



## PILOTING PROFESSIONAL PROFILES: DESIGNER

*FINAL PROJECT CONFERENCE (online)*  
*November 5<sup>th</sup>*



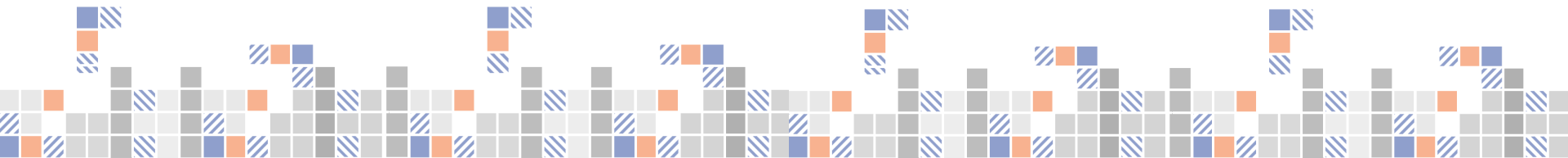
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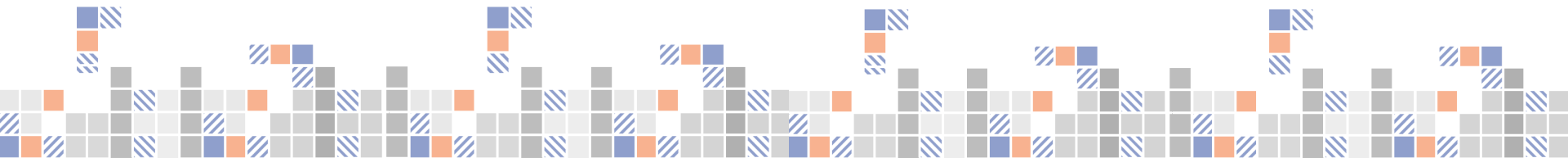
# Outline

- Designer Profile
- CUs Designer Profile Piloted
- RPL Designer Pilot Development
- RPL Designer Pilot Results
- Opinions/Summary



# Outline

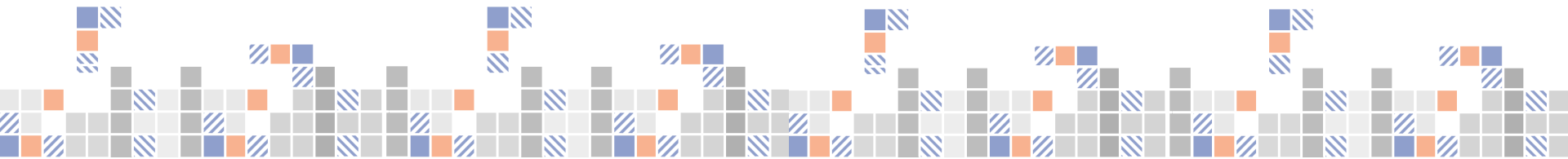
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# Designer Profile

Metal AM Designer for PBF Processes are the professionals with the specific knowledge, skills, autonomy and responsibility to design metal AM solutions for PBF Processes. Designer main tasks are to:

- *Design Metal AM solutions for PBF Processes ensuring and validating that parts can be made cost-effective and efficiently.*
- *Close PBF Processes design projects by verifying requirements for production with engineer as well as process requirements, ensuring liaison with other technical areas to sign of drawings.*
- *Contribute to projects in a teaming environment cooperation with AM Team.*



# Designer Profile

*How a professional has access to Designer Profile Process?*



# Designer Profile

QUALIFICATION	EWF LEVEL	KNOWLEDGE	SKILLS	AUTONOMY AND RESPONSIBILITY
ED PBF	ADVANCED	Advanced knowledge and critical understanding of the theory, principles and applicability of metal additive manufacturing design for PBF processes.	Advanced problem-solving skills including critical evaluation and design thinking, allowing to choose the proper technical and economical solutions, when designing for PBF metal additive manufacturing processes, in complex and unpredictable conditions.	Manage complex PBF processes design projects, taking responsibility for decision-making in unpredictable PBF processes design applications.

