

## Floating Tube Bridge to Link Scotland and Northern Ireland?



*Artist's impression of the floating tube tunnel*

Prime Minister Boris Johnson has repeatedly given enthusiastic support to ambitious proposals for a 20-mile bridge between Portpatrick in Wigtownshire, and Larne, north of Belfast. The crossing could cost £15 billion according to initial estimates. However, a team from Heriot-Watt University in Edinburgh has now proposed a less costly scheme involving the creation of a submerged floating tube bridge (SFTB). Their vision would require less structural engineering work because, instead of pillars, it would be anchored to the seabed and tethered to pontoons on the surface.

The tube through which traffic could pass would be 50m (164ft) below the surface. Cars could drive through or park on a high-speed shuttle train, which the designers say would be safer. It is also estimated the SFTB would cut the current ferry passage from Cairnryan Port to Northern Ireland from two-and-a-half-hours to 40 minutes.

"From an engineering perspective, an SFTB as a concept is very exciting," said Eoin MacDonald, who is working on the project proposal. "It has the potential to transform how long-distance sea crossings are tackled."

Mr MacDonald's enthusiasm was echoed by Finlay Carson, Scottish Conservative MSP for Galloway and West Dumfries, who said: "There is a lot of merit in a submerged floating tube bridge, especially if it brings significant financial benefits to the local economy in the southwest of Scotland as well as nationally."

A UK government source told one Sunday newspaper: "A link between Scotland and Northern Ireland is an exciting idea. It is fascinating to see topflight engineers working up concepts which might achieve that end."

The technology behind the tunnel is untested, although plans are under way to use it to link islands in Norway. The idea of a link to Northern Ireland will be included in an independent review being carried out by Sir Peter Hendy, the chairman of Network Rail. Plans for a North Channel crossing have attracted scepticism because of the huge costs and the danger posed by Beaufort's Dyke, a deepsea trench filled with dumped Second World War munitions.

The Scottish government said: "We have no plans to take forward proposals for a bridge."