

## Impact-Echo diagnosis in Sighisoara, Romania, bridge over Sacs

Sketching a mesh over the surface with 30 cm / 30 cm frame size :



Measuring the sound speed and executing non-destructive Impact Echo tests over the bridge deck and beams :



- The 1.520 m/s sound speed measured in the concrete, shows a low elasticity modulus, under 50.000 dN/cm<sup>2</sup>
- More than 500 impact-echo tests were performed over the bridge structure.
- Several cracks were detected, with preference in the concrete beams.
- Example of three consecutive points indicating the development of a crack in the concrete beam :

