water Directors at their meeting in Tallinn on 4-5 December 2017
- ☐ On 15. march 2018 Act no. 51/2018 Coll. came into force, amending act no. 364/2004 Coll. on water and amendment to the Slovak National Council Act 372/1990 Coll. on offences as amended (Water Act)



Act no. 51/2018 Coll.

- ☐ Water Research Institute is the authorized body in accordance act no. 51/2018 Coll. which elaborates Expert Assessment to proposed activity (former primary assessment)
- ☐ The procedure for Expert Assessment elaboration remained the same as it was for the primary assessment. In particular, the section related to the assessment of the potential impact of the proposed activity/project on environmental objectives in line with the requirements of Article 4.7 and taking into account Articles 4.8 and 4.9 WFD is modified/extended .
- ☐ JASPERS Checklist Tool is used as a tool for assessing the potential impact of the proposed activity on the environmental objectives of the affected water bodies.



Guidance Document no. 36 – application of the Checklist

The application of the checklist tool in close cooperation with JASPERS was begun by Ministry of Transport and Construction of the Slovak Republic and the National Motorway Company in the assessment of major transport projects:

- ☐ - Motorway D3 Čadca, Bukov – Svrčinovec
- ☐ - Motorway D1 Lietavská Lúčka - Višňové – Dubná Skala
- ☐ - Motorway D1 Prešov západ – Prešov – juh
- ☐ - Motorway D1 Budimír – Bidovce
- ☐ - ŽSR, Modernization of the railway line Púchov – Žilina, for line speed up to 160 km / h - stage I (Púchov – Považská Teplá)



Výskumný ústav vodného hospodárstva Bratislava

Motorway D3 Čadca, Bukov – Svrčinovec



Zdroj: <https://www.ndsas.sk/stavby/vystavba>



Motorway D3 Čadca, Bukov – Svrčinovec

a) Surface water bodies

Sub-basin	Code of WB	Name of WB	rkm		Length WB (km)	Type of WB	Ecological status	Chemical status
			from	to				
Váh	SKV 0032	Kysuca	45,30	0,00	45,30	NAT	moderate(3)	good
Váh	SKV 0090	Čierňanka	21,50	0,00	21,50	NAT	good(2)	good
Váh	SKV 0262	Čadečanka	7,70	0,00	7,70	NAT	good(2)	good

b) Groundwater bodies

Sub-basin	Code of WB	Name of WB	Area of WB (km ²)	Status of WB	
				quantitative	chemical
Váh	SK1000500P	Intergranular groundwater body of Quaternary sediments of the Váh river and its tributaries in the N part of the Váh watershed area	1069,302	good	good
Váh	SK2001800F	Fissure groundwater body of the W part of flysch belt and podtatranská group in the watershed area of Váh	4451/705	good	good



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Motorway D1 Lietavská Lúčka - Višňové – Dubná Skala



Zdroj: <https://www.ndsas.sk/stavby/vystavba>



Motorway D1 Lietavská Lúčka - Višňové – Dubná Skala

a) Surface water bodies

Sub-basin	Code of WB	Name of WB	rkm		Length WB (km)	Type of WB	Ecological status
			from	to			
Váh	SKV0038	Rajčanka	22,90	0,00	22,90	natural	moderate(3)
Váh	SKV0446	Rosinka	11,80	0,00	11,80	natural	moderate(3)