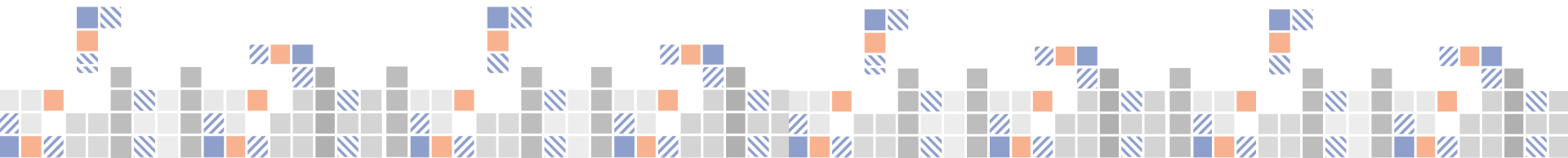
# Designer Profile

*Which CUs build up the profile?*

COMPETENCE UNITS	ED PBF	
	Recommended Contact Hours*	Expected Workload**
CU 00: Additive manufacturing Process Overview	7	14
CU 25: Post Processing	14	28
CU 59: Relevant principles of PBF Processes for Design	21	42
CU 60: Design Metal AM parts for PBF Processes	28	56
CU 61: Simulation Analysis	21	42
<b>Subtotal (without optional CUs)</b>		
CU 62: Simulation Execution	21	42
<b>Total</b>	<b>112</b>	<b>224</b>

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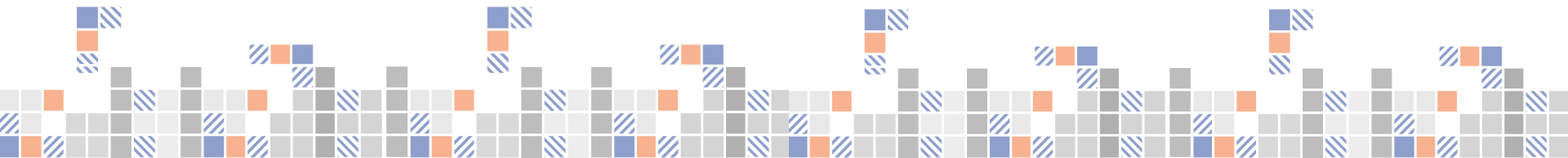




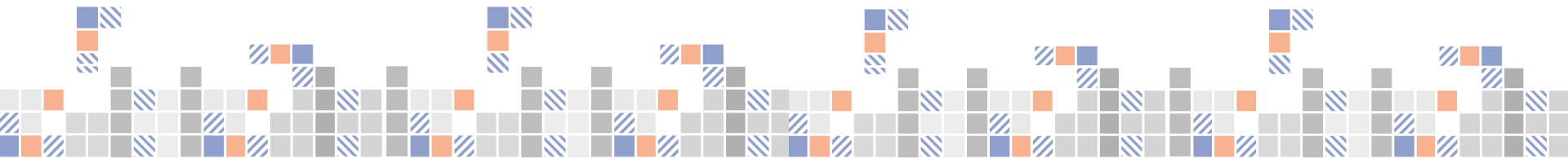
# CUs Designer Profile Piloted

- ☐ CU00: Additive Manufacturing Process Overview
- ☐ CU15: PBF-LB Process
- ☐ CU59: Relevant Principles of PBF Processes for Design

10 Attendants per each CU / 3 tutors (1 per each CU)

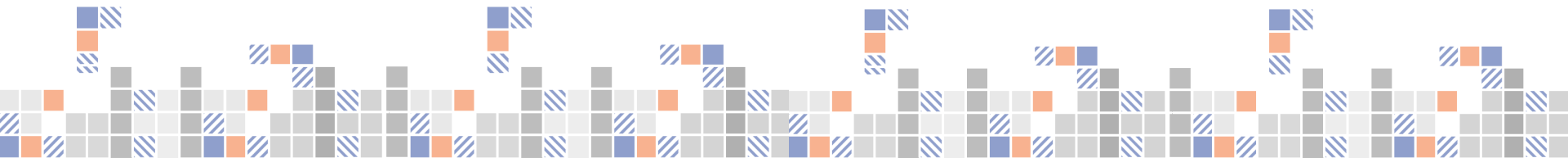


# CUs Designer Profile Piloted



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# RPL Designer Pilot Development

