Training course outline

ITU and FASOVE

Title	Start-ups readiness for IoT deployment training: Pre-compliance testing
Modality	Online instructor-led
Dates	28th March – 6th May, 2022
Duration	6 weeks
Registration deadline	24th March, 2022
Training fees	Free
Description	This course will provide awareness to start-up teams on the role and impact of Conformity and Interoperability (C&I) relevant to their path to market for their IoT related products and services. The material will provide a road-map to allow the start-up to evaluate where they are located on their journey to market. Tools will also be provided to help the start-up establish their level of risk as relates to C&I and how this risk can be managed as the start-up meets their C&I obligations as they move forward.

Upon completion of this course participants can be expected to have a working knowledge of the relevant C&I considerations for each stage of their IoT related product/service development. This knowledge will allow start-up teams to plan for and manage the relevant C&I related activities throughout their product development cycle in terms of activities, expertise and funding. This information can assist start-ups in avoiding costly mistakes in developing and deploying their IoT related products and services. |
| Code | 22OI500031MUL-E-D |

1.LEARNING OBJECTIVES

1.   Provide guidance to start-up teams on the role and impact of Conformity and Interoperability (C&I) relevant to their path to market for their IoT related products and services using telecommunication interfaces.
2.   The training materials provide tools and roadmaps that will allow start-ups on how to evaluate where they are located on their journey to market.

2. LEARNING OUTCOMES

Upon completion of this course, participants will understand:

A: Knowledge
- Appreciation for the classes of IOT products
- Global considerations for C&I IOT product certification relevant to target markets
- Strategies for managing C&I certification risks regardless of the point in the product development cycle
- Budgeting for C&I conformance and certification costs for every stage in the product development cycle

B: Understanding
- Road maps relevant to the development of an IOT product/service
- Road maps for achieving IOT product conformance and certification
- Budgeting to account for the C&I considerations in your IOT related product/service development

C: Assessment criteria
- Skills to identify the appropriate classification of an IOT product/service
- Skills to identify the relevant global certifications applicable to an IOT related product/service
- Skills to develop (budget, resources, activities) and manage a risk management plan for C&I conformance and certification of an IOT related product/service

3. TARGET POPULATION

The target audience is students, youth, and entrepreneurs with interest in IoT and willing to understand the telecommunication conformance and interoperability procedures in other to design solutions able to meet relevant national and international standards towards accessing different marketplaces through certification procedures.

Participation of young women in ICTs is encouraged.

4. ENTRY REQUIREMENTS

No prior knowledge or qualification is required; however, the course if designed for students, youth and entrepreneurs working with IoT development of ICT devices and/or Conformance and Interoperability of ICT devices.

Please note that the available seats are limited to 60 participants to facilitate smooth students' interaction. Seats are assigned on a first-come first serve basis and priority will be given to students, youth and entrepreneurs.

5. TUTORS/INSTRUCTORS

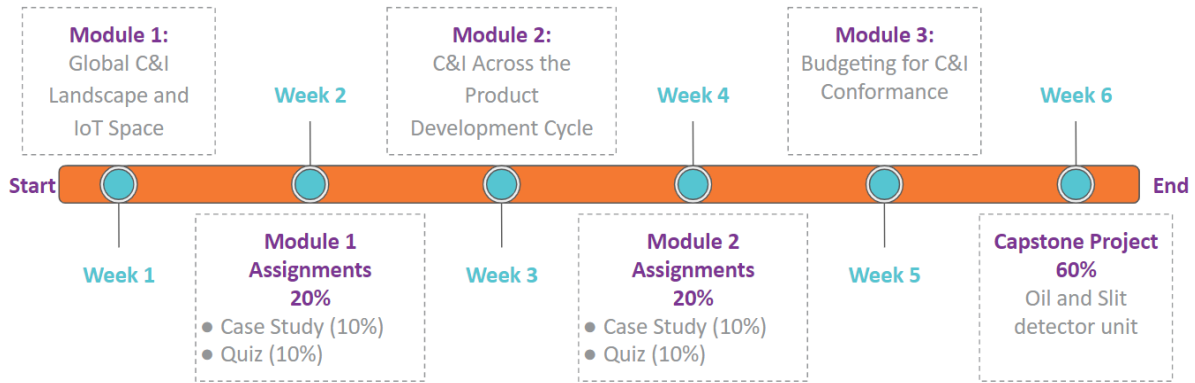| NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Jeevan Persad	mrjpersad@gmail.com

6. TRAINING COURSE CONTENTS

Objective	Case Study involving real product scenario
• Understanding the Global Landscape of C&I regulations • Understanding the IoT product space	• Identify IoT technology space Identify • IoT certification needs
• Understanding the IoT product development cycle • Understanding C&I certification risk at each stage	• High risk of IoT product requiring risk mitigation strategies
• Developing budgets for a new IoT product/service initiative	• Planning for a new IoT product development initiative

