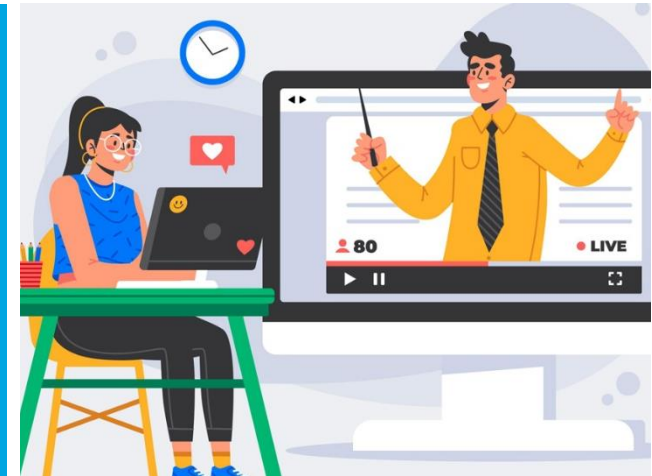


Remote learning and immersive technology in training

Jordan Smith, Lead Human Factors Specialist at RSSB
IRSC 12th – 14th October 2021



Background

A regular review and improvement of training programmes is required to ensure that they can be delivered in an effective manner and that benefits are realised



Industry is yet to fully utilise the advancements in technology and remote learning to **enhance** training development and delivery

Previous RSSB research has highlighted the importance of the **learning requirement** dictating the method of delivery

Postponement of training can lead to **knowledge and/or skills fade**

There has been a **requirement** to deliver training remotely over the past 6 months




Remote training options offer a **longer term benefit**; planning for similar challenges

The opportunity

There is a huge opportunity for the rail industry to make a step change in its approach and mindset to attracting talent, and to training and developing staff



Approach

 **Literature**  **Interviews**  **Workshop**



A large offshore oil and gas platform is illuminated at sunset. The sky is a mix of orange, pink, and blue. The platform's complex structure of pipes, cranes, and towers is silhouetted against the bright horizon. The ocean is visible in the background.

Oil and gas

A commercial airplane is parked on a tarmac at dusk. The aircraft is silhouetted against the darkening sky. A ground crew member in a high-visibility vest is visible near the wing. The ocean is visible in the background.

Aviation

A nuclear power plant is shown at night. Several large, conical cooling towers are illuminated from below, casting a warm glow. The sky is dark, and the plant's structures are lit up.

