



ADS

SC21

*SC21 2035 and beyond –*

**Building skills to support  
the next era of flight**

**Friday 16 July, 09:30 - 10:45**

[sc21.org.uk](http://sc21.org.uk)



# Housekeeping

- Please keep microphones on mute and videos off for the duration of the webinar and to ensure the line is clear. Please don't be offended if we mute your line, it's just to make sure we have the best audio possible
- This webinar will be recorded



# Agenda

09:30 Welcome and introduction – Kevin Craven, CEO, ADS

09:35 SC21 in numbers – Marika De Rosa, SC21 Data Management and Operations, ADS

09:37 Reflecting on 15 years past and present – Russ Armitage, Principal Russ Armitage & Associates and ex BAE Systems

09:45 The winner's experience panel – Award winners (1<sup>st</sup> group) - Phil Curnock, Aerospace and Defence Senior Director, AESCOM & ex SC21 PM

09:55 Skills and the new way of working – Sarah Dhanda, Head of Strategic Partnerships, Enginuity

10:05 Looking ahead: EFQM & SC21 synergy – Russell Longmuir, CEO, EFQM

10.15 Panelists for the future - Winner's panel discussion (2<sup>nd</sup> group) - further discussion in breakout rooms

10:40 Closing remarks

# **Welcome and introduction**

**Kevin Craven (ADS)**  
**CEO**

# **SC21 in numbers**

**Marika De Rosa (ADS)**

**SC21 Data Management and Operations**

330+  
Currently active  
Participants

224  
Expressions of  
Interest

64  
Confirmed C&G  
Beneficiaries

85  
OE Current  
Awards

=

9

Gold Award

+

27

Silver Award

+











49

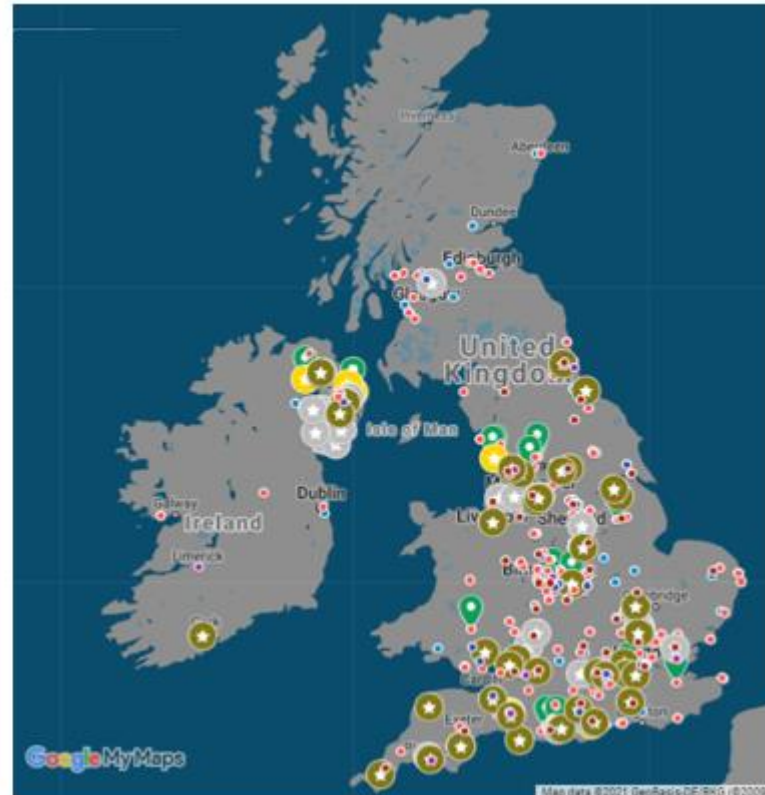
Bronze Award

In 15 years  
900+  
Participants  
835  
OE Awards

<b>Delivery*</b>	≥ 99.00%	≥ 95.00%	≥ 90.00%
<b>Quality*</b>	≥ 99.90%	≥ 99.50%	≥ 98.00%
<b>ManEx/BusEx/RelEx</b>	≥ 500	≥ 400	< 400