Candidates/Participants: 5

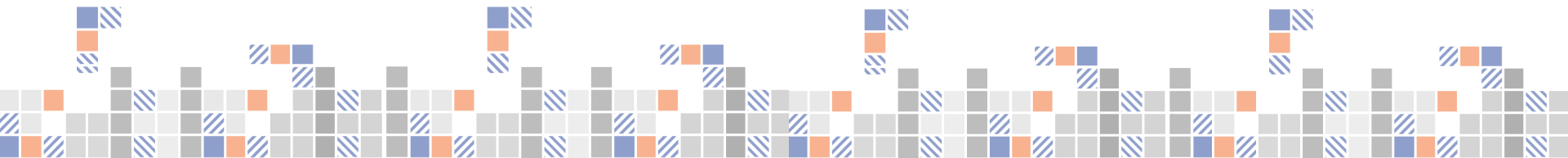


EQF Level  
5 Candidates in Level 6

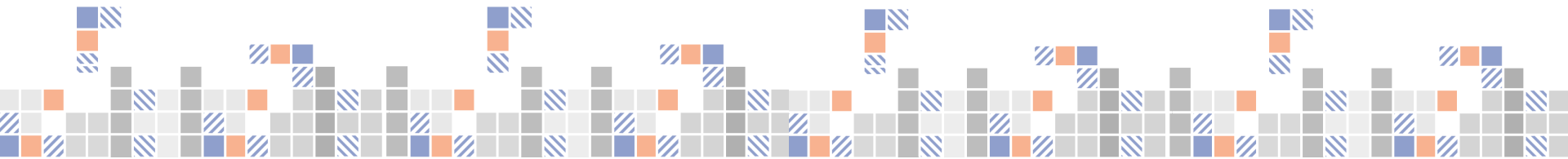
Tutor: 1



EQF Level  
6

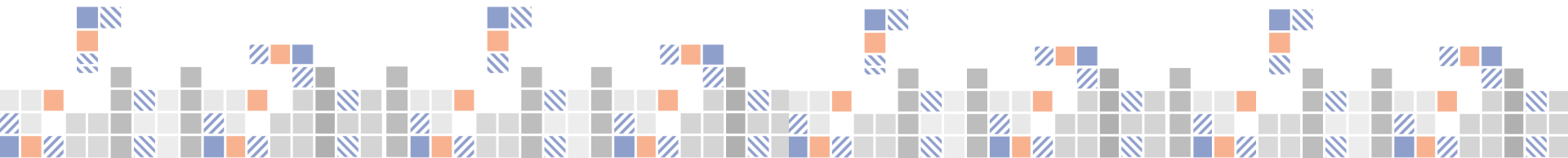


# RPL Designer Pilot Development



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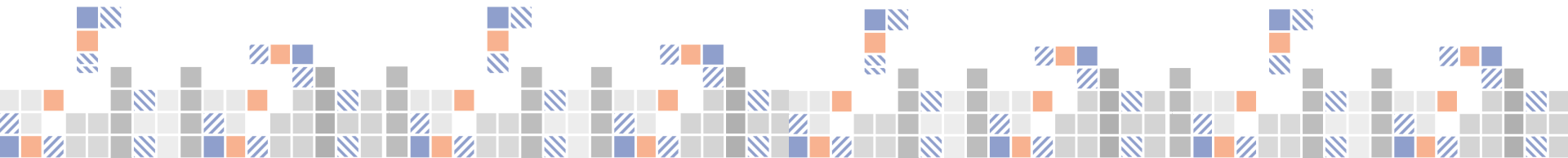


# RPL Designer Pilot Results

*Which were the results obtained?*

COMPETENCE UNITS	
CU 00: Additive manufacturing Process Overview	
CU 25: Post Processing	
CU 59: Relevant principles of PBF Processes for Design	
CU 60: Design Metal AM parts for PBF Processes	
CU 61: Simulation Analysis	
Subtotal (without optional CUs)	
CU 62: Simulation Execution	
Total	