6. TRAINING COURSE SCHEDULE

Week / Session	Topic	Exercises and interactions
Week 1 **[28 Mar-1 Apr]**	The global landscape of C&I as relates to IOT products and services certification	Prerecorded Video lectures on • Course introduction • Introduction to IoT

Live introductory session **Mon 28th Mar at 2pm (CEST)** **Live Q&A** **Fri 1st Apr at 2pm (CEST)**		• Mapping the space of IOT devices to establish product/service classes • Mapping product certification to the global market space
Week 2 **[4-8 April]** **Live Q&A** **Fri 8th Apr at 2pm (CEST)**	The global landscape of C&I as relates to IOT products and services certification	• Multiple choice quiz • Case study of a real product scenario to illustrate how a start-up would establish where in the IOT technology space their product/service lies and how they would establish their C&I certification requirements based on their intended markets
Week 3 **[11-15 April]** **Live Q&A** **Fri 15th Apr at 2pm (CEST)**	The C&I certification process throughout the product development cycle	Prerecorded Video lectures on • Mapping the product development cycle where do you fall • C&I certification risks at each stage of the product development cycle and strategies for managing risk
Week 4 **[18 - 22 April]** **Live Q&A** **Fri 22nd Apr at 2pm (CEST)**	The C&I certification process throughout the product development cycle	• Multiple choice quiz • Case study of a real product scenario with high risk exposure and the risk mitigation strategies employed
Week 5 **[25-29 April]** **Live Q&A** **Fri 29th Apr at 2pm (CEST)**	Budgeting for C&I conformance and certification for the various IOT device classes for a new product/service development	Prerecorded Video lectures on • Establishing the budgets for each class of IOT device • Managing C&I at the different stages of product development
Week 6 **[2-6 May]** **Live Q&A**	Capstone project	

Fri 6th May at 2pm (CEST)		

Module 1: Global C&I Landscape and IoT Space — Week 1, Week 2
Module 2: C&I Across the Product Development Cycle — Week 3, Week 4
Module 3: Budgeting for C&I Conformance — Week 5, Week 6

Module 1 Assignments 20%
● Case Study (10%)
● Quiz (10%)

Module 2 Assignments 20%
● Case Study (10%)
● Quiz (10%)

Capstone Project 60%
Oil and Slit detector unit

*Live Q&A sessions with instructors will be held at 14:00h CEST

7.METHODOLOGY (Didactic approach)

The virtual course (6 weeks duration) study method will be the following:
- Live introductory session via Zoom platform (week 1 – Mon 28th March at 2pm (CEST)), including course structure, learning objectives, and evaluation)
- Pre-recorded video course material (presentations) will be made available on the ITU Academy learning portal at the beginning of the course to facilitate self-study. Each week is based on 3 hours of lectures-presentations per week.
- Discussion forums will be organized on the ITU Academy based on discussions topics and case studies (weekly). Students are highly encouraged to participate and interact with instructors and other students (e.g., forum participation, Moodle messenger, etc.).
- 1 live chat session via Zoom platform (weekly – 2pm CEST) with the students to facilitate any questions about the material covered for the week and the assignments. 1 additional chat session might occur if needed and depending on the level of students' interactions.
- Multiple choice quiz tests will be assigned at the end of Module 1 and 2.
- Downloadable Word document Template will be provided for submission case study research (2 case studies at the end of Module 1 and 2) on the ITU Academy
- Downloadable Word document Template for Capstone project will be provided in the ITU Academy

8.EVALUATION AND GRADING

Two partial exams at the end of the two weeks (week 2 and week 4), and one final capstone assignment to be submitted and graded. Templates will be provided on the ITU Academy outlining the format for the assignment submission.

Each exam shall consist of a quiz-based (multiple choices questions) and a short case study suitable for evaluation of course participants through the ITU Academy platform.

Maximum grade for the course will be 100 points. The minimum passing grade will be 60% or higher.

Module 1	• Quiz (10%)

	• Case study (10%)	
Module 2	• Quiz (10%)	
	• Case study (10%)	
Capstone Project	• Report (60%)	

Only participants who have successfully completed all assessments with a pass mark of 60% shall be
awarded the ITU Certificate. ITU Certificates will be available inside the platform upon completion of the feedback form and achievement of the abovementioned pass mark.

9.TRAINING COURSE COORDINATION

Course coordinator:	**ITU coordinator:**
Name: Jeevan Persad Email address: mrjpersad@gmail.com	Name: Miguel Alcaine Email address: miguel.alcaine@itu.int