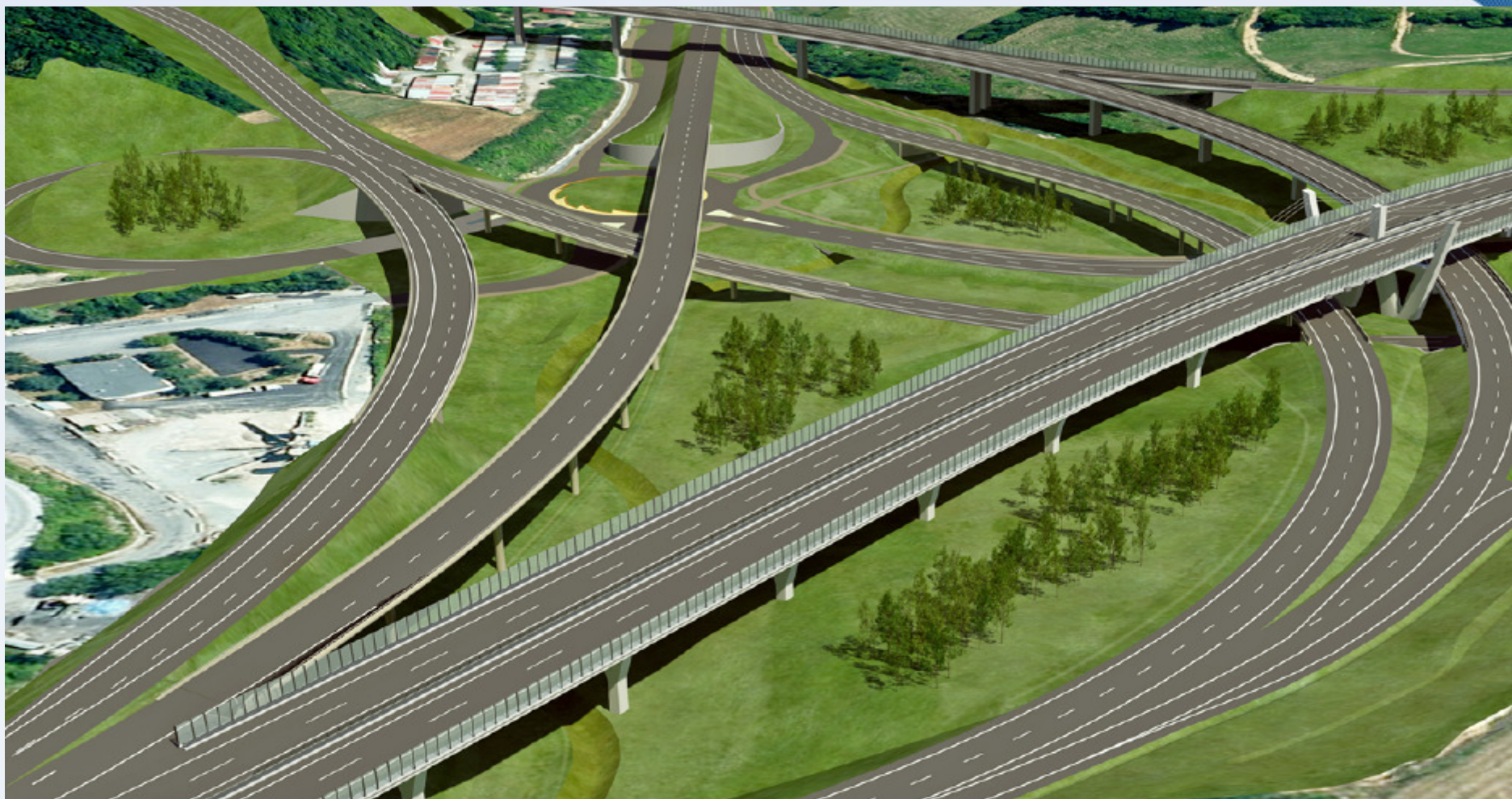
b) Groundwater bodies

Sub-basin	Code of WB	Name of WB	Area of WB (km ²)	Status of WB	
				quantitative	chemical
Váh	SK200240FK	Fissure and karst-fissure groundwater body of the Malá Fatra Mts. in the watershed area of Váh	406,534	good	good



Výskumný ústav vodného hospodárstva Bratislava

Motorway D1 Prešov west – Prešov – south



Zdroj: <https://www.ndsas.sk/stavby/vystavba>



Motorway D1 Prešov west – Prešov – south

a) Surface water bodies

Sub-basin	Code of WB	Name of WB	rkm		Length WB (km)	Type of WB	Ecological status	Chemical status
			from	to				
Hornád	SKH0016	Torysa/K2S	102,30	56,25	46,05	natural	moderate (3)	good
	SKH0017	Torysa/K2S	56,25	0,00	56,25	natural	poor (4)	good
	SKH0046	Delňa/K2M	10,60	0,00	10,60	natural	good (2)	good