\* Rolling 12-month Performance

- SC21 Expressions of Interest 
- C&G - Passed Main Gate 
- Active participants 
- Current Bronze 
- Current Silver 
- Current Gold 
- RAAs 
- LEPs 
- Training Partners 
- Strategic Partners 



### Supporters

**30**  
OEMs

**90+**  
Partners,  
Practitioners,  
Providers,  
Assessors,  
Mentors

SC21 endorsed and supported by BEIS, AGP, DGP, OEMs and Industry supporters

ADS

SC21



AIRBUS



BAE SYSTEMS



COBHAM



MEGGITT



QINETIQ

Raytheon



THALES





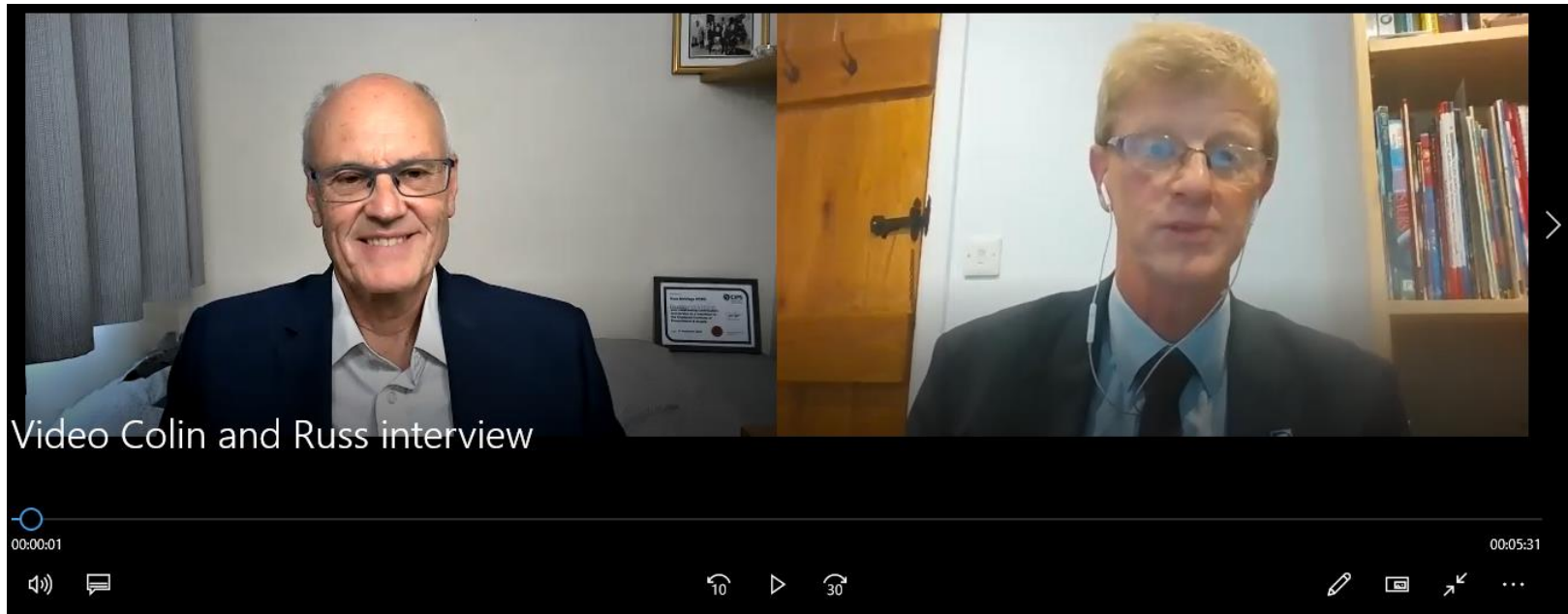
# **Reflecting on 15 years past and present**