***All Candidates completed them properly***



# RPL Designer Pilot Results

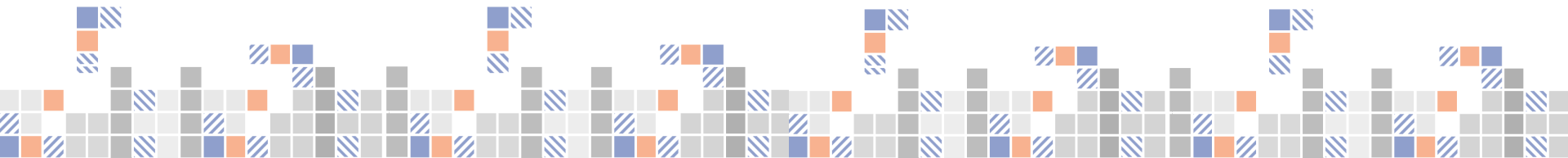
*Which were the results obtained?*

COMPETENCE UNITS	
CU 00: Additive Manufacturing Process Overview	
CU 25: Post Processing	
CU 59: Relevant principles of PBF Processes for Design	
CU 60: Design Metal AM parts for PBF Processes	
CU 61: Simulation Analysis	
	Subtotal (without optional CUs)
CU 62: Simulation Execution	
	Total

***All Candidates found difficulties in order to reach the minimum level required.***



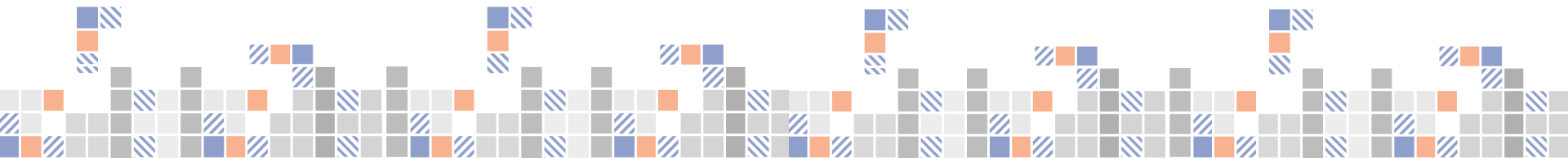
***High level of definition as well as high previous knowledge required to overpass them.***





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# Opinions/Summary

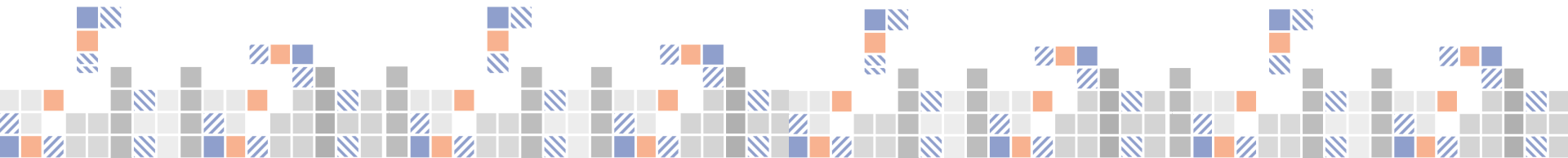
Question	Score
How would you rate the guidance provided by the evaluator institution through the RPL process?	3,6
How would you rate the understanding of the different phases of the RPL process?	3,6
How would you rate the methodology used?	3,4
How would you rate the effort to go through the RPL process?	3,6
How would you rate the duration to go through the RPL process?	3,2
How would you rate the usefulness of the process?	3,2
How would you rate the quality of the technical interview?	3,8
How would you rate the relevance of the technical interview?	3,6
How would you rate the transparency of the process?	3,8

**Final Average: 3,53/4**

# Opinions/Summary

Candidates/assistants consider training received within the development of the previous cited pilots was very satisfied. However, candidates show those pilots could be improved by adding to the theoretical sessions, some materials that give high support to them as technical documentation or technical bibliography.

Some practical sessions could be added to the theoretical one in order to improve the quality of the training as well as to put into practice the knowledge acquired within the theoretical sessions.



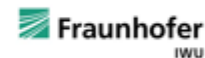


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# Thank you!

**Pablo Cabal**

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