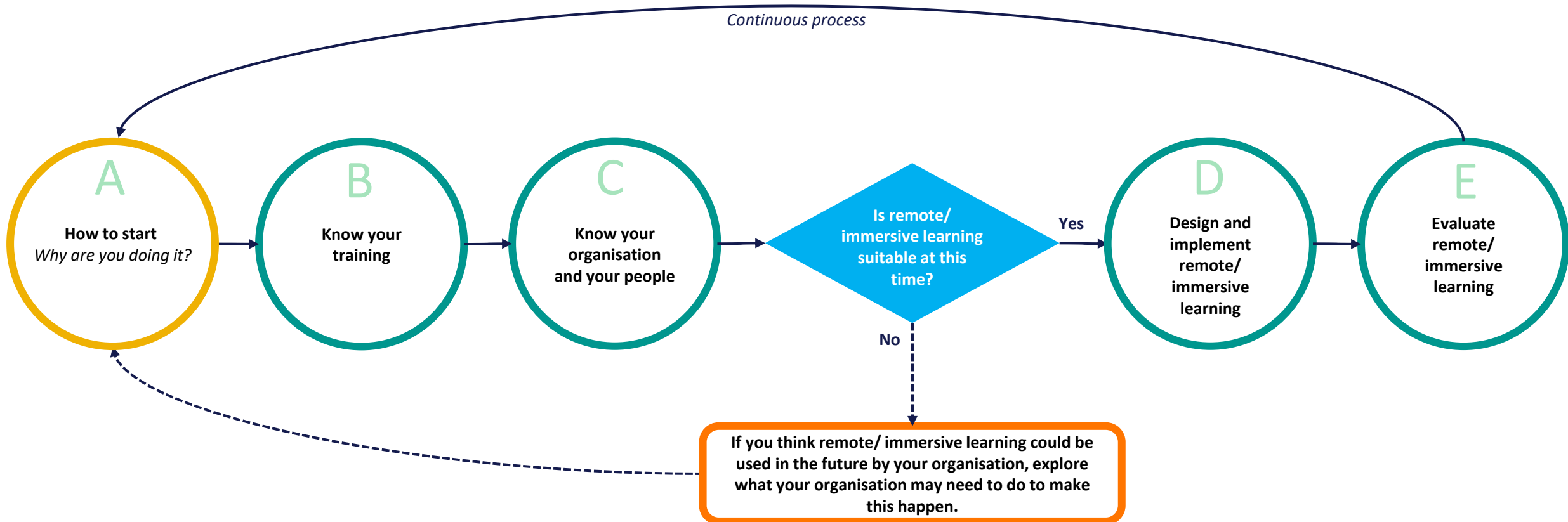
Nuclear

Guiding principles

-  **1 Complete a training needs analysis**
-  **2 Plan to avoid skill fade**
-  **3 Prepare the organisation**
-  **4 Prepare the trainers**
-  **5 Prepare learners**

-  **6 Engage learners**
-  **7 Create opportunities to practice skills**
-  **8 Utilise multiple remote learning methods**
-  **9 Measure and evaluate remote training**

Achieving a consistent approach



A

How to start
Why are you doing it?



Establish 'why' you want to use remote/ immersive learning.



What are you trying to achieve by making this change?

Continue through process

B

Know your training



What are the tasks and competencies?



How is your training currently structured?

Continue through process



How is your training currently delivered?

C
**Know your
organisation and
your people**



How ready is your organisation to use it?



Will there be any likely resistance?