**Russ Armitage**

**Principal Russ Armitage & Associates, ex BAE Systems**

**Colin Hart**

**Head of SC21, ADS**



Video Colin and Russ interview



# C&G Beneficiaries who passed the Main Gate



INNOVATION IN ENGINEERING



BROWN & HOLMES (Tamworth) LTD

Precision Workholding and Machining



CCP Gransden

ADVANCED COMPOSITES



HYCROME

AEROSPACE



ADS

SC21

Competitiveness & Growth



WINSLOW ADAPTICS



SC21 – Achieving Supply Chain Excellence [www.sc21.org.uk](http://www.sc21.org.uk)

The winners' experience panel



- Houndstone
- Leonardo Production Stores



**KAEFER**



**MOYOLA**  
Precision Engineering



**TMM**  
TechnicalMetals  
ANODISING • BEAD BLASTING • POLISHING

# **The winner's experience panel**

## **Award winners (1<sup>st</sup> Group)**

**Phil Curnock**

**Aerospace and Defence Senior Director, AESCOM &  
ex SC21 PM**

# **Skills and the new way of working**

**Sarah Dhanda**

**Head of Strategic Partnerships, Enginuity**



To 2035 and beyond

Supply chain skills and the new way of working

Enginuity

Commercial in Confidence



# Enginuity

Engineering Skills  
for a Smarter World

Enginuity



## Carry on flying

We absolutely are committed to getting [emissions from air travel] to zero carbon by 2050, in fact 2040 for domestic flights," Transport Secretary Grant Shapps told the BBC's Today programme.

