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# Assessment of measures targeted to reduce railway suicide and trespass

## WP2 and WP3

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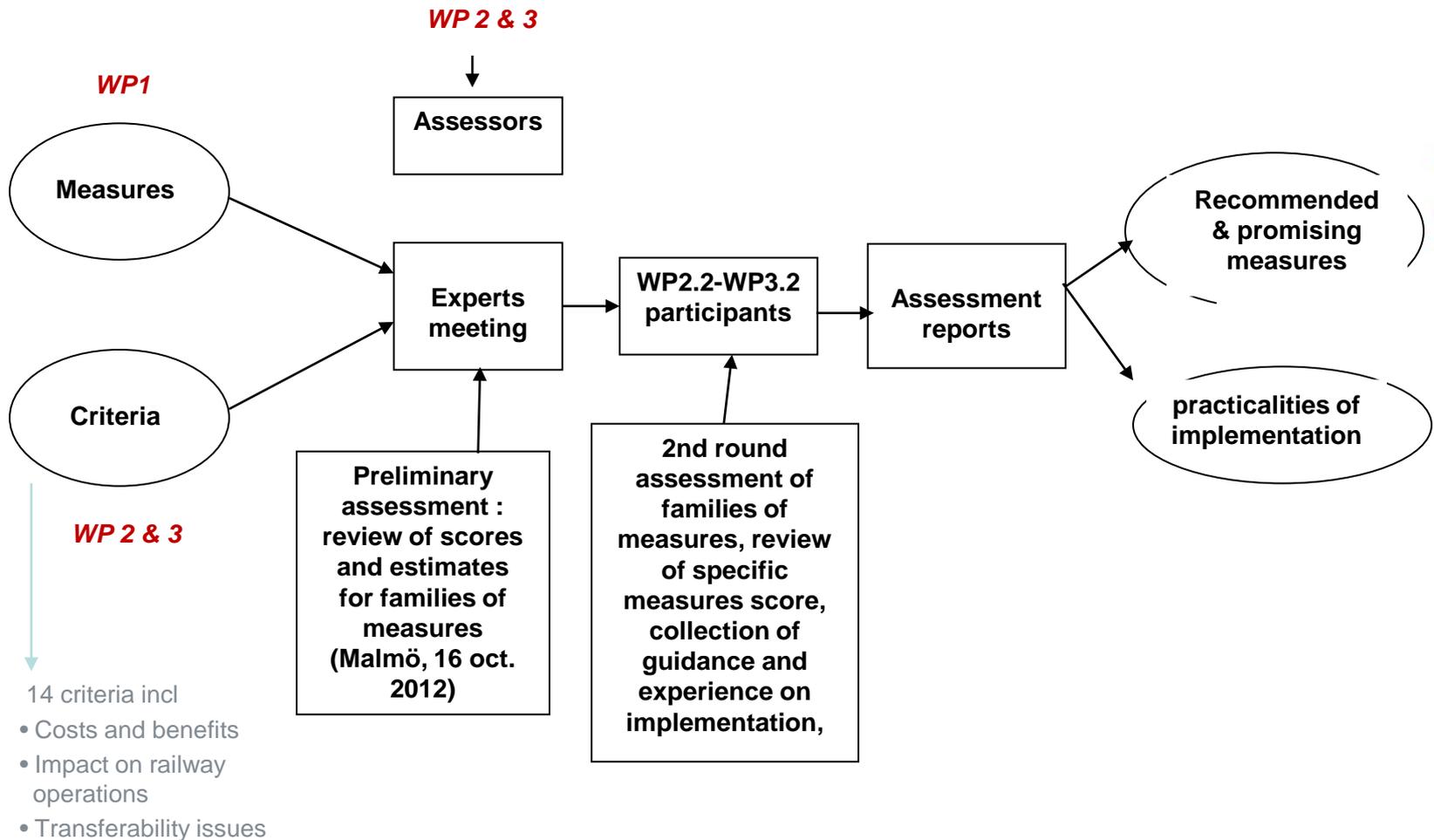


# Why a joint work

- WP1 identified a long list of preventative measures used by the railway
- For IMs and RUs suicide and trespass are usually address conjointly
- Most of the measures are potentially suitable for both suicide and trespassing, but
- There could be negative interaction (as well as positive reinforcement) between measures
- No unnecessary duplication



