

Paris Session 2022





Temporary access roads across
environmental sensitive land

Overhead lines
PS 3 and Question 3.21
J-F Goffinet (Belgium)



Question 3.21: How differentiate the settlements from the presented execution to the two standard access ways from Elia? How does heavy rainfall or an increase in the groundwater level affect settlements? Could you describe the reduction of the intervention times compared to common projects? Experts are requested to share examples of innovations related to temporary access road construction to cross environmentally sensitive lands.

Answer prepared by elia and Geolys

		
Type of access road :	Steel plates or (wooden pieces)	Stones track
Impact on permit :	No permit required	Archaeological survey sometimes Requested. Permits needed if permanent
Easiness of solution :	Easy and flexible Inappropriate in hilly reliefs and humid fields	Heavy Installation and difficult to remove completely
Cost :	Advantageous for short duration (< 6 months)	Advantageous for long duration (> 6 months)
Safety :	Slippy when humid Reduced speed	Less risk of accident
Maintenance & risk of stealing :	Necessary washing risk of stealing	Less maintenance and no risk of stealing



Group Discussion Meeting

How differentiate the settlements from the presented execution to the two standard access ways from Elia?

- **Excavation works were not allowed** in this project by environmental authorities to preserve the high biodiversity present in the first weak ground layer.
- The expected settlements occur principally in the **first weak ground layer** (organic / turf layer) and are therefore largely dependent on the thickness of this layer.
- The standard stone tracks are executed by **removing a part of this weak layer for stability reasons (30-50 cm)**, replaced by the metaling.
- So the expected settlements with the standard stone tracks are smaller than the expected settlement with the presented execution but **it was here no option.**

How does heavy rainfall or an increase in the groundwater level affect settlements?

Considering :

- the natural ground protection provided by the metaling => no soil disturbance with traffic loads ;
- the increase of the pore water pressure in the ground ;
- the reduction of the possibility for soil dewatering due to the presence of water ;

We can say that the **heavy rainfall or the increase of the groundwater level has a positive impact** and reduce the value and the speed of the primary settlements.