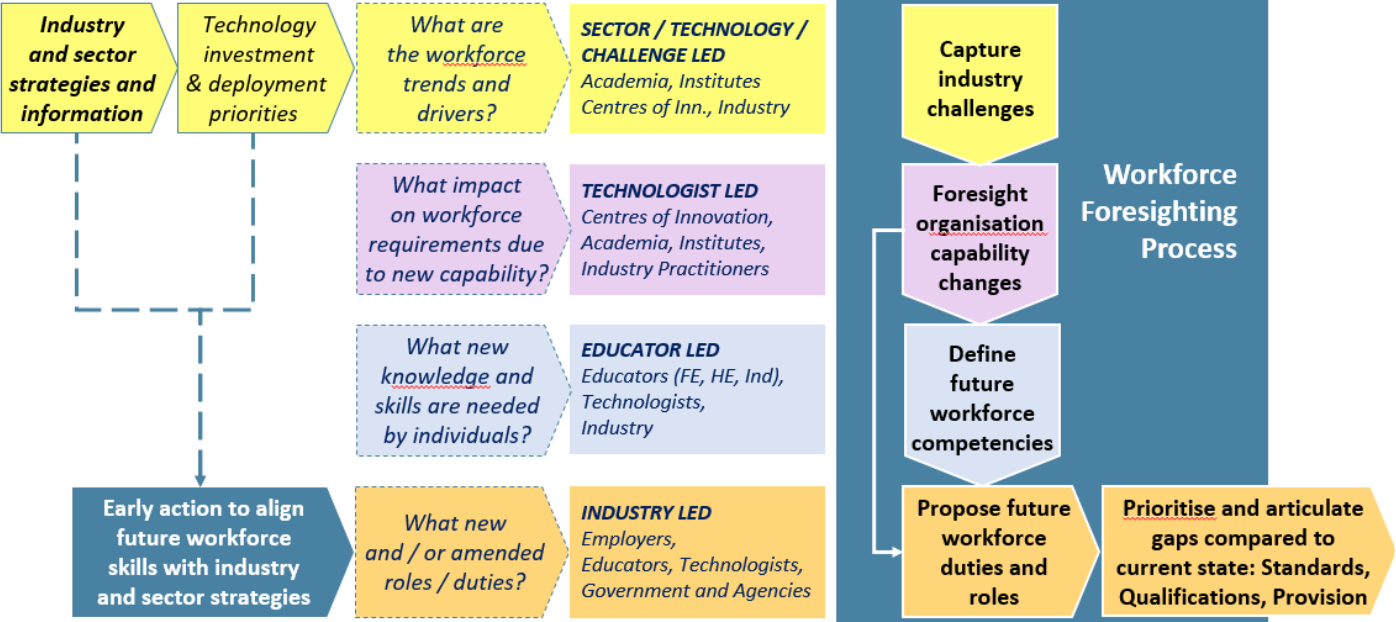
14<sup>th</sup> July 21

# The path to Net Zero in Aerospace and Defence

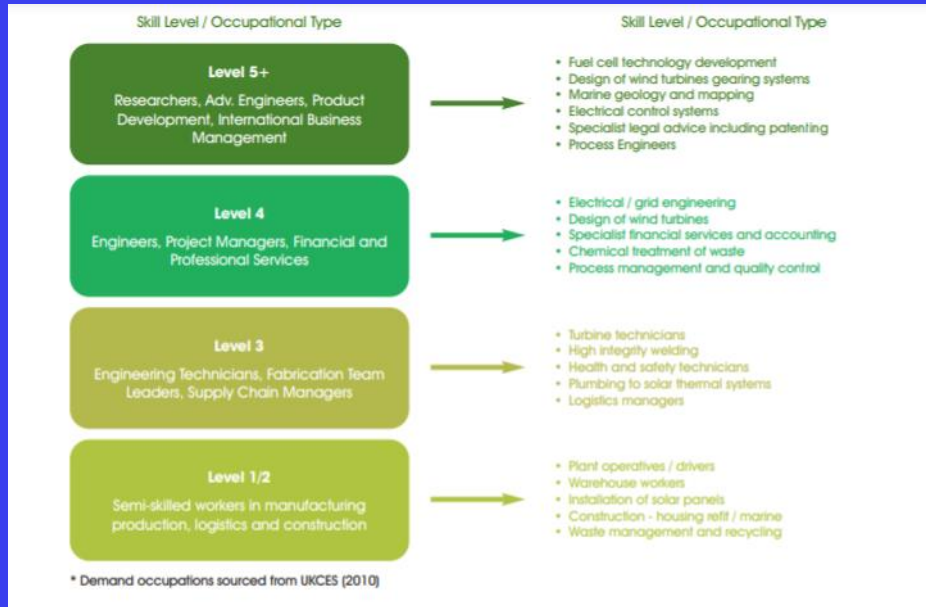
- ◆ New Technologies
  - ◆ Propulsion systems
    - ◆ Hydrogen
    - ◆ Electric
  - ◆ Whole aircraft design
  - ◆ Aircraft systems
  - ◆ Structures & Materials
- ◆ Manufacturing Efficiency
  - ◆ Digitalisation
  - ◆ Building systems
  - ◆ Lean
- ◆ Carbon Offsetting & Removal



Foresighting – connecting technology strategies to workforce action



# What is a Green Job or Skill ?



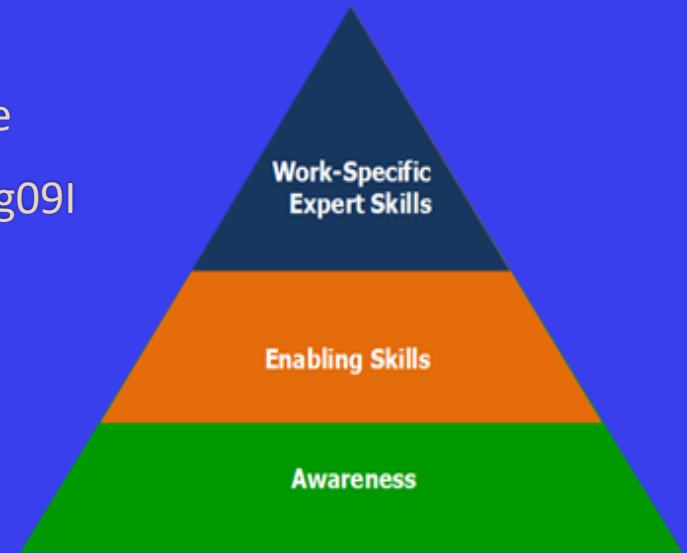
Local Governments Association  
Local green jobs – accelerating a sustainable economic recovery

