Opportunities for participatory data collection	Yes for data collection and reporting			
Additional information				
References	Gonzalez-Ollauri, A. and Mickovski, S.B., 2017. Plant-Best: A novel plant selection tool for slope protection. Ecological Engineering 106 (2017) 154–173.			

6.39 Velocity of occurred landslide

Project Name: PHUSICOS (Grant Agreement no. 776681)

Author/s and affiliations: Gerardo Caroppi^{1,2}, Carlo Gerundo², Francesco Pugliese², Maurizio Giugni², Marialuce Stanganelli², Farrokh Nadim³, Amy Oen³

¹ Aalto University, Department of Built Environment, Espoo, Finland (gerardo.caroppi@aalto.fi)

² University of Naples Federico II (UNINA), Department of Civil, Architectural and Environmental Engineering, Naples, Italy

³ Norwegian Geotechnical Institute (NGI), Oslo, Norway

Velocity of Occurred Landslide		Natural and Climate Hazards	
Description and justification	Indicators of Landslide Risk Resilience sub-criterion will assess the site response to landslide phenomena based on susceptibility indicators: slope angle, pore water pressure, groundwater depth, soil properties, land use, land cover.		
Definition	Factor having significant relevance in the landslide classification. A velocity range is connected to the different types of landslides, on the basis of observation of either case histories or site observations (Cruden & Varnes, 1996).		
Strengths and weaknesses			
Measurement procedure and tool	Model		
Scale of measurement	m/s		
Data source			
Required data	Geological and geotechnical information, topography (Model/Survey).		
Data input type	Quantitative		
Data collection frequency			

Level of expertise required	High		
Synergies with other indicators			
Connection with SDGs	13		
Opportunities for participatory data collection			
Additional information			
References	Cruden D.M., Varnes D.J. (1996). Landslide Types and Processes. Special Report, transportation Research Board, National Academy of Sciences, 247, 36-75.		

6.40 Erosion risk

Project Name: OPERANDUM (Grant Agreement no. 776848)

Author/s and affiliations: Slobodan B. Mickovski¹, Alejandro Gonzalez-Ollauri¹, Karen Munro¹

¹ Built Environment Asset Management Centre, Glasgow Caledonian University, Glasgow, Scotland, UK

Erosion risk (soil loss estimate)		Natural and Climate Hazards	
Description and justification	Soil erosion is among the most challenging and continuous environmental problems in the world and can take form of erosion by water (usually surface runoff) or wind. The displaced soil travels away from the point of origin and can create additional risks to life and property. Soil erosion is one of the main and original risks the NBS were employed to mitigate against.		
Definition	The likelihood of a site/plot of soil to lose the uppermost layer due to the agents of water, wind, etc. Usually measured as the volume of lost soil per unit of time.		
Strengths and weaknesses	 +: relatively standard me databases exist for prelim -: lack of data on the eros engineered soil surfaces a 	inary assessment. ion risk of man-made or	
Measurement procedure and tool	the soil loss per unit of tin consideration of soil type,	oss Equation is used to calculate ne. The calculation involves climatic parameters (rainfall), ation (not necessarily NBS).	