

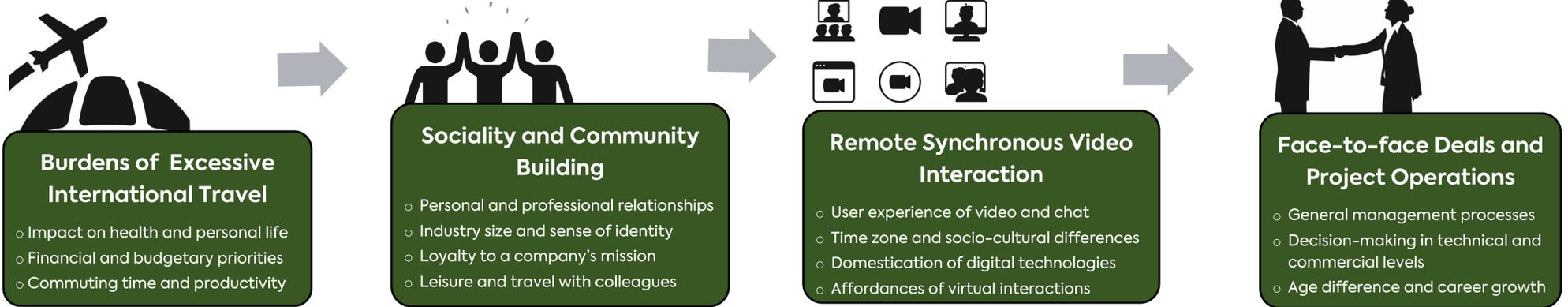
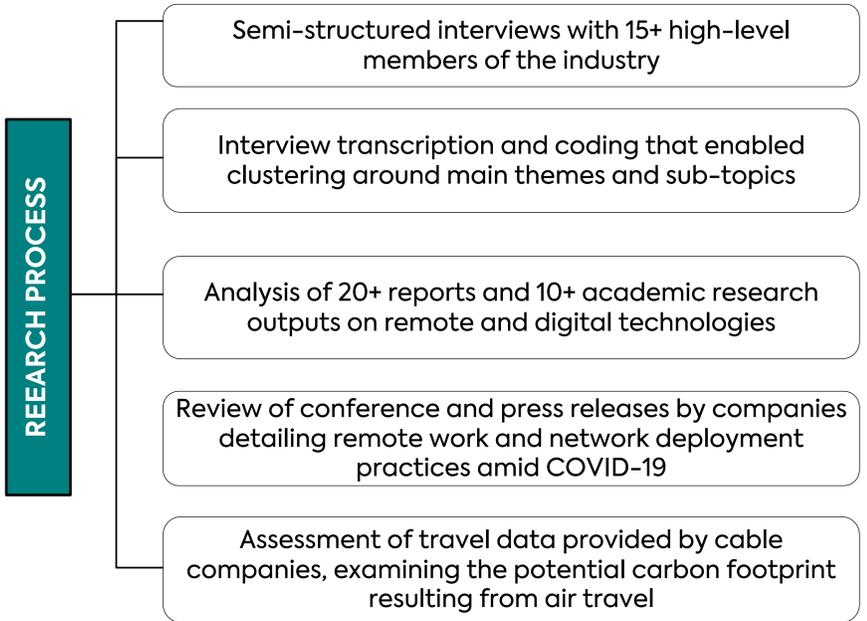
Flying the Skies to Wire the Seas: Should the Subsea Cable Industry Stop Flying?

Iago Bojczuk, Nicole Starosielski, and Anne Pasek

ib410@cam.ac.uk

INTRODUCTION: THE SUBSEA CABLE INDUSTRY ADAPTS TO THE “NEW NORMAL”

For decades, the subsea cable industry has relied on transnational air travel to lay global communication networks and expand its presence across the globe. However, the COVID-19 pandemic disrupted this practice in 2020, forcing workers in the industry to shift to remote work and online meetings to complete projects like Dunant, Jupiter, JGA, NO-UK, EllaLink, and regional cables. **Our research, based on interviews with industry leaders, suggests that reducing air travel and shifting towards remote work can have positive environmental effects and reduce the industry’s carbon footprint.** However, as in-person interactions are likely to remain necessary for some project stages and people, **we developed a calculator to help the industry estimate the benefits of using online meetings giving the specificities of a cable project.**



THE LIMITS OF REMOTE WORK AND AN ENDURING SOCIAL FABRIC

The subsea cable industry is unique in its reliance on in-person communication, which has historically helped drive a sense of loyalty to various corporate missions toward connecting the world. **Our interviews show that building relationships is a vital part of the industry, which has been established over decades.** Unlike other infrastructure sectors, the subsea cable industry is globally dispersed and relatively small, making face-to-face meetings crucial to ensure successful project delivery—which is one of the aspects of the industry’s “social fabric.” While recent network deployments have shown that remote work can be indeed successful, informal interactions and engagement may be challenging when not performed face-to-face. Moreover, the lack of in-person engagement can have a negative impact on the career paths of junior staff, as these interactions are important for their development in the industry.

SSN CARBON EMISSIONS SAVINGS CALCULATOR ~

Main Travel-related Indicators	Planning &	JBA &	Construction	Total
	Development	Procurement		
Period (months)	18	18	36	72
Meeting Frequency (months between mtgs)	1.5	1.5	1.5	4.5
Number of Meetings	12	12	24	48
Avg # of Participants Traveling/Meeting	12	18	15	45
Avg # of Participants Traveling/Project	144	216	360	720
% of Meetings Possible via Zoom	80%	90%	30%	
# of Individual Trips Saved with Zoom	115.2	194.4	108	417.6
Avg. Distance Traveled per Individual Trip (km)*	4000	4000	4000	
Total Air Travel Distance Avoided (km)	460800	777600	432000	1670400
Carbon Savings per Project (kg CO2e) Δ	197600	333450	185250	716301

Notes
 ~ Sample estimations assume a large-scale consortium system.
 Δ Conversion factors are taken from the 2021 UK Government’s GHG Conversion factors, inclusive of radiative forcing and presuming business class travel.
 * Average air travel distance is assumed to be a mid-length international flight.
 Obs.: 4,000km was selected as a fair estimate—roughly the distance between Los Angeles and Honolulu.

CONCLUSION: IT DEPENDS

Our interviewees suggest that the decision on global air travel for deploying new cable systems depends on several factors, including the project stage, people involved, and the social fabric in place. For example, on-site visits and stakeholder meetings are crucial for teams in marine, CLS, and network installations during the early stages of a project. Video conferencing, on the other hand, may be more successful for cables with a single purchaser due to a shared corporate culture and limited discussion, but remote work can be challenging for getting new business. Management practices also vary based on age group, with younger generations favoring video calls for flexibility and older generations preferring face-to-face interactions. **To reduce carbon footprint, the industry should seek to prioritize meaningful travel and allocate budgets accordingly. This shift can potentially influence the broader ICT and telecom industries to reach net-zero objectives.**



SCAN ME