**Table 5: Comments on key area of skill level gap for individual sub-sector (corresponding to relevant NVQ Level)**

Sub-sector		Comment on skill gap areas	Time horizon
Low-carbon electricity	Solar	Supply chain considered relatively secure, however an uptick in demand would require technicians to be trained at <b>NVQ level 3</b> equivalent to develop a larger installer base to deliver grid connected solar for utility scale/decentralised generation.	Yellow
Low-carbon electricity	Nuclear	Entire supply chain in need of upskilling to meet emerging demand; <b>NVQ level 1 – 3</b> for construction; <b>NVQ level 4+</b> for design and planning.	Red
Low-carbon heat	Heat pumps	Key skills gap area to meet increasing demand is in the design, specification and installation of heat pumps; <b>NVQ level 2 – 3</b> .	Red
Alternative fuels	Anaerobic digestion	To meet forecasted demand, higher skill levels would be required <b>NVQ 4+</b> to design and connect AD plants to the grid and ensure biomethane is of sufficient quality for DNOs.	Yellow
Alternative fuels	Hydrogen fuel cells	Highly skilled jobs ( <b>NVQ level 4+</b> ) for R&I required in future; a good stock of technicians expected to be available from existing automotive sector to meet manufacturing demand (i.e. NVQ 1 – 3).	Yellow
Energy efficient products	Smart controls	Highly skilled <b>NVQ level 4+</b> in software engineering is considered as a key skill to enable future innovations within the sub-sector; good stock of manufacturing technicians expected to be available (NVQ 1 – 3) for manufacturing demands.	Yellow
Low-carbon services	Consultancies and financial services	Highly skilled <b>NVQ level 4+</b> demand is ongoing and required to ensure service sector organisations can exploit emerging opportunities.	Red
Low emission vehicles and infrastructure	Electric vehicles	Sector is expected to preserve jobs across all NVQ levels as existing, large automotive capacity in UK switches to ULEV technology. Ongoing R&I activities demands highly skilled researchers <b>NVQ Level 4+</b> .	Yellow
<b>Key</b>	Sub-sectors that are considered to have key near-term (2020 – 2025) skills gaps		Red
	Sub-sectors considered to have a skills gap emerging in the longer-term (2025 – 2035)		Yellow

# Workforce development

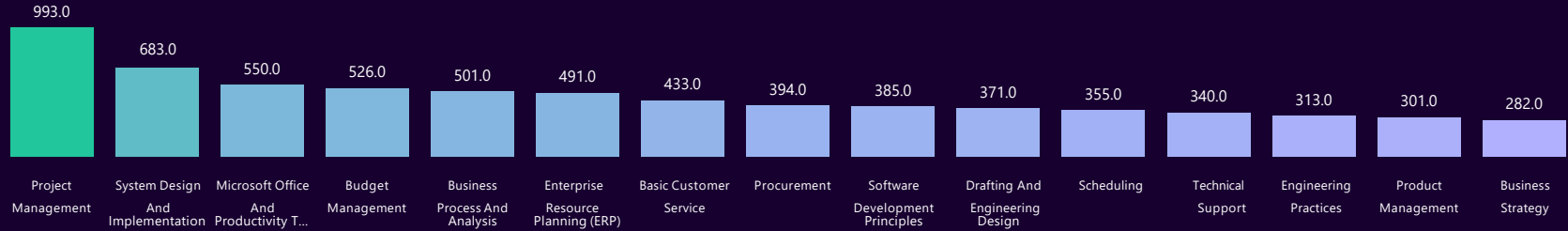
- ◇ New entrants/early careers
  - ◇ Diversity of workforce – Skills Miner Aerospace
  - ◇ <https://www.youtube.com/watch?v=GFAcHLCg09I>
- ◇ Upskilling and Reskilling
- ◇ Redeployment