# Overview of the evaluation





# Example from the evaluation process

ID	FAMILIES OF MEASURES	TOTAL SCORE FOR QUALITATIVE EVALUATION CRITERIA		ANNUAL REDUCTION OF FATALITIES				CATEGORISATION CRITERIA ("1" indicates passing of threshold value)								RECOMMENDATION: R = RECOMMENDED P = PROMISING		COMMENTS
				SUICIDES		TRESPASSING		SUICIDES				TRESPASSING						
		SUICIDES	TRESPASSING	MIN	MAX	MIN	MAX	Total qual. score	Safety effect score	Implement. score	Survey score	Total qual. score	Safety effect score	Implement. score	Survey score	SUICIDES	TRESPASSING	
2	Increased visibility by lightning at railway crossings, tunnels and hotspots	23	19	2,3	17,1	0,6	3,1	1	1	1	0	0	0	1	0	P		High total score and for suicide.
3	Operational train planning and control, temporary speed reduction or traffic shut-down when a risk is detected.	14	14	1,4	7,14	0,4	2	0	0	0	0	0	0	0	0			
4	Increasing visibility through removal of vegetation	23	23	11	52,8	0,5	2,5	1	1	1	0	1	1	1	0	P		High total score and for suicide.
5	Surveillance to deter and prevent incidents: CCTV cameras	18	16	0	5,71	0	0,8	0	0	0	1	0	0	0	1			Scored well in TOP otherwise. Problem
6	Surveillance and light to influence behaviour: Lighting including a tracking spotlight linked to a movement sensor. Dispelling light source.	23	20	2,1	12,7	1	4,1	1	1	1	1	0	0	0	1	R		High total score and suicide, perhaps pr
7	Surveillance to deter: CCTV and sound warnings	24	19	3,2	15,8	0,5	2,5	1	1	1	1	0	0	1	1	R		
8	Surveillance to deter and prevent incidents: Security Patrols	17	17	21	128	12	47	0	1	0	1	0	1	0	1		P	Promising for trespass durability and costs
9	Surveillance to influence behaviour: RADAR/ Glass fibre sensing	17	17	4,2	21,1	1	5,1	0	1	0	0	0	0	0	0			
10	Video cameras/motion detectors, mobile CCTV, linked to (train)traffic stop warnings	11	11	7,1	42,8	0,8	3,9	0	1	0	0	0	0	0	0			
11	Surveillance based on local intelligence (e.g. from police, health authorities)	15	0	5,7	28,5	0	0	0	1	1	1	0	0	0	0	P		Ratings not that high and reasonable effort
12	Targeted campaigns (including shock campaigns)	21	21	7	36	3,1	16	0	1	1	1	0	0	1	1	R	P	Predicted effect for trespass.
13	Education and prevention in schools	0	23	0	0	2,8	14	0	0	0	0	1	0	1	1		R	
14	Mass media campaigns	21	21	0	71,4	3,9	20	0	1	1	0	0	0	1	0	P	P	High potential effect level could be conc
15	Media Guidelines	22	21	21	107	0	9,8	1	1	1	0	0	1	1	0	P		
16	Staff Support (staff at risk of suicide)	22	0	1	4,02	0	0	1	0	1	0	0	0	0	0			
17	Additional technologies for train drivers (e.g. spotlights, in-cab CCTV)	13	14	1,4	14,3	0,4	2	0	1	0	0	0	0	0	0			



# Selected measures suicide and trespasses

Family of measures	Classification for suicide	Classification for trespass
Targeted campaigns (including shock campaigns)	Recommended	Promising
Fences and barriers at specific parts of stations	Recommended	Recommended
Fences and barriers at locations outside stations where people take shortcuts across tracks	Recommended	Recommended
Surveillance to deter (social measure)	Promising	Promising
Mass media campaigns	Promising	Promising
Risk assessment (eg of stations, special circumstances, risk groups or individuals)	Promising	Promising
Monitoring and learning from research and best practice	Promising	Promising



# Selected measures specific for suicide or trespasses

Family of measures	Classification for suicide
Surveillance and lights to influence behaviour	Recommended
Detection system combined with sound warnings	Recommended
Increased visibility by lighting at railway crossings, tunnels and hotspots	Promising
Increases visibility through removal of vegetation	Promising
Surveillance based on local intelligence (eg from Police, health authorities)	Promising
Media guidelines	Promising
Emergency information at stations (signs, posters, flyers, on screens etc)	Promising
Collaboration between organisations and agencies	Promising
Societal collaboration to prevent railway suicide	Promising
Gatekeeper programme	Promising

Family of measures	Classification for trespass
Education and prevention in schools and outside of school	Recommended
Warning signs and posters to address trespassing	Recommended
Prohibitive signs	Promising



# Conclusion of the work done

- Evaluation is difficult in this type of real world context
- A structured, transparent process has been developed
- We have drawn upon published material and collected information
- The evaluation process was designed to be flexible and able to take account of new information.
- Consideration has been given to differences in the way in which measures may work in relation to suicide and trespass
- We have successfully discriminated between different measures.
- The process helped us understand more about how to implement the measures



Questions?