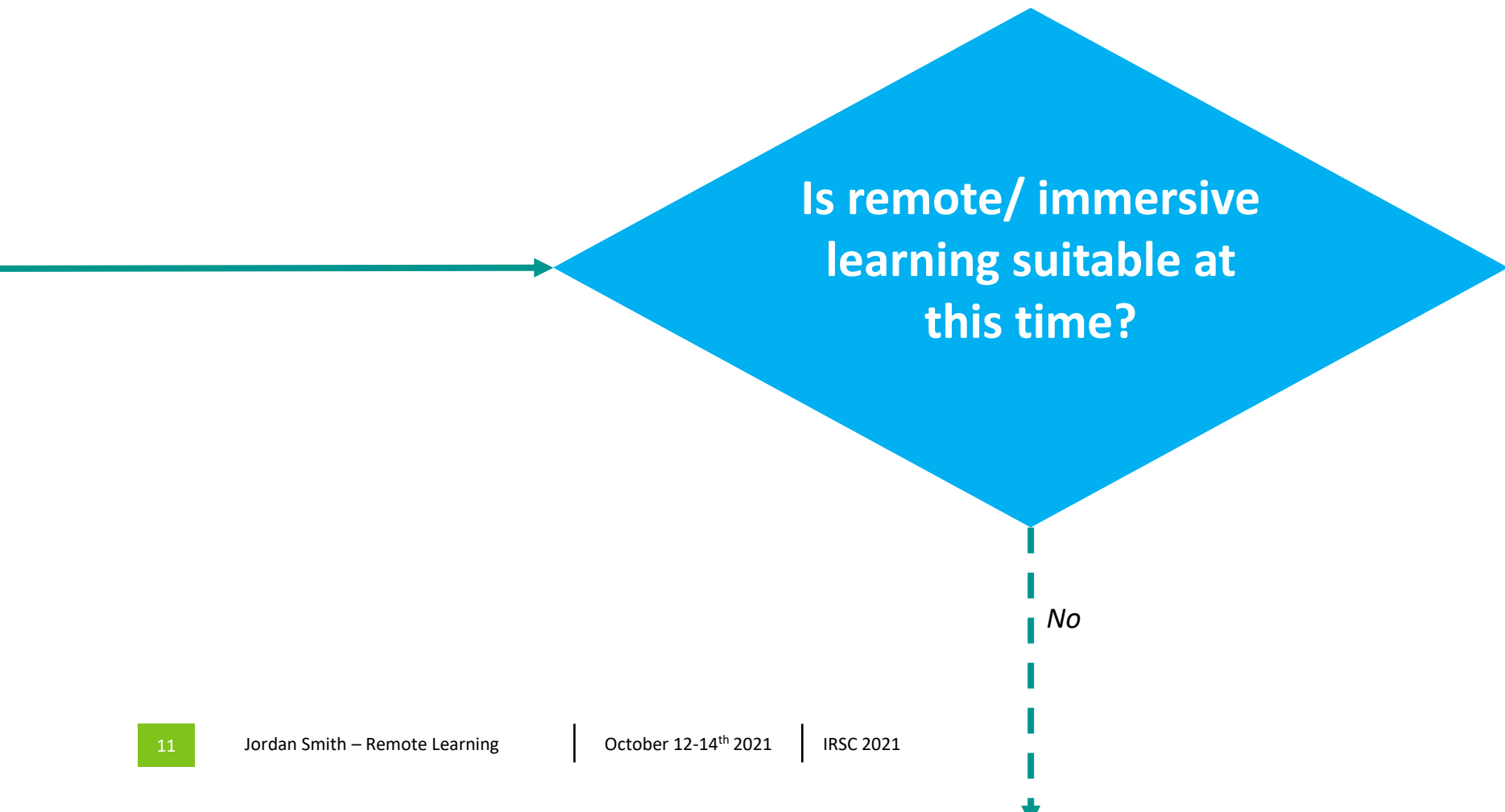
Continue through process



What learning infrastructure is already in place?



What technology and support systems are needed?



Is remote/ immersive
learning suitable at
this time?

No

No

If you think remote/immersive learning could be used in the future by your organisation, explore what your organisation may need to do to make this happen.

Back to 'Step A'

Is remote/ immersive
learning suitable at
this time?

If 'Yes', continue through process

No

D
**Design and
implement
remote/
immersive learning**



Prepare your organisation, trainers and learners for remote/ immersive learning



Design remote/ immersive learning to be effective

Continue through process



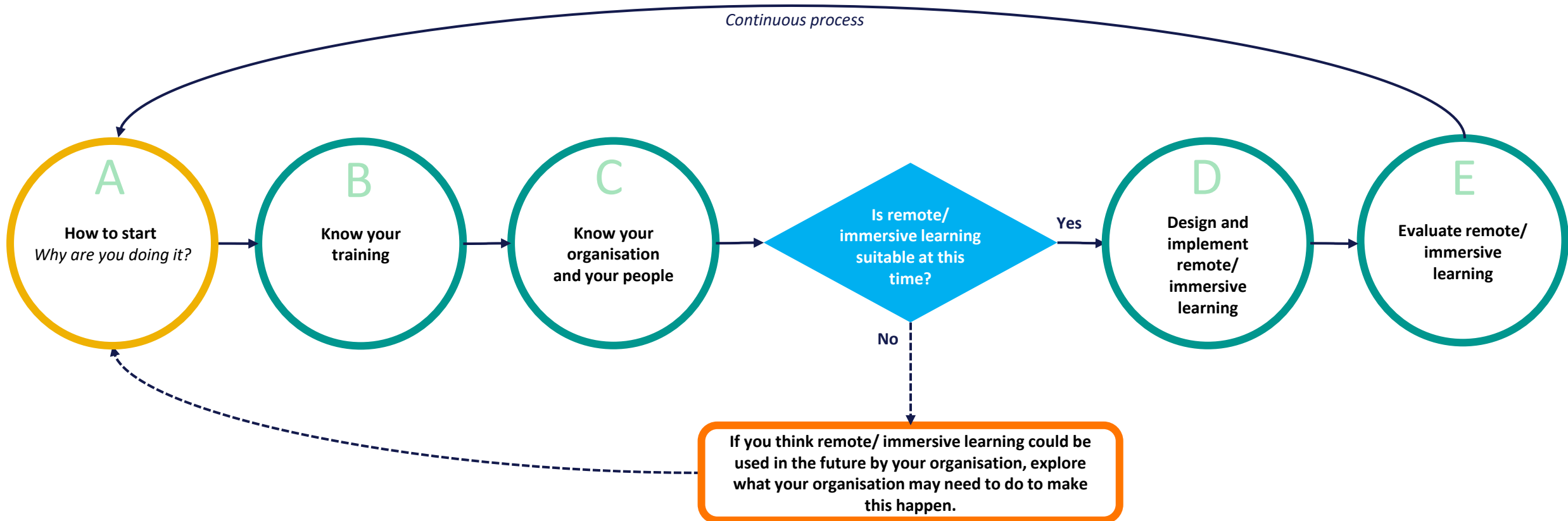
Prepare to introduce remote assessments



E

**Evaluate remote/
immersive learning**

'Plan-Do-Check-Act' for remote learning





Thank you