## Top Skills Clusters in Demand

Source: Labour Insight (Burning Glass Technologies)



## Top Specialised Skills in Demand



## Top Digital Skills in Demand



## Top Soft Skills in Demand





# Summary – What do we know today ?

- ◇ New Jobs
- ◇ Key focus is upskilling/reskilling
- ◇ Skills Audit – gap analysis
- ◇ Digitalisation and Business Improvement are key drivers
- ◇ Underpinning Engineering & STEM principles
- ◇ The world is changing .....





# Thank You

[Sarah.dhanda@engineuity.org](mailto:Sarah.dhanda@engineuity.org)

# Looking ahead: EFQM & SC21 synergy

**Russell Longmuir**  
**CEO, EFQM**

# Emerging excellence



# Why do organisations use the EFQM Model?

- Drive continuous improvement
- Manage risk – build organisational resilience
- Benchmarking and providing comparative performance indices
- Understanding the impact of market disruption
- Managing organisational change programmes
- Drive excellence through their supply chain

# The EFQM client list

Organisations that embrace our approach:

- SMEs
- Charities
- Public Sector
- World's biggest brands



## SC21 Gold Winner and EFQM 5 Star!!

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Denroy Plastics achieve 5-Star recognition in Ireland Excellence Awards

13.03.17



Denroy are delighted to receive this prestigious award, aimed at improving productivity and quality excellence within the industry.

The EFQM Model structure is based on the simple but powerful logic of asking three questions:

## WHY

Why does this organisation exist?  
What purpose does it fulfil?  
Strategy?



**DIRECTION**

## HOW

How does it intend to deliver  
on its Purpose and its Strategy?



**EXECUTION**

## WHAT

What has it actually achieved  
to date?  
What does it intend to achieve  
tomorrow?



**RESULTS**



## The EFQM Model and SC21 OE – what's changed

### 1990 Excellence Model

- Strong **people management framework** and performance management systems
- High performing **leadership team**
- Laser focus on **continuous improvement**
- **Strategic approach to partnerships** and all organisational resources
- Highly effective **strategic** planning capability

### 2020 EFQM Model

- **Unique culture & purpose** running through the whole organisation
- **Leadership** and self responsibility at **every level**
- **Transformation management** skills allied to continued performance improvement
- Flexible and **adaptable to meet changing ecosystem** and organisation needs
- Well informed, predictive and **future focused**

## The EFQM Model

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We have many underpinning principles in the model such as the European Charter for Human Rights, the UN Compact and the UNSDGs...

Using the EFQM Model is a starting point for any organisation to evaluate their ESG proposition across their enterprise

# SUSTAINABLE DEVELOPMENT GOALS

## The EFQM Model - Why are we different?

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We help you build capability in your clients so they can manage change and measure performance improvement with your help