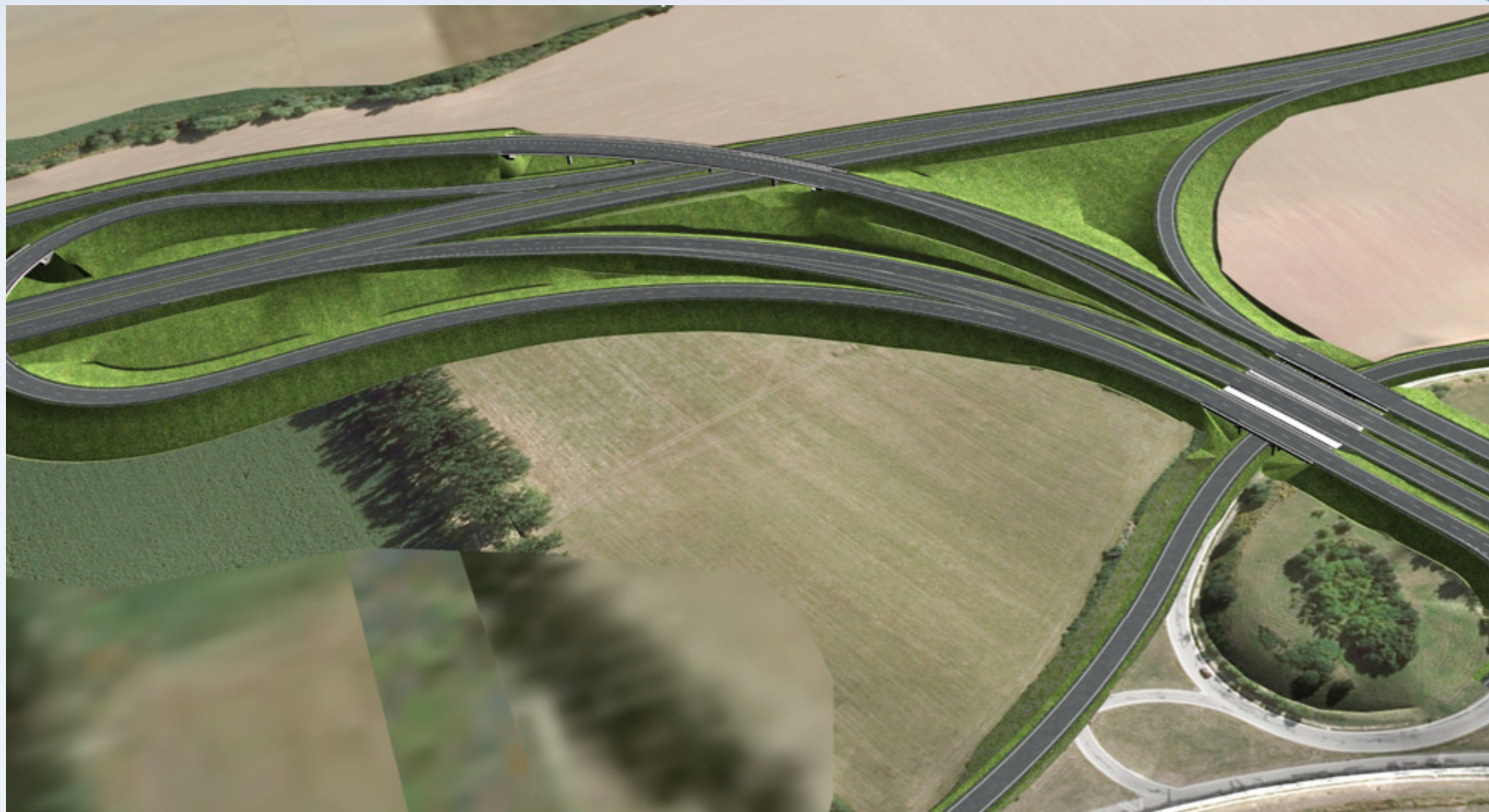
b) Groundwater bodies

Sub-basin	Code of WB	Name of WB	Area of WB (km ²)	Status of WB	
				quantitative	chemical
Hornád	SK1001200P	Intergranular groundwater body of Quaternary sediments of the Hornád watershed area	934,295	poor	poor
	SK2004900F	Fissure groundwater body of the podtatranská skupina group and flysch belt in the watershed area of Hornád	1648,160	good	good
	SK2005300P	Intergranular groundwater body of the Košická kotlina Basin in the watershed area of Hornád	1124,018	good	good



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Motorway D1 Budimír – Bidovce



Zdroj: <https://www.ndsas.sk/stavby/vystavba>



Moterway D1 Budimír – Bidovce

a) Surface water bodies

Sub-basin	Code of WB	Name of WB	rkm		Length WB (km)	Type of WB	Ecological status	Chemical status
			from	to				
Hornád	SKH0017	Torysa/K2S	56,25	0,00	56,25	natural	poor(4)	good
	SKH0022	Olšava/K2S	27,90	0,00	27,90	natural	moderate(3)	good
	SKH0004	Hornád /H2(K2V)	66,30	0,00	66,30	natural	moderate(3)	good

b) Groundwater bodies

Sub-basin	Code of WB	Name of WB	Area of WB (km ²)	Status of WB	
				quantitative	chemical
Hornád	SK1001200P	Intergranular groundwater body of Quaternary sediments of the Hornád watershed area	934,295	poor	poor
	SK2005300P	Intergranular groundwater body of the Košická kotlina Basin in the watershed area of Hornád	1124,018	good	good



