

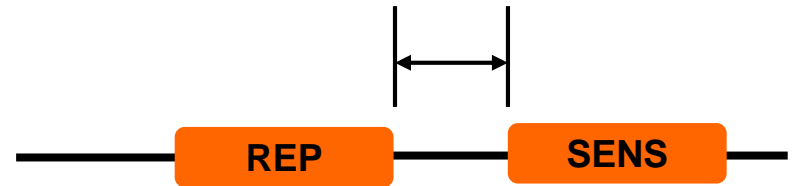
# Integration options

## (1) Full integration

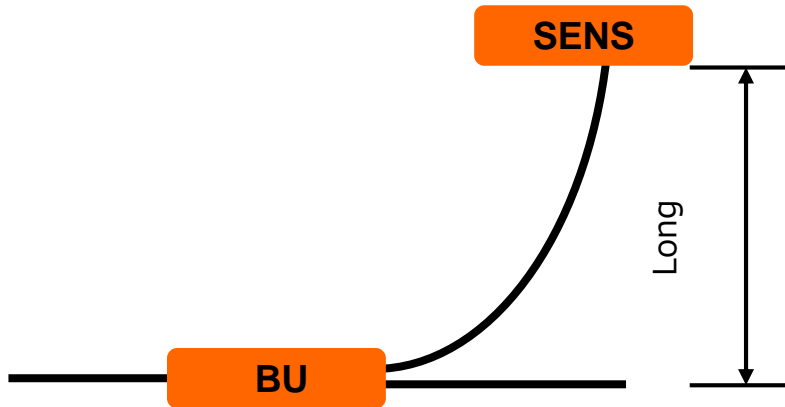


## (2) Sensor Independent

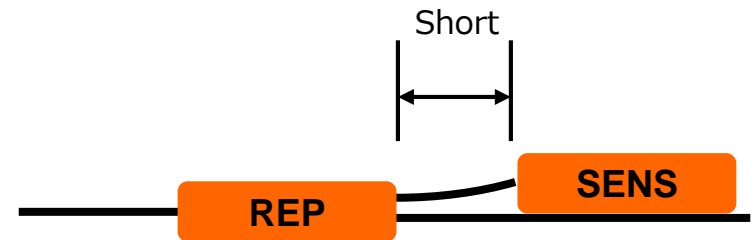
Mid - Span /  
Alternate Spans ?



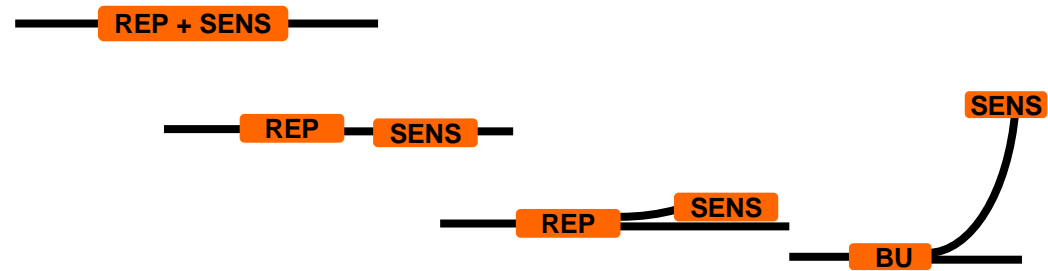
## (3) Sensor branch



## (4) Sensor tail



# Comparison of options



	Full integration	Sensor Independent	Sensor tail	Sensor branch
Field-proven qualified solution	Yes	Yes	No	Yes
OK for ... pressure sensors	Yes	Yes	Yes	Yes
... accelerometers	Yes	Yes	Yes	Yes
... temperature sensors	No	Probably	Probably	Yes
Scalable to many REPs	Yes	Yes	Yes	No
Target sites of scientific interest	No	Yes*	No	Yes
Deployment complexity	Lower	Lower	Lower	Higher
Independent sensor	No	Yes*	No	Yes

# Financial Considerations

Example Hypothetical Transatlantic Cable System

5000 km, 65~100 Telecoms Housings

System Cost ~ US\$ 300 Million (NB: This is a fair estimate but not specific)

This estimate as yet un-validated

This is not a like for like comparison...

	8fp	4fp	Independent
Participating Science Investor	US\$36.25M	US\$71.25M	NA
Cost of Sensors	US\$ 20M?	US\$ 20M?	US\$31M*
Cost of Fibres	Inc	Inc	US\$200K
Annual O&M Contribution	To be negotiated (Cost of Power impact to business case) ~US\$0.56M	To be negotiated (Cost of Power impact to business case) ~US\$1.80M	Cost of Power? Level of O&M To be negotiated ~US\$0.47M