### TRAINING

Courses to improve performance, deliver change and manage transformation



### INSIGHT

Intelligence and best-practice to improve and transform your organisation

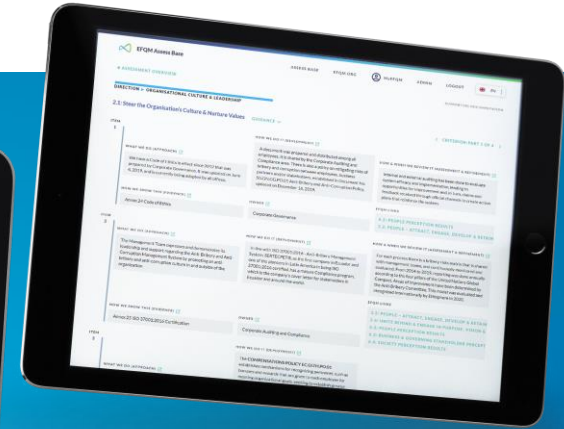
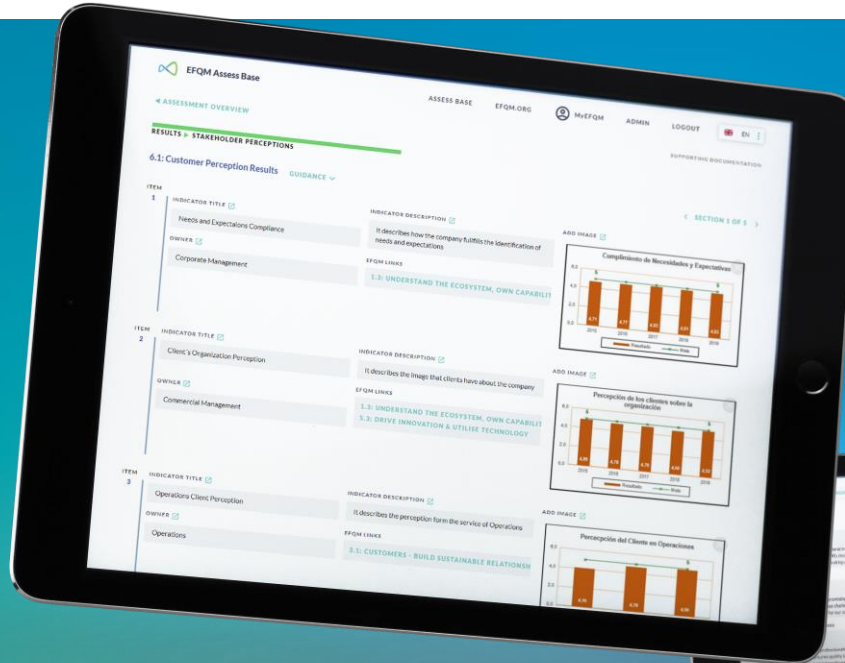


### RECOGNITION

A global learning network to help people and organisations succeed

# The EFQM Model: AssessBase

Accurate and independent baselining ready for you to identify opportunities for improvement and areas for your services



# The 5 key benefits of using the SC21 OE/EFQM Model and AssessBase

It is an enterprise platform providing:

1

Access for your wider team to track and benchmark progress of areas for improvement and change

2

True insight and analysis as to where the organisation is performing strongly (at the strategic level, on execution or results)

3

Overview of where other organisations are performing in relation to you against a global index

4

Intelligence into where an organisation is stronger – planning, deploying or assessing/refining business initiatives

5

A world leading assessment methodology to develop opportunities for action and change – across a whole organisation

—  
**Thank you!**

[www.efqm.org](http://www.efqm.org)

[www.efqm.org/assessbase](http://www.efqm.org/assessbase)



# **Panelists for the future**

**Award winners (2<sup>nd</sup> Group)**

**Breakout Sessions**

## Facilitators

**Panel A - Sarah Dhanda - Enginuity**

**Panel B - Russell Longmuir - EFQM**

**Panel C - Phil Curnock - WEAFF**



**There are a lot of “unknowns” regarding the skills we need to achieve a “Global Britain Supply Chain” by 2035.**

- 1) What are the barriers to identifying the skills you need in your business?**
- 2) What approach could you use to identify the first steps on your skills development ?**
- 3) How to best to incorporate them into annual business planning & budgeting process ?**

## Closing Remarks

### Stay connected with us:

- Talk with the SC21 Programme Office or send an email at  [sc21@adsgroup.org.uk](mailto:sc21@adsgroup.org.uk)
- Visit regularly our website for the recent updates:  [www.sc21.org.uk](http://www.sc21.org.uk)
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