Výskumný ústav vodného hospodárstva Bratislava

ŽSR, Modernization of the railway line Púchov – Žilina, for line speed up to 160 km / h - stage I (Púchov – Považská Teplá)



Zdroj: <https://www.zeleznicne.info/view.php?cisloclanku=2017020005>



ŽSR, Modernization of the railway line Púchov – Žilina, for line speed up to 160 km / h - stage I (Púchov – Považská Teplá)

a) Surface water bodies

Sub-basin	Code of WB	Name of WB	rkm		Length WB (km)	Type of WB	Ecological status/potential	Chemical status
			from	to				
Váh	SKV0007/V2(K2V)	Váh	264,50	143,40	121,00	HMWB	poor(4)	good
Váh	SKV0054/V2(K2V)	Nosický kanál	34,00	0,00	34,00	AWB	good(2)	good
Váh	SKV0192/K2M	Domanižanka	19,50	0,00	19,50	natural	moderate(3)	good
Váh	SKV0462/K2M	Manínsky potok	11,05	0,00	11,05	natural	good(2)	good
Váh	SKV0464/K2M	Mošteník	8,05	0,00	8,05	natural	good(2)	good

b) Groundwater bodies

Sub-basin	Code of WB	Name of WB	Area of WB (km ²)	Status of WB	
				quantitative	chemical
Váh	SK1000400P	Intergranular groundwater body of Quaternary sediments of rivers Váh, Nitra and their tributaries in the S part of the Váh watershed area	1943,020	good	poor
Váh	SK2001800F	Fissure groundwater body of the W part of flysch belt and podtatranská skupina group in the watershed area of Váh	4451,705	good	good



Guidance Document no. 36 – applying of the Checklist

- ❑ Based on the experience gained by applying the Checklist in accordance with the Guidance Document no. 36 in the period 1 January 2018 - 5 September 2018, [47 new infrastructure projects](#) within the various sectors were assessed.
- ❑ Related to the number of new infrastructure projects and the extent of the considered issues, the biggest group are various projects ([20](#)), then flood protection projects ([13](#)) and followed by new infrastructure transport projects ([10](#)) and small hydropower plants ([4](#))



Public participation

- ❑ **space for public feedback was created:**
 - within the administrative procedure issuing The Decision whether the proposed activity is in accordance with the § 16(6)(b) (transposition of Article 4.7 of the WFD)
 - within public marking up the river basin management plans in accordance with Art. 14 WFD



Priority topics needed to be addressed as a prerequisite for successful management of the issue resulting from the requirements of the Art. 4.7 WFD

- ❑ **To define or specify more precisely *which* projects have to be assessed in accordance with Article 4.7 of the WFD in terms of their impact significance**
 - there are many projects without significant impact (e.g. water and sewerage connections to the public water supply and public sewerage, shopping centers, industrial halls, etc.)

- ❑ **to provide information and feedback on projects which have been assessed in accordance with Art. 4.7 WFD and have been granted an exemption**
 - all projects for which an exception was granted must be listed and justified in the river basin management plans



Priority topics needed to be addressed as a prerequisite for successful management of the issue resulting from the requirements of the Art. 4.7 WFD

- ☐ to provide information and feedback on projects implementation to assessing body (e.g. whether the project was approved, when it was implemented or whether it remained only as a proposal that would not be implemented)
- ☐ Information are important from the viewpoint:
 - Art. 5 WFD (evaluation of human activity impact to surface water and groundwater status)
 - evaluation of cumulative impact of existing and new modifications of the physical (hydromorphological) characteristics on the status of affected surface water bodies and status of groundwater bodies.



Priority topics needed to be addressed as a prerequisite for successful management of the issue resulting from the requirements of the Art. 4.7 WFD

- ❑ **To ensure the accordance with relevant EU Directives** in the field of environment protection, including Habitats, EIA and SEA Directives as well as Flood Directive on national level in the context of the implementation of other EU policies or international and financial mechanisms such as the Renewable Energy Directive, the TEN-T and the TEN-E, the CEF, etc.





Thank you for your attention!